First Light Imaging FliSdk

2.9.x

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

Chapter 5

Namespace Documentation

5.1 FliCblueOneEnum Namespace Reference

Enumerations

- enum DeviceTemperatureSelectorEnum : int64_t {
DeviceTemperatureSelectorEnum::Sensor = 0, DeviceTemperatureSelectorEnum::CPU = 1, DeviceTemperatureSelectorEnum::
= 2, DeviceTemperatureSelectorEnum::Frontend = 3,
DeviceTemperatureSelectorEnum::Heatsink = 4, DeviceTemperatureSelectorEnum::Case = 5 }
- enum DeviceTecSelectorEnum : int64_t { DeviceTecSelectorEnum::TEC1 = 0 }
- enum DeviceFanModeEnum : int64_t { DeviceFanModeEnum::Automatic = 0, DeviceFanModeEnum::Manual
= 1 }
- enum FirmwareUpdateStatusEnum : int64_t { FirmwareUpdateStatusEnum::Idle = 0, FirmwareUpdateStatusEnum::InProgress
= 1, FirmwareUpdateStatusEnum::Done = 2, FirmwareUpdateStatusEnum::Failed = 3 }
- enum LogCollectStatusEnum : int64_t { LogCollectStatusEnum::Idle = 0, LogCollectStatusEnum::InProgress
= 1, LogCollectStatusEnum::Done = 2, LogCollectStatusEnum::Failed = 3 }
- enum IPModeEnum : int64_t { IPModeEnum::Automatic = 0, IPModeEnum::Manual = 1 }
- enum SparseSelectorEnum : int64_t {
SparseSelectorEnum::Region0 = 0, SparseSelectorEnum::Region1 = 1, SparseSelectorEnum::Region2 = 2,
SparseSelectorEnum::Region3 = 3,
SparseSelectorEnum::Region4 = 4, SparseSelectorEnum::Region5 = 5, SparseSelectorEnum::Region6 = 6,
SparseSelectorEnum::Region7 = 7 }
- enum SparseModeEnum : int64_t { SparseModeEnum::Off = 0, SparseModeEnum::On = 1 }
- enum TestPatternGeneratorSelectorEnum : int64_t { TestPatternGeneratorSelectorEnum::Sensor = 0,
TestPatternGeneratorSelectorEnum::Simulator = 1 }
- enum TestPatternEnum : int64_t {
TestPatternEnum::Off = 0, TestPatternEnum::Black = 1, TestPatternEnum::White = 2, TestPatternEnum::GreyHorizontalRamp
= 3,
TestPatternEnum::SimulatorGreyHorizontalRamp = 10, TestPatternEnum::SimulatorGreyHorizontalRampMoving
= 11 }
- enum GlowReductionEnum : int64_t { GlowReductionEnum::Off = 0, GlowReductionEnum::On = 1 }
- enum ConversionEfficiencyEnum : int64_t { ConversionEfficiencyEnum::Low = 0, ConversionEfficiencyEnum::High
= 1 }
- enum UserSetSelectorEnum : int64_t {
UserSetSelectorEnum::Default8bits = 30, UserSetSelectorEnum::Default12bits = 32, UserSetSelectorEnum::HighSensitivity8bit
= 40, UserSetSelectorEnum::HighSensitivity12bits = 42,
UserSetSelectorEnum::UserSet0 = 0, UserSetSelectorEnum::UserSet1 = 1, UserSetSelectorEnum::UserSet2
= 2, UserSetSelectorEnum::UserSet3 = 3,
UserSetSelectorEnum::UserSet4 = 4, UserSetSelectorEnum::UserSet5 = 5, UserSetSelectorEnum::UserSet6
= 6, UserSetSelectorEnum::UserSet7 = 7,
UserSetSelectorEnum::UserSet8 = 8, UserSetSelectorEnum::UserSet9 = 9 }

- enum UserSetDefaultEnum : int64_t {
  UserSetDefaultEnum::Default8bits = 30, UserSetDefaultEnum::Default12bits = 32, UserSetDefaultEnum::HighSensitivity8bits = 40, UserSetDefaultEnum::HighSensitivity12bits = 42,
  UserSetDefaultEnum::UserSet0 = 0, UserSetDefaultEnum::UserSet1 = 1, UserSetDefaultEnum::UserSet2 = 2, UserSetDefaultEnum::UserSet3 = 3,
  UserSetDefaultEnum::UserSet4 = 4, UserSetDefaultEnum::UserSet5 = 5, UserSetDefaultEnum::UserSet6 = 6, UserSetDefaultEnum::UserSet7 = 7,
  UserSetDefaultEnum::UserSet8 = 8, UserSetDefaultEnum::UserSet9 = 9 }

Variables

- const std::map< std::string, int64_t > DeviceTemperatureSelectorStringToValue
- const std::map< std::string, int64_t > DeviceTecSelectorStringToValue
- const std::map< std::string, int64_t > DeviceFanModeStringToValue
- const std::map< std::string, int64_t > FirmwareUpdateStatusStringToValue
- const std::map< std::string, int64_t > LogCollectStatusStringToValue
- const std::map< std::string, int64_t > IPModeStringToValue
- const std::map< std::string, int64_t > SparseSelectorStringToValue
- const std::map< std::string, int64_t > SparseModeStringToValue
- const std::map< std::string, int64_t > TestPatternGeneratorSelectorStringToValue
- const std::map< std::string, int64_t > TestPatternStringToValue
- const std::map< std::string, int64_t > GlowReductionStringToValue
- const std::map< std::string, int64_t > ConversionEfficiencyStringToValue
- const std::map< std::string, int64_t > UserSetSelectorStringToValue
- const std::map< std::string, int64_t > UserSetDefaultStringToValue

5.1.1 Enumeration Type Documentation

5.1.1.1 ConversionEfficiencyEnum

```
enum FliCblueOneEnum::ConversionEfficiencyEnum : int64_t [strong]
```

Enumerator

Low	
High	

5.1.1.2 DeviceFanModeEnum

```
enum FliCblueOneEnum::DeviceFanModeEnum : int64_t [strong]
```

Enumerator

Automatic	
Manual	

5.1.1.3 DeviceTecSelectorEnum

```
enum FliCblueOneEnum::DeviceTecSelectorEnum : int64_t [strong]
```

Enumerator

TEC1	

5.1.1.4 DeviceTemperatureSelectorEnum

```
enum FliCblueOneEnum::DeviceTemperatureSelectorEnum : int64_t [strong]
```

Enumerator

Sensor	
CPU	
Power	
Frontend	
Heatsink	
Case	

5.1.1.5 FirmwareUpdateStatusEnum

```
enum FliCblueOneEnum::FirmwareUpdateStatusEnum : int64_t [strong]
```

Enumerator

Idle	
InProgress	
Done	
Failed	

5.1.1.6 GlowReductionEnum

```
enum FliCblueOneEnum::GlowReductionEnum : int64_t [strong]
```

Enumerator

Off	
On	

5.1.1.7 IPModeEnum

```
enum FliCblueOneEnum::IPModeEnum : int64_t [strong]
```

Enumerator

Automatic	
Manual	

5.1.1.8 LogCollectStatusEnum

```
enum FliCblueOneEnum::LogCollectStatusEnum : int64_t [strong]
```

Enumerator

Idle	
InProgress	
Done	
Failed	

5.1.1.9 SparseModeEnum

```
enum FliCblueOneEnum::SparseModeEnum : int64_t [strong]
```

Enumerator

Off	
On	

5.1.1.10 SparseSelectorEnum

```
enum FliCblueOneEnum::SparseSelectorEnum : int64_t [strong]
```

Enumerator

Region0	
Region1	
Region2	
Region3	
Region4	
Region5	
Region6	
Region7	

5.1.1.11 TestPatternEnum

`enum FliCblueOneEnum::TestPatternEnum : int64_t [strong]`

Enumerator

Off	
Black	
White	
GreyHorizontalRamp	
SimulatorGreyHorizontalRamp	
SimulatorGreyHorizontalRampMoving	

5.1.1.12 TestPatternGeneratorSelectorEnum

`enum FliCblueOneEnum::TestPatternGeneratorSelectorEnum : int64_t [strong]`

Enumerator

Sensor	
Simulator	

5.1.1.13 UserSetDefaultEnum

`enum FliCblueOneEnum::UserSetDefaultEnum : int64_t [strong]`

Enumerator

Default8bits	

Enumerator

Default12bits	
HighSensitivity8bits	
HighSensitivity12bits	
UserSet0	
UserSet1	
UserSet2	
UserSet3	
UserSet4	
UserSet5	
UserSet6	
UserSet7	
UserSet8	
UserSet9	

5.1.1.14 UserSetSelectorEnum

```
enum FliCblueOneEnum::UserSetSelectorEnum : int64_t [strong]
```

Enumerator

Default8bits	
Default12bits	
HighSensitivity8bits	
HighSensitivity12bits	
UserSet0	
UserSet1	
UserSet2	
UserSet3	
UserSet4	
UserSet5	
UserSet6	
UserSet7	
UserSet8	
UserSet9	

5.1.2 Variable Documentation

5.1.2.1 ConversionEfficiencyStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::ConversionEfficiencyStringToValue
```

Initial value:

```
=
    {
        {"Low", 0},
        {"High", 1}
    }
```

5.1.2.2 DeviceFanModeStringToValue

`const std::map<std::string, int64_t> FliCblueOneEnum::DeviceFanModeStringToValue`

Initial value:

```
=
    {
        {"Automatic", 0},
        {"Manual", 1}
    }
```

5.1.2.3 DeviceTecSelectorStringToValue

`const std::map<std::string, int64_t> FliCblueOneEnum::DeviceTecSelectorStringToValue`

Initial value:

```
=
    {
        {"TEC1", 0}
    }
```

5.1.2.4 DeviceTemperatureSelectorStringToValue

`const std::map<std::string, int64_t> FliCblueOneEnum::DeviceTemperatureSelectorStringToValue`

Initial value:

```
=
    {
        {"Sensor", 0},
        {"CPU", 1},
        {"Power", 2},
        {"Frontend", 3},
        {"Heatsink", 4},
        {"Case", 5}
    }
```

5.1.2.5 FirmwareUpdateStatusStringToValue

`const std::map<std::string, int64_t> FliCblueOneEnum::FirmwareUpdateStatusStringToValue`

Initial value:

```
=
    {
        {"Idle", 0},
        {"InProgress", 1},
        {"Done", 2},
        {"Failed", 3}
    }
```

5.1.2.6 GlowReductionStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::GlowReductionStringToValue
```

Initial value:

```
=
    {
        {"Off", 0},
        {"On", 1}
    }
```

5.1.2.7 IPModeStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::IPModeStringToValue
```

Initial value:

```
=
    {
        {"Automatic", 0},
        {"Manual", 1}
    }
```

5.1.2.8 LogCollectStatusStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::LogCollectStatusStringToValue
```

Initial value:

```
=
    {
        {"Idle", 0},
        {"InProgress", 1},
        {"Done", 2},
        {"Failed", 3}
    }
```

5.1.2.9 SparseModeStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::SparseModeStringToValue
```

Initial value:

```
=
    {
        {"Off", 0},
        {"On", 1}
    }
```

5.1.2.10 SparseSelectorStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::SparseSelectorStringToValue
```

Initial value:

```
=
    {
        {"Region0", 0},
        {"Region1", 1},
        {"Region2", 2},
        {"Region3", 3},
        {"Region4", 4},
        {"Region5", 5},
        {"Region6", 6},
        {"Region7", 7}
    }
```

5.1.2.11 TestPatternGeneratorSelectorStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::TestPatternGeneratorSelectorStringTo←
Value
```

Initial value:

```
=
    {
        {"Sensor", 0},
        {"Simulator", 1}
    }
```

5.1.2.12 TestPatternStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::TestPatternStringToValue
```

Initial value:

```
=
    {
        {"Off", 0},
        {"Black", 1},
        {"White", 2},
        {"GreyHorizontalRamp", 3},
        {"SimulatorGreyHorizontalRamp", 10},
        {"SimulatorGreyHorizontalRampMoving", 11}
    }
```

5.1.2.13 UserSetDefaultStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::UserSetDefaultStringToValue
```

Initial value:

```
=
    {
        {"Default8bits", 30},
        {"Default12bits", 32},
        {"HighSensitivity8bits", 40},
        {"HighSensitivity12bits", 42},
        {"UserSet0", 0},
        {"UserSet1", 1},
        {"UserSet2", 2},
        {"UserSet3", 3},
        {"UserSet4", 4},
        {"UserSet5", 5},
        {"UserSet6", 6},
        {"UserSet7", 7},
        {"UserSet8", 8},
        {"UserSet9", 9}
    }
```

5.1.2.14 UserSetSelectorStringToValue

```
const std::map<std::string, int64_t> FliCblueOneEnum::UserSetSelectorStringToValue
```

Initial value:

```
=
    {
        {"Default8bits", 30},
        {"Default12bits", 32},
        {"HighSensitivity8bits", 40},
        {"HighSensitivity12bits", 42},
        {"UserSet0", 0},
        {"UserSet1", 1},
        {"UserSet2", 2},
        {"UserSet3", 3},
        {"UserSet4", 4},
        {"UserSet5", 5},
        {"UserSet6", 6},
        {"UserSet7", 7},
        {"UserSet8", 8},
        {"UserSet9", 9}
    }
```

5.2 FliCblueSfncEnum Namespace Reference

Enumerations

- enum DeviceScanTypeEnum : int64_t { DeviceScanTypeEnum::Areascan = 0 }
- enum DeviceIndicatorModeEnum : int64_t { DeviceIndicatorModeEnum::Inactive = 0, DeviceIndicatorModeEnum::Active = 1, DeviceIndicatorModeEnum::ErrorStatus = 2 }
- enum SensorShutterModeEnum : int64_t { SensorShutterModeEnum::Global = 0, SensorShutterModeEnum::Rolling = 1, SensorShutterModeEnum::GlobalReset = 2 }
- enum RegionSelectorEnum : int64_t { RegionSelectorEnum::Region0 = 0 }
- enum RegionModeEnum : int64_t { RegionModeEnum::Off = 0, RegionModeEnum::On = 1 }
- enum RegionDestinationEnum : int64_t { RegionDestinationEnum::Stream0 = 0 }
- enum PixelFormatEnum : int64_t { PixelFormatEnum::Mono8 = 0, PixelFormatEnum::Mono10 = 1, PixelFormatEnum::Mono12 = 2 }
- enum AcquisitionModeEnum : int64_t { AcquisitionModeEnum::Continuous = 0 }
- enum ExposureModeEnum : int64_t { ExposureModeEnum::Timed = 0 }
- enum GainSelectorEnum : int64_t { GainSelectorEnum::AnalogAll = 0, GainSelectorEnum::DigitalAll = 1 }
- enum BlackLevelSelectorEnum : int64_t { BlackLevelSelectorEnum::All = 0 }
- enum BlackLevelAutoEnum : int64_t { BlackLevelAutoEnum::Off = 0, BlackLevelAutoEnum::Continuous = 1 }
- enum CxpLinkConfigurationStatusEnum : int64_t { CxpLinkConfigurationStatusEnum::CXP1_X1 = 0, CxpLinkConfigurationStatusEnum::CXP12_X1 = 1, CxpLinkConfigurationStatusEnum::CXP1_X2 = 2, CxpLinkConfigurationStatusEnum::CXP6_X2 = 3, CxpLinkConfigurationStatusEnum::CXP10_X2 = 4, CxpLinkConfigurationStatusEnum::CXP12_X2 = 5 }
- enum CxpLinkConfigurationPreferredEnum : int64_t { CxpLinkConfigurationPreferredEnum::CXP12_X1 = 0, CxpLinkConfigurationPreferredEnum::CXP6_X2 = 1, CxpLinkConfigurationPreferredEnum::CXP10_X2 = 2, CxpLinkConfigurationPreferredEnum::CXP12_X2 = 3 }
- enum CxpLinkConfigurationEnum : int64_t { CxpLinkConfigurationEnum::CXP10_X2 = 0 }
- enum CxpConnectionTestModeEnum : int64_t { CxpConnectionTestModeEnum::Off = 0, CxpConnectionTestModeEnum::Mode = 1 }
- enum CxpSendReceiveSelectorEnum : int64_t { CxpSendReceiveSelectorEnum::Send = 0, CxpSendReceiveSelectorEnum::Re = 1 }
- enum CxpErrorCounterSelectorEnum : int64_t { CxpErrorCounterSelectorEnum::ConnectionLockLoss = 0, CxpErrorCounterSelectorEnum::Encoding = 1, CxpErrorCounterSelectorEnum::StreamDataPacketCrc = 2, CxpErrorCounterSelectorEnum::ControlPacketCrc = 3, CxpErrorCounterSelectorEnum::EventPacketCrc = 4, CxpErrorCounterSelectorEnum::DuplicatedCharactersCorrected = 5, CxpErrorCounterSelectorEnum::DuplicatedCharactersUncorrected = 6 }
- enum CxpErrorCounterStatusEnum : int64_t { CxpErrorCounterStatusEnum::CounterActive = 0, CxpErrorCounterStatusEnum::CounterOverflow = 1 }

Variables

- const std::vector< std::string > DeviceScanTypeString
- const std::vector< std::string > DeviceIndicatorModeString
- const std::vector< std::string > SensorShutterModeString
- const std::vector< std::string > RegionSelectorString
- const std::vector< std::string > RegionModeString
- const std::vector< std::string > RegionDestinationString
- const std::vector< std::string > PixelFormatString
- const std::vector< std::string > AcquisitionModeString
- const std::vector< std::string > ExposureModeString
- const std::vector< std::string > GainSelectorString
- const std::vector< std::string > BlackLevelSelectorString
- const std::vector< std::string > BlackLevelAutoString
- const std::vector< std::string > CxpLinkConfigurationStatusString
- const std::vector< std::string > CxpLinkConfigurationPreferredString
- const std::vector< std::string > CxpLinkConfigurationString
- const std::vector< std::string > CxpConnectionTestModeString
- const std::vector< std::string > CxpSendReceiveSelectorString
- const std::vector< std::string > CxpErrorCounterSelectorString
- const std::vector< std::string > CxpErrorCounterStatusString
- const std::vector< std::string > featuresListString

5.2.1 Enumeration Type Documentation

5.2.1.1 AcquisitionModeEnum

```
enum FliCblueSfncEnum::AcquisitionModeEnum : int64_t [strong]
```

Enumerator

Continuous	

5.2.1.2 BlackLevelAutoEnum

```
enum FliCblueSfncEnum::BlackLevelAutoEnum : int64_t [strong]
```

Enumerator

Off	
Continuous	

5.2.1.3 BlackLevelSelectorEnum

```
enum FliCblueSfncEnum::BlackLevelSelectorEnum :  int64_t  [strong]
```

Enumerator

All	

5.2.1.4 CxpConnectionTestModeEnum

```
enum FliCblueSfncEnum::CxpConnectionTestModeEnum :  int64_t  [strong]
```

Enumerator

Off	
Mode1	

5.2.1.5 CxpErrorCounterSelectorEnum

```
enum FliCblueSfncEnum::CxpErrorCounterSelectorEnum :  int64_t  [strong]
```

Enumerator

ConnectionLockLoss	
Encoding	
StreamDataPacketCrc	
ControlPacketCrc	
EventPacketCrc	
DuplicatedCharactersCorrected	
DuplicatedCharactersUncorrected	

5.2.1.6 CxpErrorCounterStatusEnum

```
enum FliCblueSfncEnum::CxpErrorCounterStatusEnum :  int64_t  [strong]
```

Enumerator

CounterActive	
CounterOverflow	

5.2.1.7 CxpLinkConfigurationEnum

```
enum FliCblueSfncEnum::CxpLinkConfigurationEnum : int64_t [strong]
```

Enumerator

CXP10_X2	

5.2.1.8 CxpLinkConfigurationPreferredEnum

```
enum FliCblueSfncEnum::CxpLinkConfigurationPreferredEnum : int64_t [strong]
```

Enumerator

CXP12_X1	
CXP6_X2	
CXP10_X2	
CXP12_X2	

5.2.1.9 CxpLinkConfigurationStatusEnum

```
enum FliCblueSfncEnum::CxpLinkConfigurationStatusEnum : int64_t [strong]
```

Enumerator

CXP1_X1	
CXP12_X1	
CXP1_X2	
CXP6_X2	
CXP10_X2	
CXP12_X2	

5.2.1.10 CxpSendReceiveSelectorEnum

```
enum FliCblueSfncEnum::CxpSendReceiveSelectorEnum : int64_t [strong]
```

Enumerator

Send	
Receive	

5.2.1.11 DeviceIndicatorModeEnum

```
enum FliCblueSfncEnum::DeviceIndicatorModeEnum : int64_t [strong]
```

Enumerator

Inactive	
Active	
ErrorStatus	

5.2.1.12 DeviceScanTypeEnum

```
enum FliCblueSfncEnum::DeviceScanTypeEnum : int64_t [strong]
```

Enumerator

Areascan	

5.2.1.13 ExposureModeEnum

```
enum FliCblueSfncEnum::ExposureModeEnum : int64_t [strong]
```

Enumerator

Timed	

5.2.1.14 GainSelectorEnum

```
enum FliCblueSfncEnum::GainSelectorEnum : int64_t [strong]
```

Enumerator

AnalogAll	
DigitalAll	

5.2.1.15 PixelFormatEnum

```
enum FliCblueSfncEnum::PixelFormatEnum : int64_t [strong]
```

Enumerator

Mono8	
Mono10	
Mono12	

5.2.1.16 RegionDestinationEnum

```
enum FliCblueSfncEnum::RegionDestinationEnum : int64_t [strong]
```

Enumerator

Stream0	

5.2.1.17 RegionModeEnum

```
enum FliCblueSfncEnum::RegionModeEnum : int64_t [strong]
```

Enumerator

Off	
On	

5.2.1.18 RegionSelectorEnum

```
enum FliCblueSfncEnum::RegionSelectorEnum : int64_t [strong]
```

Enumerator

Region0	

5.2.1.19 SensorShutterModeEnum

```
enum FliCblueSfncEnum::SensorShutterModeEnum : int64_t [strong]
```

Enumerator

Global	
Rolling	
GlobalReset	

5.2.2 Variable Documentation

5.2.2.1 AcquisitionModeString

```
const std::vector<std::string> FliCblueSfncEnum::AcquisitionModeString
```

Initial value:

```
=
    {
        "Continuous",
    }
```

5.2.2.2 BlackLevelAutoString

```
const std::vector<std::string> FliCblueSfncEnum::BlackLevelAutoString
```

Initial value:

```
=
    {
        "Off",
        "Continuous",
    }
```

5.2.2.3 BlackLevelSelectorString

```
const std::vector<std::string> FliCblueSfncEnum::BlackLevelSelectorString
```

Initial value:

```
=
    {
        "All",
    }
```

5.2.2.4 CxpConnectionTestModeString

```
const std::vector<std::string> FliCblueSfncEnum::CxpConnectionTestModeString
```

Initial value:

```
=
    {
        "Off",
        "Mode1",
    }
```

5.2.2.5 CxpErrorCounterSelectorString

```
const std::vector<std::string> FliCblueSfncEnum::CxpErrorCounterSelectorString
```

Initial value:

```
=
    {
        "ConnectionLockLoss",
        "Encoding",
        "StreamDataPacketCrc",
        "ControlPacketCrc",
        "EventPacketCrc",
        "DuplicatedCharactersCorrected",
        "DuplicatedCharactersUncorrected",
    }
```

5.2.2.6 CxpErrorCounterStatusString

```
const std::vector<std::string> FliCblueSfncEnum::CxpErrorCounterStatusString
```

Initial value:

```
=
    {
        "CounterActive",
        "CounterOverflow",
    }
```

5.2.2.7 CxpLinkConfigurationPreferredString

```
const std::vector<std::string> FliCblueSfncEnum::CxpLinkConfigurationPreferredString
```

Initial value:

```
=
    {
        "CXP12_X1",
        "CXP6_X2",
        "CXP10_X2",
        "CXP12_X2",
    }
```

5.2.2.8 CxpLinkConfigurationStatusString

```
const std::vector<std::string> FliCblueSfncEnum::CxpLinkConfigurationStatusString
```

Initial value:

```
=
    {
        "CXP1_X1",
        "CXP12_X1",
        "CXP1_X2",
        "CXP6_X2",
        "CXP10_X2",
        "CXP12_X2",
    }
```

5.2.2.9 CxpLinkConfigurationString

```
const std::vector<std::string> FliCblueSfncEnum::CxpLinkConfigurationString
```

Initial value:

```
=
    {
        "CXP10_X2",
    }
```

5.2.2.10 CxpSendReceiveSelectorString

```
const std::vector<std::string> FliCblueSfncEnum::CxpSendReceiveSelectorString
```

Initial value:

```
=
    {
        "Send",
        "Receive",
    }
```

5.2.2.11 DeviceIndicatorModeString

```
const std::vector<std::string> FliCblueSfncEnum::DeviceIndicatorModeString
```

Initial value:

```
=
    {
        "Inactive",
        "Active",
        "ErrorStatus",
    }
```

5.2.2.12 DeviceScanTypeString

```
const std::vector<std::string> FliCblueSfncEnum::DeviceScanTypeString
```

Initial value:

```
=
    {
        "Areascan",
    }
```

5.2.2.13 ExposureModeString

```
const std::vector<std::string> FliCblueSfncEnum::ExposureModeString
```

Initial value:

```
=
    {
        "Timed",
    }
```

5.2.2.14 featuresListString

```
const std::vector<std::string> FliCblueSfncEnum::featuresListString
```

5.2.2.15 GainSelectorString

```
const std::vector<std::string> FliCblueSfncEnum::GainSelectorString
```

Initial value:

```
=
    {
        "AnalogAll",
        "DigitalAll",
    }
```

5.2.2.16 PixelFormatString

```
const std::vector<std::string> FliCblueSfncEnum::PixelFormatString
```

Initial value:

```
=
    {
        "Mono8",
        "Mono10",
        "Mono12",
    }
```

5.2.2.17 RegionDestinationString

```
const std::vector<std::string> FliCblueSfncEnum::RegionDestinationString
```

Initial value:

```
=
    {
        "Stream0",
    }
```

5.2.2.18 RegionModeString

```
const std::vector<std::string> FliCblueSfncEnum::RegionModeString
```

Initial value:

```
=
    {
        "Off",
        "On",
    }
```

5.2.2.19 RegionSelectorString

```
const std::vector<std::string> FliCblueSfncEnum::RegionSelectorString
```

Initial value:

```
=
    {
        "Region0",
    }
```

5.2.2.20 SensorShutterModeString

```
const std::vector<std::string> FliCblueSfncEnum::SensorShutterModeString
```

Initial value:

```
=
    {
        "Global",
        "Rolling",
        "GlobalReset",
    }
```

5.3 FliCblueTwoEnum Namespace Reference

Enumerations

- enum BinningSelectorEnum : int64_t { BinningSelectorEnum::Sensor = 0 }

  Selects which binning engine is controlled by the BinningHorizontal and BinningVertical features.
- enum BinningHorizontalModeEnum : int64_t { BinningHorizontalModeEnum::Sum = 0, BinningHorizontalModeEnum::Average = 1 }

  Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.
- enum BinningVerticalModeEnum : int64_t { BinningVerticalModeEnum::Sum = 0, BinningVerticalModeEnum::Average = 1 }

  Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.
- enum FirmwareUpdateStatusEnum : int64_t { FirmwareUpdateStatusEnum::Idle = 0, FirmwareUpdateStatusEnum::InProgress = 1, FirmwareUpdateStatusEnum::Done = 2, FirmwareUpdateStatusEnum::Failed = 3 }

Variables

- const std::map< std::string, int64_t > BinningSelectorStringToValue
- const std::map< std::string, int64_t > BinningHorizontalModeStringToValue
- const std::map< std::string, int64_t > BinningVerticalModeStringToValue
- const std::map< std::string, int64_t > FirmwareUpdateStatusStringToValue

5.3.1 Enumeration Type Documentation

5.3.1.1 BinningHorizontalModeEnum

```
enum FliCblueTwoEnum::BinningHorizontalModeEnum :  int64_t  [strong]
```

Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.

Enumerator

Sum	The response from the combined cells will be added, resulting in increased sensitivity.
Average	The response from the combined cells will be averaged, resulting in increased signal/noise ratio.

5.3.1.2 BinningSelectorEnum

```
enum FliCblueTwoEnum::BinningSelectorEnum :  int64_t  [strong]
```

Selects which binning engine is controlled by the BinningHorizontal and BinningVertical features.

Enumerator

Sensor	Selected features will control the sensor binning.

5.3.1.3 BinningVerticalModeEnum

```
enum FliCblueTwoEnum::BinningVerticalModeEnum :  int64_t  [strong]
```

Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.

Enumerator

Sum	The response from the combined cells will be added, resulting in increased sensitivity.
Average	The response from the combined cells will be averaged, resulting in increased signal/noise ratio.

5.3.1.4 FirmwareUpdateStatusEnum

```
enum FliCblueTwoEnum::FirmwareUpdateStatusEnum :  int64_t  [strong]
```

Enumerator

Idle	
InProgress	
Done	
Failed	

5.3.2 Variable Documentation

5.3.2.1 BinningHorizontalModeStringToValue

```
const std::map<std::string, int64_t> FliCblueTwoEnum::BinningHorizontalModeStringToValue
```

Initial value:

```
=
    {
        {"Sum", 0},
        {"Average", 1}
    }
```

5.3.2.2 BinningSelectorStringToValue

```
const std::map<std::string, int64_t> FliCblueTwoEnum::BinningSelectorStringToValue
```

Initial value:

```
=
    {
        {"Sensor", 0}
    }
```

5.3.2.3 BinningVerticalModeStringToValue

```
const std::map<std::string, int64_t> FliCblueTwoEnum::BinningVerticalModeStringToValue
```

Initial value:

```
=
    {
        {"Sum", 0},
        {"Average", 1}
    }
```

5.3.2.4 FirmwareUpdateStatusStringToValue

```
const std::map<std::string, int64_t> FliCblueTwoEnum::FirmwareUpdateStatusStringToValue
```

Initial value:

```
=
    {
        {"Idle", 0},
        {"InProgress", 1},
        {"Done", 2},
        {"Failed", 3}
    }
```

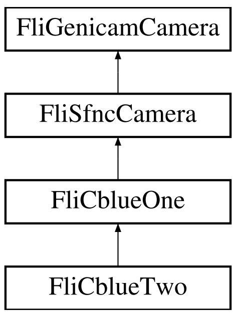
Chapter 6

Class Documentation

6.1 FliCblueOne Class Reference

```
#include <FliCblueOne.h>
```

Inheritance diagram for FliCblueOne:



Public Member Functions

- FliCblueOne (IFrameGrabberGenicam ∗grabber)

Public Attributes

- GenicamFeature ∗ DeviceShutdown

  Turns the device off.
- GenicamFeature< FliCblueOneEnum::DeviceTemperatureSelectorEnum > ∗ DeviceTemperatureSelector

  Selects the location within the device, where the temperature will be measured.
- GenicamFeature< FliCblueOneEnum::DeviceTecSelectorEnum > ∗ DeviceTecSelector

  Selects the TEC module within the device, where voltage, current and power will be measured.
- GenicamFeature< double > ∗ DeviceTecVoltage

  Voltage applied to TEC in Volts (V). It is measured at the TEC selected by DeviceTecSelector.
- GenicamFeature< double > ∗ DeviceTecCurrent

  Current consumed by the TEC in Amperes (A). It is measured at the TEC selected by DeviceTecSelector.
- GenicamFeature< double > ∗ DeviceTecPower

TEC power consumption in Watts (W). It is measured at the TEC selected by DeviceTecSelector.
- GenicamFeature< FliCblueOneEnum::DeviceFanModeEnum > ∗ DeviceFanMode

  Selects the mode of operation of the device fan.
- GenicamFeature< int64_t > ∗ DeviceFanSpeed

  Selects the speed of the fan in manual mode.
- GenicamFeature< bool > ∗ DeviceCoolingEnable

  Controls if the sensor cooling is enabled.
- GenicamFeature< double > ∗ DeviceCoolingSetpoint

  Specifies the sensor temperature target when cooling is enabled.
- GenicamFeature< std::string > ∗ DeviceStatus

  Status of the device.
- GenicamFeature< std::string > ∗ DeviceStatusDetailed

  Detailed status of the device.
- GenicamFeature< std::string > ∗ FirmwareUpdateUri

  Specifies location of firmware update (max 255 bytes).
- GenicamFeature ∗ FirmwareUpdateExecute

  Launches the firmware update procedure. See.
- GenicamFeature ∗ FirmwareUpdateAbort

  Aborts the firmware update procedure in progress.
- GenicamFeature ∗ FirmwareUpdateStatusRefresh

  Forces reload of firmware update status. This is only needed for implementation that do not handle IsSelfClearing properly.
- GenicamFeature< FliCblueOneEnum::FirmwareUpdateStatusEnum > ∗ FirmwareUpdateStatus

  Returns firmware udpate status.
- GenicamFeature< int64_t > ∗ LogHistoryDepth

  Specifies the log history depth in days.
- GenicamFeature ∗ LogCollect

  Collects the logs.
- GenicamFeature ∗ LogCollectAbort

  Aborts collecting of the logs.
- GenicamFeature< FliCblueOneEnum::LogCollectStatusEnum > ∗ LogCollectStatus

  Returns log collect status.
- GenicamFeature ∗ LogCollectStatusRefresh

  Forces reload of log collecting status. This is only needed for implementation that do not handle IsSelfClearing properly.
- GenicamFeature ∗ LogServe

  Serves the logs previously collected.
- GenicamFeature ∗ LogServeAbort

  Aborts serving of the logs.
- GenicamFeature< std::string > ∗ LogServeUri

  Specifies location of firmware update.
- GenicamFeature< std::string > ∗ CurrentIPAddress

  Reports the IP address of the camera Ethernet link.
- GenicamFeature< std::string > ∗ CurrentSubnetMask

  Reports the subnet mask of the camera Ethernet link.
- GenicamFeature< FliCblueOneEnum::IPModeEnum > ∗ IPMode

  Configures how the camera Ethernet link is configured.
- GenicamFeature ∗ IPReconfigure

  Reconfigures Network.
- GenicamFeature< std::string > ∗ StaticIPAddress

Controls the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

- GenicamFeature< std::string > ∗ StaticSubnetMask

  Controls the static subnet mask associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.
- GenicamFeature< std::string > ∗ StaticDefaultGateway

  Controls the static default gateway associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.
- GenicamFeature< std::string > ∗ StaticDomainNameServer

  Controls the static domain name server associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.
- GenicamFeature< std::string > ∗ StaticAlternateDomainNameServer

  Controls the static alternate domain name server associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.
- GenicamFeature< bool > ∗ Sparse

  This feature controls whether the region is contiguous or split in different areas.
- GenicamFeature< FliCblueOneEnum::SparseSelectorEnum > ∗ SparseSelector

  Selects the sparse area to be configured.
- GenicamFeature< int64_t > ∗ SparseWidth

  Width of the sparse area (in pixels).
- GenicamFeature< int64_t > ∗ SparseHeight

  Height of the sparse area (in pixels).
- GenicamFeature< int64_t > ∗ SparseOffsetX

  Horizontal offset from the origin to the sparse area (in pixels).
- GenicamFeature< int64_t > ∗ SparseOffsetY

  Vertical offset from the origin to the sparse area (in pixels).
- GenicamFeature< FliCblueOneEnum::SparseModeEnum > ∗ SparseMode

  Controls if the selected spare area is active.
- GenicamFeature< FliCblueOneEnum::TestPatternGeneratorSelectorEnum > ∗ TestPatternGeneratorSelector

  Selects which test pattern generator is controlled by the TestPattern feature.
- GenicamFeature< FliCblueOneEnum::TestPatternEnum > ∗ TestPattern

  Selects the type of test pattern that is generated by the device as image source.
- GenicamFeature< double > ∗ AcquisitionFrameRateMinReg

  Minimum acquisition rate (in Hertz) at which the frames are captured.
- GenicamFeature< double > ∗ AcquisitionFrameRateMaxReg

  Maximum acquisition rate (in Hertz) at which the frames are captured.
- GenicamFeature< double > ∗ ExposureTimeMinReg
- GenicamFeature< double > ∗ ExposureTimeMaxReg
- GenicamFeature< FliCblueOneEnum::GlowReductionEnum > ∗ GlowReduction

  Controls the glow reduction scheme in use.
- GenicamFeature< FliCblueOneEnum::ConversionEfficiencyEnum > ∗ ConversionEfficiency

  Controls the conversion efficiency.
- GenicamFeature< FliCblueOneEnum::UserSetSelectorEnum > ∗ UserSetSelector

  Selects the feature User Set to load, save or configure.
- GenicamFeature< FliCblueOneEnum::UserSetDefaultEnum > ∗ UserSetDefault

  Selects the feature User Set to load and make active by default when the device is reset.

Additional Inherited Members

6.1.1 Constructor & Destructor Documentation

6.1.1.1 FliCblueOne()

```
FliCblueOne::FliCblueOne (
              IFrameGrabberGenicam * grabber )
```

6.1.2 Member Data Documentation

6.1.2.1 AcquisitionFrameRateMaxReg

```
GenicamFeature<double>* FliCblueOne::AcquisitionFrameRateMaxReg
```

Maximum acquisition rate (in Hertz) at which the frames are captured.

6.1.2.2 AcquisitionFrameRateMinReg

```
GenicamFeature<double>* FliCblueOne::AcquisitionFrameRateMinReg
```

Minimum acquisition rate (in Hertz) at which the frames are captured.

6.1.2.3 ConversionEfficiency

```
GenicamFeature<FliCblueOneEnum::ConversionEfficiencyEnum>* FliCblueOne::ConversionEfficiency
```

Controls the conversion efficiency.

6.1.2.4 CurrentIPAddress

```
GenicamFeature<std::string>* FliCblueOne::CurrentIPAddress
```

Reports the IP address of the camera Ethernet link.

6.1.2.5 CurrentSubnetMask

```
GenicamFeature<std::string>* FliCblueOne::CurrentSubnetMask
```

Reports the subnet mask of the camera Ethernet link.

6.1.2.6 DeviceCoolingEnable

```
GenicamFeature<bool>* FliCblueOne::DeviceCoolingEnable
```

Controls if the sensor cooling is enabled.

6.1.2.7 DeviceCoolingSetpoint

```
GenicamFeature<double>* FliCblueOne::DeviceCoolingSetpoint
```

Specifies the sensor temperature target when cooling is enabled.

6.1.2.8 DeviceFanMode

```
GenicamFeature<FliCblueOneEnum::DeviceFanModeEnum>* FliCblueOne::DeviceFanMode
```

Selects the mode of operation of the device fan.

6.1.2.9 DeviceFanSpeed

```
GenicamFeature<int64_t>* FliCblueOne::DeviceFanSpeed
```

Selects the speed of the fan in manual mode.

6.1.2.10 DeviceShutdown

```
GenicamFeature* FliCblueOne::DeviceShutdown
```

Turns the device off.

6.1.2.11 DeviceStatus

```
GenicamFeature<std::string>* FliCblueOne::DeviceStatus
```

Status of the device.

6.1.2.12 DeviceStatusDetailed

```
GenicamFeature<std::string>* FliCblueOne::DeviceStatusDetailed
```

Detailed status of the device.

6.1.2.13 DeviceTecCurrent

```
GenicamFeature<double>* FliCblueOne::DeviceTecCurrent
```

Current consumed by the TEC in Amperes (A). It is measured at the TEC selected by DeviceTecSelector.

6.1.2.14 DeviceTecPower

```
GenicamFeature<double>* FliCblueOne::DeviceTecPower
```

TEC power consumption in Watts (W). It is measured at the TEC selected by DeviceTecSelector.

6.1.2.15 DeviceTecSelector

```
GenicamFeature<FliCblueOneEnum::DeviceTecSelectorEnum>* FliCblueOne::DeviceTecSelector
```

Selects the TEC module within the device, where voltage, current and power will be measured.

6.1.2.16 DeviceTecVoltage

```
GenicamFeature<double>* FliCblueOne::DeviceTecVoltage
```

Voltage applied to TEC in Volts (V). It is measured at the TEC selected by DeviceTecSelector.

6.1.2.17 DeviceTemperatureSelector

```
GenicamFeature<FliCblueOneEnum::DeviceTemperatureSelectorEnum>* FliCblueOne::DeviceTemperature↩
Selector
```

Selects the location within the device, where the temperature will be measured.

6.1.2.18 ExposureTimeMaxReg

```
GenicamFeature<double>* FliCblueOne::ExposureTimeMaxReg
```

6.1.2.19 ExposureTimeMinReg

```
GenicamFeature<double>* FliCblueOne::ExposureTimeMinReg
```

6.1.2.20 FirmwareUpdateAbort

```
GenicamFeature* FliCblueOne::FirmwareUpdateAbort
```

Aborts the firmware update procedure in progress.

6.1.2.21 FirmwareUpdateExecute

```
GenicamFeature* FliCblueOne::FirmwareUpdateExecute
```

Launches the firmware update procedure. See.

6.1.2.22 FirmwareUpdateStatus

```
GenicamFeature<FliCblueOneEnum::FirmwareUpdateStatusEnum>* FliCblueOne::FirmwareUpdateStatus
```

Returns firmware udpate status.

6.1.2.23 FirmwareUpdateStatusRefresh

```
GenicamFeature* FliCblueOne::FirmwareUpdateStatusRefresh
```

Forces reload of firmware update status. This is only needed for implementation that do not handle IsSelfClearing properly.

6.1.2.24 FirmwareUpdateUri

```
GenicamFeature<std::string>* FliCblueOne::FirmwareUpdateUri
```

Specifies location of firmware update (max 255 bytes).

6.1.2.25 GlowReduction

```
GenicamFeature<FliCblueOneEnum::GlowReductionEnum>* FliCblueOne::GlowReduction
```

Controls the glow reduction scheme in use.

6.1.2.26 IPMode

```
GenicamFeature<FliCblueOneEnum::IPModeEnum>* FliCblueOne::IPMode
```

Configures how the camera Ethernet link is configured.

6.1.2.27 IPReconfigure

```
GenicamFeature* FliCblueOne::IPReconfigure
```

Reconfigures Network.

6.1.2.28 LogCollect

```
GenicamFeature* FliCblueOne::LogCollect
```

Collects the logs.

6.1.2.29 LogCollectAbort

```
GenicamFeature* FliCblueOne::LogCollectAbort
```

Aborts collecting of the logs.

6.1.2.30 LogCollectStatus

`GenicamFeature<FliCblueOneEnum::LogCollectStatusEnum>* FliCblueOne::LogCollectStatus`

Returns log collect status.

6.1.2.31 LogCollectStatusRefresh

`GenicamFeature* FliCblueOne::LogCollectStatusRefresh`

Forces reload of log collecting status. This is only needed for implementation that do not handle IsSelfClearing properly.

6.1.2.32 LogHistoryDepth

`GenicamFeature<int64_t>* FliCblueOne::LogHistoryDepth`

Specifies the log history depth in days.

6.1.2.33 LogServe

`GenicamFeature* FliCblueOne::LogServe`

Serves the logs previously collected.

6.1.2.34 LogServeAbort

`GenicamFeature* FliCblueOne::LogServeAbort`

Aborts serving of the logs.

6.1.2.35 LogServeUri

`GenicamFeature<std::string>* FliCblueOne::LogServeUri`

Specifies location of firmware update.

6.1.2.36 Sparse

```
GenicamFeature<bool>* FliCblueOne::Sparse
```

This feature controls whether the region is contiguous or split in different areas.

6.1.2.37 SparseHeight

```
GenicamFeature<int64_t>* FliCblueOne::SparseHeight
```

Height of the sparse area (in pixels).

6.1.2.38 SparseMode

```
GenicamFeature<FliCblueOneEnum::SparseModeEnum>* FliCblueOne::SparseMode
```

Controls if the selected spare area is active.

6.1.2.39 SparseOffsetX

```
GenicamFeature<int64_t>* FliCblueOne::SparseOffsetX
```

Horizontal offset from the origin to the sparse area (in pixels).

6.1.2.40 SparseOffsetY

```
GenicamFeature<int64_t>* FliCblueOne::SparseOffsetY
```

Vertical offset from the origin to the sparse area (in pixels).

6.1.2.41 SparseSelector

```
GenicamFeature<FliCblueOneEnum::SparseSelectorEnum>* FliCblueOne::SparseSelector
```

Selects the sparse area to be configured.

6.1.2.42 SparseWidth

```
GenicamFeature<int64_t>* FliCblueOne::SparseWidth
```

Width of the sparse area (in pixels).

6.1.2.43 StaticAlternateDomainNameServer

```
GenicamFeature<std::string>* FliCblueOne::StaticAlternateDomainNameServer
```

Controls the static alternate domain name server associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

6.1.2.44 StaticDefaultGateway

```
GenicamFeature<std::string>* FliCblueOne::StaticDefaultGateway
```

Controls the static default gateway associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

6.1.2.45 StaticDomainNameServer

```
GenicamFeature<std::string>* FliCblueOne::StaticDomainNameServer
```

Controls the static domain name server associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

6.1.2.46 StaticIPAddress

```
GenicamFeature<std::string>* FliCblueOne::StaticIPAddress
```

Controls the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

6.1.2.47 StaticSubnetMask

```
GenicamFeature<std::string>* FliCblueOne::StaticSubnetMask
```

Controls the static subnet mask associated with the static IP address of the camera ethernet link. It is only used when the DHCP configuration scheme is disabled.

6.1.2.48 TestPattern

```
GenicamFeature<FliCblueOneEnum::TestPatternEnum>* FliCblueOne::TestPattern
```

Selects the type of test pattern that is generated by the device as image source.

6.1.2.49 TestPatternGeneratorSelector

```
GenicamFeature<FliCblueOneEnum::TestPatternGeneratorSelectorEnum>* FliCblueOne::TestPattern↩
GeneratorSelector
```

Selects which test pattern generator is controlled by the TestPattern feature.

6.1.2.50 UserSetDefault

```
GenicamFeature<FliCblueOneEnum::UserSetDefaultEnum>* FliCblueOne::UserSetDefault
```

Selects the feature User Set to load and make active by default when the device is reset.

6.1.2.51 UserSetSelector

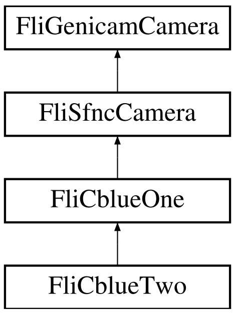
```
GenicamFeature<FliCblueOneEnum::UserSetSelectorEnum>* FliCblueOne::UserSetSelector
```

Selects the feature User Set to load, save or configure.

6.2 FliCblueTwo Class Reference

```
#include <FliCblueTwo.h>
```

Inheritance diagram for FliCblueTwo:



Public Member Functions

- FliCblueTwo (IFrameGrabberGenicam ∗grabber)

Public Attributes

- GenicamFeature< int64_t > ∗ BinningHorizontal

  Number of horizontal photo-sensitive cells to combine together. This reduces the horizontal resolution (width) of the image.
- GenicamFeature< int64_t > ∗ BinningVertical

  Number of vertical photo - sensitive cells to combine together.This reduces the vertical resolution(height) of the image.
- GenicamFeature< FliCblueTwoEnum::BinningHorizontalModeEnum > ∗ BinningHorizontalMode

  Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.
- GenicamFeature< FliCblueTwoEnum::BinningVerticalModeEnum > ∗ BinningVerticalMode

  Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.
- GenicamFeature< FliCblueTwoEnum::FirmwareUpdateStatusEnum > ∗ FirmwareUpdateStatus

  Returns firmware udpate status.

Additional Inherited Members

6.2.1 Constructor & Destructor Documentation

6.2.1.1 FliCblueTwo()

```
FliCblueTwo::FliCblueTwo (
            IFrameGrabberGenicam ∗ grabber )
```

6.2.2 Member Data Documentation

6.2.2.1 BinningHorizontal

```
GenicamFeature<int64_t>∗ FliCblueTwo::BinningHorizontal
```

Number of horizontal photo-sensitive cells to combine together. This reduces the horizontal resolution (width) of the image.

6.2.2.2 BinningHorizontalMode

```
GenicamFeature<FliCblueTwoEnum::BinningHorizontalModeEnum>∗ FliCblueTwo::BinningHorizontalMode
```

Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.

6.2.2.3 BinningVertical

```
GenicamFeature<int64_t>* FliCblueTwo::BinningVertical
```

Number of vertical photo - sensitive cells to combine together.This reduces the vertical resolution(height) of the image.

6.2.2.4 BinningVerticalMode

```
GenicamFeature<FliCblueTwoEnum::BinningVerticalModeEnum>* FliCblueTwo::BinningVerticalMode
```

Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.

6.2.2.5 FirmwareUpdateStatus

```
GenicamFeature<FliCblueTwoEnum::FirmwareUpdateStatusEnum>* FliCblueTwo::FirmwareUpdateStatus
```

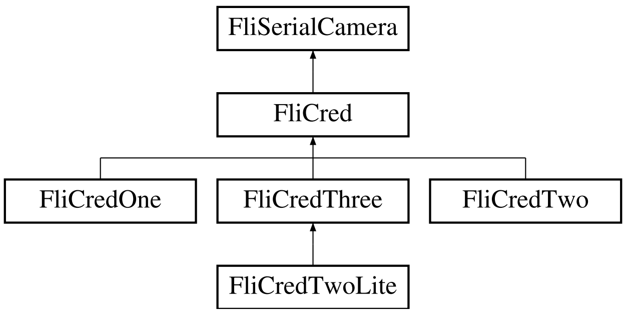
Returns firmware udpate status.

6.3 FliCred Class Reference

This class manages the methods common to all the C-RED camera (C-RED One, C-RED 2, C-RED 2 Lite, C-RED 2 ER, C-RED 3)

```
#include <FliCred.h>
```

Inheritance diagram for FliCred:



Public Member Functions

- FliCred (IFrameGrabberCL ∗grabber)
- FliSdkError getAduOffset (int &aduOffset)
- FliSdkError getBiasState (bool &enabled)
- FliSdkError getFlatState (bool &enabled)
- FliSdkError getEventsState (bool &enabled)
- FliSdkError getCameraType (std::string &info)
- FliSdkError getHwuid (std::string &hwuid)
- FliSdkError getImageTagsState (bool &enabled)
- FliSdkError getLedState (bool &enabled)
- FliSdkError getPassword (std::string &password)
- FliSdkError getExtSynchroState (bool &enabled)
- FliSdkError getIpConfig (std::string &macAddress, std::string &ipAddress, std::string &mask, bool &established)
- FliSdkError getStatusDetailed (std::string &status, std::string &diag)
- FliSdkError getStatus (std::string &status)
- FliSdkError getVersions (std::string &firmware, std::string &fpga, std::string &hardware)
- FliSdkError getVersionFirmware (std::string &version)
- FliSdkError getVersionFirmwareBuild (std::string &build)
- FliSdkError getVersionFirmwareDetailed (std::string &detailed)
- FliSdkError getVersionFpga (std::string &version)
- FliSdkError getVersionHardware (std::string &version)
- FliSdkError getIsSlowMode (bool &slowmode)
- FliSdkError getCheckTag4by4 (bool &tag4by4)
- FliSdkError getExcludeBorder (bool &exclude)
- FliSdkError getBadPixelModeOnOff (bool &checked)
- FliSdkError getKindOfBadPixelCorrection (int &correction)

    getKindOfBadPixelCorrection : get the kind of correction to apply to bad pixels
- FliSdkError getFilteringModeOnOff (bool &checked)
- FliSdkError getUserConvolutionMatrixIndex_V2 (int &index)

    getUserConvolutionMatrixIndex_V2 : get the current convolution matrix index
- FliSdkError getUserConvolutionMatrix (std::vector< std::vector< double > > &matrixBadPixels, double &divisor, std::string &description)

    FliCred_getUserConvolutionMatrix_V2 : method to get the convolution matrix from the camera.
- FliSdkError enableExtSynchro (bool enable)
- FliSdkError enableImageTags (bool enable)
- FliSdkError enableEvents (bool enable)
- FliSdkError enableLed (bool enable)
- FliSdkError enableTelnet (bool enable)
- FliSdkError enableCropping (bool enable)
- FliSdkError setIpAddress (std::string ip)
- FliSdkError setIpAlternateDns (std::string dns)
- FliSdkError setIpDns (std::string dns)
- FliSdkError setIpGateway (std::string gateway)
- FliSdkError setIpAutomatic ()
- FliSdkError setIpManual ()
- FliSdkError setIpRefresh ()
- FliSdkError setIpNetmask (std::string netmask)
- FliSdkError setPassword (std::string password)
- FliSdkError setAduOffset (int aduOffset)
- FliSdkError setSlowMode (bool slowMode)
- FliSdkError setExcludeBorderOnOff (bool exclude)
- FliSdkError setBadPixelModeOnOff (bool checked)

- FliSdkError setFilteringModeOnOff (bool checked)
- FliSdkError setKindOfBadPixelCorrection (int correction)

  setKindOfBadPixelCorrection : set the kind of correction to apply to bad pixels
- FliSdkError setUserConvolutionMatrixIndex_V2 (const int index)

  setUserConvolutionMatrixIndex_V2 : set the index of the current convolution matrix
- FliSdkError setUserConvolutionMatrix (std::vector< std::vector< double > > &matrixBadPixels, double divisor, std::string &description)

  FliCred_setUserConvolutionMatrix_V2 : method to set the convolution matrix inside the camera.
- FliSdkError saveCameraSettings ()

  saveCameraSettings save all the user (not the factory) settings inside the camera
- FliSdkError continueStarting ()

  continueStarting let the camera continue after a reboot for instance
- FliSdkError shutDown ()

  shutDown will shut down the camera
- FliSdkError getLogs (std::string &url)

  getLogs start the logs and return the url of them
- FliSdkError getLogs (uint16_t nbDays, std::string &url)

  getLogs start the logs and return the number of days last ones the url of them
- FliSdkError buildFlat ()

  buildFlat will execute the build of the flat
- FliSdkError buildBias ()

  buildBias will execute the build of the bias
- FliSdkError restoreFactory ()

  restoreFactory will restore the factory settings inside the camera as the user settings
- FliSdkError upgradeFirmware (std::string url)

  upgradeFirmware will upgrade the Firmware inside the camera from the url of a firmware file
- FliSdkError sendBiasFromUrl (std::string url)

  sendBiasFromUrl send to the camera a bias file to the camera from an url
- FliSdkError sendFlatFromUrl (std::string url)

  sendFlatFromUrl send to the camera a flat file to the camera from an url
- FliSdkError sendBiasFile (std::string filePath)

  sendBiasFile send to the camera a bias file to the camera
- FliSdkError sendFlatFile (std::string filePath)

  sendFlatFile send to the camera a flat file to the camera
- FliSdkError setThresholdingOnOff (bool checked)
- FliSdkError getThreholdingOnOff (bool &checked)
- FliSdkError setThresholdingLevelsValues (int lowLevel, int highLevel, int lowValue, int middleValue, int high↩ Value)

  setThresholdingLevelsValues set the levels and values of the thresholding

Additional Inherited Members

6.3.1 Detailed Description

This class manages the methods common to all the C-RED camera (C-RED One, C-RED 2, C-RED 2 Lite, C-RED 2 ER, C-RED 3)

6.3.2 Constructor & Destructor Documentation

6.3.2.1 FliCred()

```
FliCred::FliCred (
             IFrameGrabberCL * grabber )
```

6.3.3 Member Function Documentation

6.3.3.1 buildBias()

```
FliSdkError FliCred::buildBias ( )
```

buildBias will execute the build of the bias

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.2 buildFlat()

```
FliSdkError FliCred::buildFlat ( )
```

buildFlat will execute the build of the flat

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.3 continueStarting()

```
FliSdkError FliCred::continueStarting ( )
```

continueStarting let the camera continue after a reboot for instance

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.4 enableCropping()

```
FliSdkError FliCred::enableCropping (
             bool enable )
```

6.3.3.5 enableEvents()

```
FliSdkError FliCred::enableEvents (
             bool enable )
```

6.3.3.6 enableExtSynchro()

```
FliSdkError FliCred::enableExtSynchro (
             bool enable )
```

6.3.3.7 enableImageTags()

```
FliSdkError FliCred::enableImageTags (
             bool enable )
```

6.3.3.8 enableLed()

```
FliSdkError FliCred::enableLed (
             bool enable )
```

6.3.3.9 enableTelnet()

```
FliSdkError FliCred::enableTelnet (
             bool enable )
```

6.3.3.10 getAduOffset()

```
FliSdkError FliCred::getAduOffset (
             int & aduOffset )
```

6.3.3.11 getBadPixelModeOnOff()

```
FliSdkError FliCred::getBadPixelModeOnOff (
             bool & checked )
```

6.3.3.12 getBiasState()

```
FliSdkError FliCred::getBiasState (
             bool & enabled )
```

6.3.3.13 getCameraType()

```
FliSdkError FliCred::getCameraType (
             std::string & info )
```

6.3.3.14 getCheckTag4by4()

```
FliSdkError FliCred::getCheckTag4by4 (
             bool & tag4by4 )
```

6.3.3.15 getEventsState()

```
FliSdkError FliCred::getEventsState (
             bool & enabled )
```

6.3.3.16 getExcludeBorder()

```
FliSdkError FliCred::getExcludeBorder (
             bool & exclude )
```

6.3.3.17 getExtSynchroState()

```
FliSdkError FliCred::getExtSynchroState (
             bool & enabled )
```

6.3.3.18 getFilteringModeOnOff()

```
FliSdkError FliCred::getFilteringModeOnOff (
             bool & checked )
```

6.3.3.19 getFlatState()

```
FliSdkError FliCred::getFlatState (
             bool & enabled )
```

6.3.3.20 getHwuid()

```
FliSdkError FliCred::getHwuid (
             std::string & hwuid )
```

6.3.3.21 getImageTagsState()

```
FliSdkError FliCred::getImageTagsState (
             bool & enabled )
```

6.3.3.22 getIpConfig()

```
FliSdkError FliCred::getIpConfig (
             std::string & macAddress,
             std::string & ipAddress,
             std::string & mask,
             bool & established )
```

6.3.3.23 getIsSlowMode()

```
FliSdkError FliCred::getIsSlowMode (
             bool & slowmode )
```

6.3.3.24 getKindOfBadPixelCorrection()

```
FliSdkError FliCred::getKindOfBadPixelCorrection (
             int & correction )
```

getKindOfBadPixelCorrection : get the kind of correction to apply to bad pixels

Parameters

correction	: 1 = Low latency bad pixels correction; 2 = Convolution bad pixels correction

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.25 getLedState()

```
FliSdkError FliCred::getLedState (
             bool & enabled )
```

6.3.3.26 getLogs() [1/2]

```
FliSdkError FliCred::getLogs (
             std::string & url )
```

getLogs start the logs and return the url of them

Parameters

url	the url of the log files if ip is the adress of the camera it will be : "http://" + ip + ":8080//tmp/logs.bin"

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.27 getLogs() [2/2]

```
FliSdkError FliCred::getLogs (
             uint16_t nbDays,
             std::string & url )
```

getLogs start the logs and return the number of days last ones the url of them

Parameters

nbDays	the number of days to get the more recent logs
url	the url of the log files if ip is the adress of the camera it will be : "http://" + ip + ":8080//tmp/logs.bin"

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.28 getPassword()

```
FliSdkError FliCred::getPassword (
             std::string & password )
```

6.3.3.29 getStatus()

```
FliSdkError FliCred::getStatus (
             std::string & status )
```

6.3.3.30 getStatusDetailed()

```
FliSdkError FliCred::getStatusDetailed (
             std::string & status,
             std::string & diag )
```

6.3.3.31 getThreholdingOnOff()

```
FliSdkError FliCred::getThreholdingOnOff (
             bool & checked )
```

6.3.3.32 getUserConvolutionMatrix()

```
FliSdkError FliCred::getUserConvolutionMatrix (
             std::vector< std::vector< double > > & matrixBadPixels,
             double & divisor,
             std::string & description )
```

FliCred_getUserConvolutionMatrix_V2 : method to get the convolution matrix from the camera.

Parameters

matrixBadPixels	: a vector of doubles to return the coefficients of the convolution matrix it will have a Fli::MATRIX_FILTERING_SIZE ∗ Fli::MATRIX_FILTERING_SIZE size
divisor	: return the value of the total divisor coefficient as a double
description	: return the text that describe the matrix as a char∗

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.33 getUserConvolutionMatrixIndex_V2()

```
FliSdkError FliCred::getUserConvolutionMatrixIndex_V2 (
             int & index )
```

getUserConvolutionMatrixIndex_V2 : get the current convolution matrix index

Parameters

index	: the current index

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.34 getVersionFirmware()

```
FliSdkError FliCred::getVersionFirmware (
             std::string & version )
```

6.3.3.35 getVersionFirmwareBuild()

```
FliSdkError FliCred::getVersionFirmwareBuild (
             std::string & build )
```

6.3.3.36 getVersionFirmwareDetailed()

```
FliSdkError FliCred::getVersionFirmwareDetailed (
             std::string & detailed )
```

6.3.3.37 getVersionFpga()

```
FliSdkError FliCred::getVersionFpga (
             std::string & version )
```

6.3.3.38 getVersionHardware()

```
FliSdkError FliCred::getVersionHardware (
             std::string & version )
```

6.3.3.39 getVersions()

```
FliSdkError FliCred::getVersions (
             std::string & firmware,
             std::string & fpga,
             std::string & hardware )
```

6.3.3.40 restoreFactory()

```
FliSdkError FliCred::restoreFactory ( )
```

restoreFactory will restore the factory settings inside the camera as the user settings

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.41 saveCameraSettings()

```
FliSdkError FliCred::saveCameraSettings ( )
```

saveCameraSettings save all the user (not the factory) settings inside the camera

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.42 sendBiasFile()

```
FliSdkError FliCred::sendBiasFile (
             std::string filePath )
```

sendBiasFile send to the camera a bias file to the camera

Parameters

filePath	: the file name and path of the bias file to send to the camera

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.43 sendBiasFromUrl()

```
FliSdkError FliCred::sendBiasFromUrl (
             std::string url )
```

sendBiasFromUrl send to the camera a bias file to the camera from an url

Parameters

url	: the url of the bias file to send to the camera

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.44 sendFlatFile()

```
FliSdkError FliCred::sendFlatFile (
             std::string filePath )
```

sendFlatFile send to the camera a flat file to the camera

Parameters

filePath	: the file name and path of the flat file to send to the camera

Returns

6.3.3.45 sendFlatFromUrl()

```
FliSdkError FliCred::sendFlatFromUrl (
             std::string url )
```

sendFlatFromUrl send to the camera a flat file to the camera from an url

Parameters

url	: the url of the flat file to send to the camera

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.46 setAduOffset()

```
FliSdkError FliCred::setAduOffset (
             int aduOffset )
```

6.3.3.47 setBadPixelModeOnOff()

```
FliSdkError FliCred::setBadPixelModeOnOff (
             bool checked )
```

6.3.3.48 setExcludeBorderOnOff()

```
FliSdkError FliCred::setExcludeBorderOnOff (
             bool exclude )
```

6.3.3.49 setFilteringModeOnOff()

```
FliSdkError FliCred::setFilteringModeOnOff (
             bool checked )
```

6.3.3.50 setIpAddress()

```
FliSdkError FliCred::setIpAddress (
             std::string ip )
```

6.3.3.51 setIpAlternateDns()

```
FliSdkError FliCred::setIpAlternateDns (
             std::string dns )
```

6.3.3.52 setIpAutomatic()

```
FliSdkError FliCred::setIpAutomatic ( )
```

6.3.3.53 setIpDns()

```
FliSdkError FliCred::setIpDns (
             std::string dns )
```

6.3.3.54 setIpGateway()

```
FliSdkError FliCred::setIpGateway (
             std::string gateway )
```

6.3.3.55 setIpManual()

```
FliSdkError FliCred::setIpManual ( )
```

6.3.3.56 setIpNetmask()

```
FliSdkError FliCred::setIpNetmask (
             std::string netmask )
```

6.3.3.57 setIpRefresh()

```
FliSdkError FliCred::setIpRefresh ( )
```

6.3.3.58 setKindOfBadPixelCorrection()

```
FliSdkError FliCred::setKindOfBadPixelCorrection (
             int correction )
```

setKindOfBadPixelCorrection : set the kind of correction to apply to bad pixels

Parameters

correction	: 1 = Low latency bad pixels correction; 2 = Convolution bad pixels correction

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.59 setPassword()

```
FliSdkError FliCred::setPassword (
            std::string password )
```

6.3.3.60 setSlowMode()

```
FliSdkError FliCred::setSlowMode (
            bool slowMode )
```

6.3.3.61 setThresholdingLevelsValues()

```
FliSdkError FliCred::setThresholdingLevelsValues (
            int lowLevel,
            int highLevel,
            int lowValue,
            int middleValue,
            int highValue )
```

setThresholdingLevelsValues set the levels and values of the thresholding

Parameters

lowLevel	the low level of ADU
highLevel	the high level of ADU
lowValue	the value to be set for all the values below the low level
middleValue	the value to be set for all the values between the low level and the high level
highValue	the value to be set for all the values above the high level

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.62 setThresholdingOnOff()

```
FliSdkError FliCred::setThresholdingOnOff (
            bool checked )
```

6.3.3.63 setUserConvolutionMatrix()

```
FliSdkError FliCred::setUserConvolutionMatrix (
            std::vector< std::vector< double > > & matrixBadPixels,
            double divisor,
            std::string & description )
```

FliCred_setUserConvolutionMatrix_V2 : method to set the convolution matrix inside the camera.

Parameters

matrixBadPixels	: a vector of doubles to give the coefficients of the convolution matrix it will have a Fli::MATRIX_FILTERING_SIZE ∗ Fli::MATRIX_FILTERING_SIZE size
divisor	: the value of the total divisor coefficient
description	: the text that describe the matrix

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.64 setUserConvolutionMatrixIndex_V2()

```
FliSdkError FliCred::setUserConvolutionMatrixIndex_V2 (
            const int index )
```

setUserConvolutionMatrixIndex_V2 : set the index of the current convolution matrix

Parameters

index	: the index to set

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.65 shutDown()

```
FliSdkError FliCred::shutDown ( )
```

shutDown will shut down the camera

Returns

a FliSdkError or FLISDK_NO_ERROR

6.3.3.66 upgradeFirmware()

```
FliSdkError FliCred::upgradeFirmware (
             std::string url )
```

upgradeFirmware will upgrade the Firmware inside the camera from the url of a firmware file

Parameters

url	: the url of the firmware file to be updated

Returns

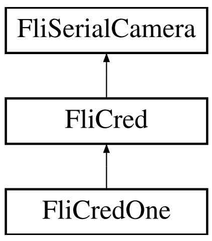
a FliSdkError or FLISDK_NO_ERROR

6.4 FliCredOne Class Reference

This class manages the methods specific to the C-RED One camera.

```
#include <FliCredOne.h>
```

Inheritance diagram for FliCredOne:



Public Types

- enum Mode {
  undefined, globalResetSingle, globalResetBursts, globalResetCds,
  rollingResetIota, rollingResetNro, rollingResetSingle }

Public Member Functions

- FliCredOne (IFrameGrabberCL ∗grabber)
- FliSdkError getCropping (bool &enabled, std::string &columns, std::string &rows)
- FliSdkError getAllTemp (double &mb, double &fe, double &pw, double &cryod, double &cryopt, double &water, double &peltier, double &ptmcu)
- FliSdkError getNbReadWoReset (int &nbRead)
- FliSdkError getRawImagesState (bool &enabled)
- FliSdkError getTempFrontEnd (double &temp)
- FliSdkError getTempMotherBoard (double &temp)
- FliSdkError getTempPowerBoard (double &temp)
- FliSdkError getTempDiode (double &temp)
- FliSdkError getTempPtController (double &temp)
- FliSdkError getTempSetpoint (double &temp)
- FliSdkError getTempPtMcu (double &temp)
- FliSdkError getTempWater (double &temp)
- FliSdkError getVersionFpgaDetailed (std::string &detailed)
- FliSdkError getAll (std::string &all)
- FliSdkError getCoolingState (bool &enabled)
- FliSdkError getGain (double &gain)
- FliSdkError getNbRegenGetter (std::string &regenInfo)
- FliSdkError getRegenRemainingTime (int &time)
- FliSdkError getReadOutMode (Mode &mode)
- FliSdkError getNloop (int &nLoop)
- FliSdkError getNbSamplePixel (int &nSample)
- FliSdkError getPhotoCurrent (double &photocurrent)
- FliSdkError getPowers (double &getter, double &peltier, double &pulseTube)
- FliSdkError getPowerGetter (double &getter)
- FliSdkError getPowerPulseTube (double &pulseTube)
- FliSdkError getPressure (std::string &pressure)
- FliSdkError getPulseTubeReady (std::string &info)
- FliSdkError getRemoteMaintenanceState (std::string &status)
- FliSdkError getResetWidth (int &width)
- FliSdkError getStandbyState (bool &enabled)
- FliSdkError getTestPatternState (bool &enabled)
- FliSdkError getTelnetState (bool &enabled)
- FliSdkError getFowlerState (bool &enabled)
- FliSdkError setCropping (bool enable, std::string columns, std::string rows)
- FliSdkError setCroppingColumns (std::string columns)
- FliSdkError setCroppingRows (std::string rows)
- FliSdkError setNbReadWoReset (int nbRead)
- FliSdkError setGain (double gain)
- FliSdkError setMode (Mode mode)
- FliSdkError setNloop (int nLoop)
- FliSdkError setNsamplePixel (int nSample)
- FliSdkError setResetWidth (int resetWidth)
- FliSdkError enableRawImages (bool enable)
- FliSdkError enableRemoteMaintenance (bool enable)
- FliSdkError enableCooling (bool enable)
- FliSdkError enableStandby (bool enable)
- FliSdkError enableTestPattern (bool enable)
- FliSdkError enableFowler (bool enable)
- FliSdkError startVacuumRegen ()

  startVacuumRegen the camera will try to redo a vacuum
- FliSdkError sendTestPatternFromUrl (std::string url)

sendTestPatternFromUrl send the test patterns to the camera from a url
- FliSdkError reboot ()

  reboot will force the camera to reboot
- FliSdkError isCroppingValid (std::string columns, std::string rows)

  isCroppingValid check against a given Regex pattern, the values of the columns and rows of a cropping

Additional Inherited Members

6.4.1 Detailed Description

This class manages the methods specific to the C-RED One camera.

6.4.2 Member Enumeration Documentation

6.4.2.1 Mode

```
enum FliCredOne::Mode
```

Enumerator

undefined	
globalResetSingle	
globalResetBursts	
globalResetCds	
rollingResetIota	
rollingResetNro	
rollingResetSingle	

6.4.3 Constructor & Destructor Documentation

6.4.3.1 FliCredOne()

```
FliCredOne::FliCredOne (
            IFrameGrabberCL * grabber )
```

6.4.4 Member Function Documentation

6.4.4.1 enableCooling()

```
FliSdkError FliCredOne::enableCooling (
             bool enable )
```

6.4.4.2 enableFowler()

```
FliSdkError FliCredOne::enableFowler (
             bool enable )
```

6.4.4.3 enableRawImages()

```
FliSdkError FliCredOne::enableRawImages (
             bool enable )
```

6.4.4.4 enableRemoteMaintenance()

```
FliSdkError FliCredOne::enableRemoteMaintenance (
             bool enable )
```

6.4.4.5 enableStandby()

```
FliSdkError FliCredOne::enableStandby (
             bool enable )
```

6.4.4.6 enableTestPattern()

```
FliSdkError FliCredOne::enableTestPattern (
             bool enable )
```

6.4.4.7 getAll()

```
FliSdkError FliCredOne::getAll (
             std::string & all )
```

6.4.4.8 getAllTemp()

```
FliSdkError FliCredOne::getAllTemp (
             double & mb,
             double & fe,
             double & pw,
             double & cryod,
             double & cryopt,
             double & water,
             double & peltier,
             double & ptmcu )
```

6.4.4.9 getCoolingState()

```
FliSdkError FliCredOne::getCoolingState (
             bool & enabled )
```

6.4.4.10 getCropping()

```
FliSdkError FliCredOne::getCropping (
             bool & enabled,
             std::string & columns,
             std::string & rows )
```

6.4.4.11 getFowlerState()

```
FliSdkError FliCredOne::getFowlerState (
             bool & enabled )
```

6.4.4.12 getGain()

```
FliSdkError FliCredOne::getGain (
             double & gain )
```

6.4.4.13 getNbReadWoReset()

```
FliSdkError FliCredOne::getNbReadWoReset (
             int & nbRead )
```

6.4.4.14 getNbRegenGetter()

```
FliSdkError FliCredOne::getNbRegenGetter (
             std::string & regenInfo )
```

6.4.4.15 getNbSamplePixel()

```
FliSdkError FliCredOne::getNbSamplePixel (
             int & nSample )
```

6.4.4.16 getNloop()

```
FliSdkError FliCredOne::getNloop (
             int & nLoop )
```

6.4.4.17 getPhotoCurrent()

```
FliSdkError FliCredOne::getPhotoCurrent (
             double & photocurrent )
```

6.4.4.18 getPowerGetter()

```
FliSdkError FliCredOne::getPowerGetter (
             double & getter )
```

6.4.4.19 getPowerPulseTube()

```
FliSdkError FliCredOne::getPowerPulseTube (
             double & pulseTube )
```

6.4.4.20 getPowers()

```
FliSdkError FliCredOne::getPowers (
             double & getter,
             double & peltier,
             double & pulseTube )
```

6.4.4.21 getPressure()

```
FliSdkError FliCredOne::getPressure (
             std::string & pressure )
```

6.4.4.22 getPulseTubeReady()

```
FliSdkError FliCredOne::getPulseTubeReady (
             std::string & info )
```

6.4.4.23 getRawImagesState()

```
FliSdkError FliCredOne::getRawImagesState (
             bool & enabled )
```

6.4.4.24 getReadOutMode()

```
FliSdkError FliCredOne::getReadOutMode (
             Mode & mode )
```

6.4.4.25 getRegenRemainingTime()

```
FliSdkError FliCredOne::getRegenRemainingTime (
             int & time )
```

6.4.4.26 getRemoteMaintenanceState()

```
FliSdkError FliCredOne::getRemoteMaintenanceState (
             std::string & status )
```

6.4.4.27 getResetWidth()

```
FliSdkError FliCredOne::getResetWidth (
             int & width )
```

6.4.4.28 getStandbyState()

```
FliSdkError FliCredOne::getStandbyState (
             bool & enabled )
```

6.4.4.29 getTelnetState()

```
FliSdkError FliCredOne::getTelnetState (
             bool & enabled )
```

6.4.4.30 getTempDiode()

```
FliSdkError FliCredOne::getTempDiode (
             double & temp )
```

6.4.4.31 getTempFrontEnd()

```
FliSdkError FliCredOne::getTempFrontEnd (
             double & temp )
```

6.4.4.32 getTempMotherBoard()

```
FliSdkError FliCredOne::getTempMotherBoard (
             double & temp )
```

6.4.4.33 getTempPowerBoard()

```
FliSdkError FliCredOne::getTempPowerBoard (
             double & temp )
```

6.4.4.34 getTempPtController()

```
FliSdkError FliCredOne::getTempPtController (
             double & temp )
```

6.4.4.35 getTempPtMcu()

```
FliSdkError FliCredOne::getTempPtMcu (
             double & temp )
```

6.4.4.36 getTempSetpoint()

```
FliSdkError FliCredOne::getTempSetpoint (
             double & temp )
```

6.4.4.37 getTempWater()

```
FliSdkError FliCredOne::getTempWater (
             double & temp )
```

6.4.4.38 getTestPatternState()

```
FliSdkError FliCredOne::getTestPatternState (
             bool & enabled )
```

6.4.4.39 getVersionFpgaDetailed()

```
FliSdkError FliCredOne::getVersionFpgaDetailed (
             std::string & detailed )
```

6.4.4.40 isCroppingValid()

```
FliSdkError FliCredOne::isCroppingValid (
             std::string columns,
             std::string rows )
```

isCroppingValid check against a given Regex pattern, the values of the columns and rows of a cropping

Parameters

columns	the values of the columns
rows	the values of the rows

Returns

a FliSdkError the state if columns and/or rows are bad or FLISDK_NO_ERROR

6.4.4.41 reboot()

```
FliSdkError FliCredOne::reboot ( )
```

reboot will force the camera to reboot

Returns

a FliSdkError or FLISDK_NO_ERROR

6.4.4.42 sendTestPatternFromUrl()

```
FliSdkError FliCredOne::sendTestPatternFromUrl (
             std::string url )
```

sendTestPatternFromUrl send the test patterns to the camera from a url

Parameters

url	: the url where are the test patterns file

Returns

a FliSdkError or FLISDK_NO_ERROR

6.4.4.43 setCropping()

```
FliSdkError FliCredOne::setCropping (
             bool enable,
             std::string columns,
             std::string rows )
```

6.4.4.44 setCroppingColumns()

```
FliSdkError FliCredOne::setCroppingColumns (
             std::string columns )
```

6.4.4.45 setCroppingRows()

```
FliSdkError FliCredOne::setCroppingRows (
             std::string rows )
```

6.4.4.46 setGain()

```
FliSdkError FliCredOne::setGain (
             double gain )
```

6.4.4.47 setMode()

```
FliSdkError FliCredOne::setMode (
             Mode mode )
```

6.4.4.48 setNbReadWoReset()

```
FliSdkError FliCredOne::setNbReadWoReset (
             int nbRead )
```

6.4.4.49 setNloop()

```
FliSdkError FliCredOne::setNloop (
             int nLoop )
```

6.4.4.50 setNsamplePixel()

```
FliSdkError FliCredOne::setNsamplePixel (
             int nSample )
```

6.4.4.51 setResetWidth()

```
FliSdkError FliCredOne::setResetWidth (
             int resetWidth )
```

6.4.4.52 startVacuumRegen()

```
FliSdkError FliCredOne::startVacuumRegen ( )
```

startVacuumRegen the camera will try to redo a vacuum

Returns

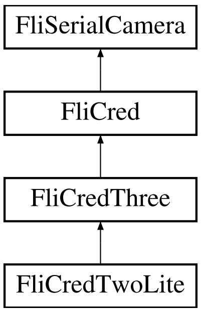
a FliSdkError or FLISDK_NO_ERROR

6.5 FliCredThree Class Reference

This class manages the methods specific to the C-RED 3 camera.

```
#include <FliCredThree.h>
```

Inheritance diagram for FliCredThree:



Public Types

- enum AgcParam {
  level_pix_high_hg, level_pix_high_mg, level_pix_low_lg, level_pix_low_mg,
  trigger_nb_frames_hg_to_mg, trigger_nb_frames_lg_to_mg, trigger_nb_frames_mg_to_hg, trigger_nb_frames_mg_to_lg,
  trigger_ratio_pixels_hg_to_mg, trigger_ratio_pixels_lg_to_mg, trigger_ratio_pixels_mg_to_hg, trigger_ratio_pixels_mg_to_lg
  }

Public Member Functions

- FliCredThree (IFrameGrabberCL ∗grabber, bool isOem=false)
- FliSdkError getCropping (bool &enabled, uint16_t &col1, uint16_t &col2, uint16_t &row1, uint16_t &row2)
- FliSdkError getAllTemp (double &cpu, double &backend, double &interfaceTemp, double &ambiant, double &sensor)
- FliSdkError getTempAmbiant (double &temp)
- FliSdkError getTempBackEnd (double &temp)
- FliSdkError getTempCpu (double &temp)
- FliSdkError getTempInterface (double &temp)
- FliSdkError getTempSnake (double &temp)
- FliSdkError getTint (double &tint)
- FliSdkError getTintRange (double &tintMin, double &tintMax)
- FliSdkError getBadPixelState (bool &enabled)

- FliSdkError getAdaptBiasState (bool &enabled)
- FliSdkError getAgcState (bool &enabled)
- FliSdkError getConversionGain (std::string &conversionGain)
- FliSdkError getAntiBloomingState (bool &enabled)
- FliSdkError getAgcPriority (std::string &priority)
- FliSdkError getAgcRoi (uint16_t &col1, uint16_t &row1, uint16_t &col2, uint16_t &row2)
- FliSdkError getDarkOptimLevel (int &level)
- FliSdkError getExtSynchroExposure (std::string &exposure)
- FliSdkError getExtSynchroPolarity (std::string &polarity)
- FliSdkError getTuning (std::string &tuning)
- FliSdkError getHdrState (bool &enabled)
- FliSdkError getHdrCalibrationMode (std::string &mode)
- FliSdkError getHdrExtendedState (bool &enabled)
- FliSdkError getLicenses (std::vector< std::string > &licenses)
- FliSdkError getMaxFpsUsb (double &maxFpsUsb)
- FliSdkError getMaxSyncDelay (double &maxSyncDelay)
- FliSdkError getMinSyncDelay (double &minSyncDelay)
- FliSdkError getMaxTintItr (double &maxTintItr)
- FliSdkError getMinFps (double &minFps)
- FliSdkError getNbFramesPerSwTrig (int &nbFrames)
- FliSdkError getPreset (int &preset)
- FliSdkError getRemoteMaintenanceState (bool &enabled)
- FliSdkError getStepSyncDelay (double &delay)
- FliSdkError getSwSynchroState (bool &enabled)
- FliSdkError getSyncDelay (double &delay)
- FliSdkError getTcdsAdjustState (bool &enabled)
- FliSdkError getTelnetState (bool &enabled)
- FliSdkError getTintGranularityState (bool &enabled)
- FliSdkError getTlsydel (int &val)
- FliSdkError getVrefAdjustState (bool &enabled)
- FliSdkError getAgcParam (AgcParam param, double &value)
- FliSdkError getIpAlternateDns (std::string &dns)
- FliSdkError getIpDns (std::string &dns)
- FliSdkError getIpGateway (std::string &gateway)
- FliSdkError getIpMode (std::string &mode)
- FliSdkError getIpNetmask (std::string &netmask)
- FliSdkError getIpAddress (std::string &ip)
- FliSdkError getSnakeParam (std::string parameter, uint16_t &value)
- FliSdkError getUploadFirmwareConnectionInfo (std::string &ip, uint16_t &port)
- FliSdkError getTriggerSource (std::string &source)
- FliSdkError getSyncSignalSource (std::string &source)
- FliSdkError getExtMarkerSource (std::string &source)
- FliSdkError getHardwareFeatures (int &features)
- FliSdkError getSoftwareFeatures (int &features)
- FliSdkError getFactoryBadPixelMap (std::vector< bool > &map, std::function< void(int)> get←Progress=nullptr)
- FliSdkError getUserBadPixelMap (std::vector< bool > &map, std::function< void(int)> getProgress=nullptr)
- FliSdkError getTintStep (double &step)
- FliSdkError getImagePattern (std::string &pattern)
- FliSdkError getDate (std::string &date)
- FliSdkError getUptime (std::string &uptime)
- FliSdkError getAccumulatedUptime (std::string &uptime)
- FliSdkError getTotalUptime (std::string &uptime)
- FliSdkError getRawImagesState (bool &enabled)
- FliSdkError getUnsignedPixelsState (bool &enabled)

- FliSdkError setCropping (bool enable, uint16_t col1, uint16_t col2, uint16_t row1, uint16_t row2)
- FliSdkError setCroppingColumns (uint16_t col1, uint16_t col2)
- FliSdkError setCroppingRows (uint16_t row1, uint16_t row2)
- FliSdkError setTint (double tint)
- FliSdkError setConversionGainHigh ()
- FliSdkError setConversionGainMedium ()
- FliSdkError setConversionGainLow ()
- FliSdkError setAgcPriorityNone ()
- FliSdkError setAgcPriorityOverExposed ()
- FliSdkError setAgcPriorityUnderExposed ()
- FliSdkError setDarkOptimLevel (int level)
- FliSdkError setExtSynchroExposureInternal ()
- FliSdkError setExtSynchroExposureExternal ()
- FliSdkError setExtSynchroPolarityInverted ()
- FliSdkError setExtSynchroPolarityStandard ()
- FliSdkError setTuningGeneralUse ()
- FliSdkError setTuningShortExposure ()
- FliSdkError setTuningLongExposure ()
- FliSdkError setHdrCalibrationC1 ()
- FliSdkError setHdrCalibrationC2 ()
- FliSdkError setHdrCalibrationOff ()
- FliSdkError setNbFramesPerSwTrig (uint16_t nbFrames)
- FliSdkError setSyncDelay (int delay)
- FliSdkError setTlsyDel (int val)
- FliSdkError setVoltageVref (double vref)
- FliSdkError setAgcRoi (uint16_t col1, uint16_t row1, uint16_t col2, uint16_t row2)
- FliSdkError setAgcParam (AgcParam param, double value)
- FliSdkError setPreset ()
- FliSdkError setPresetNumber (uint8_t presetNumber)
- FliSdkError setSnakeParam (std::string parameter, uint16_t value)
- FliSdkError setTriggerSourceSoftware ()
- FliSdkError setTriggerSourceExternal ()
- FliSdkError setSyncSignalSourceExternal ()
- FliSdkError setSyncSignalSourceCC1 ()
- FliSdkError setSyncSignalSourceCC2 ()
- FliSdkError setSyncSignalSourceCC3 ()
- FliSdkError setSyncSignalSourceCC4 ()
- FliSdkError setFrameMarkerSourceExternal ()
- FliSdkError setFrameMarkerSourceCC1 ()
- FliSdkError setFrameMarkerSourceCC2 ()
- FliSdkError setFrameMarkerSourceCC3 ()
- FliSdkError setFrameMarkerSourceCC4 ()
- FliSdkError setFactoryBadPixelMap (std::vector< bool > &map)
- FliSdkError setUserBadPixelMap (std::vector< bool > &map)
- FliSdkError setImagePatternRamp ()
- FliSdkError setImagePatternConstant (uint16_t val)
- FliSdkError setImagePatternOff ()
- FliSdkError enableBadPixel (bool enable)
- FliSdkError enableAdaptBias (bool enable)
- FliSdkError enableAgc (bool enable)
- FliSdkError enableAntiBlooming (bool enable)
- FliSdkError enableHdrExtended (bool enable)
- FliSdkError enableHdr (bool enable)
- FliSdkError enableRemoteMaintenance (bool enable)
- FliSdkError enableSwSynchro (bool enable)

- FliSdkError enableTcdsAdjust (bool enable)
- FliSdkError enableTintGranularity (bool enable)
- FliSdkError enableVrefAdjust (bool enable)
- FliSdkError enableRawImages (bool enable)
- FliSdkError enableUnsignedPixels (bool enable)
- FliSdkError reboot ()
- FliSdkError buildFlatHdrC1 ()
- FliSdkError buildFlatHdrC2 ()
- FliSdkError sendBiasHdrC1FromUrl (std::string url)
- FliSdkError sendBiasHdrC2FromUrl (std::string url)
- FliSdkError sendFlatHdrC1FromUrl (std::string url)
- FliSdkError sendFlatHdrC2FromUrl (std::string url)
- FliSdkError sendBiasHdrC1File (std::string filePath)
- FliSdkError sendBiasHdrC2File (std::string filePath)
- FliSdkError sendFlatHdrC1File (std::string filePath)
- FliSdkError sendFlatHdrC2File (std::string filePath)
- FliSdkError xSendBiasFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError xSendBiasHdrC1File (std::string filePath, std::function< void(bool, int, int)> getBlock↩ Status=nullptr)
- FliSdkError xSendBiasHdrC2File (std::string filePath, std::function< void(bool, int, int)> getBlock↩ Status=nullptr)
- FliSdkError xSendFlatFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError xSendFlatHdrC1File (std::string filePath, std::function< void(bool, int, int)> getBlock↩ Status=nullptr)
- FliSdkError xSendFlatHdrC2File (std::string filePath, std::function< void(bool, int, int)> getBlock↩ Status=nullptr)
- FliSdkError xSendLicenseFile (std::string filePath, std::string fileName, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError sendLicenseFile (std::string filePath, std::string fileName)
- FliSdkError deleteLicense (std::string licenseName)
- FliSdkError disableLicense (std::string licenseName)
- FliSdkError enableLicense (std::string licenseName)
- FliSdkError softwareTrig ()
- FliSdkError sendBadPixelFile (std::string filePath)
- FliSdkError xSendBadPixelFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError sendBadPixelFromUrl (std::string url)
- FliSdkError isCroppingValid (uint16_t col1, uint16_t col2, uint16_t row1, uint16_t row2)
- FliSdkError buildBiasNuc (uint16_t nbImages=256)
- FliSdkError buildFlatNuc (uint16_t nbImages=256)
- FliSdkError buildFlatHdrC1Nuc (uint16_t nbImages=256)
- FliSdkError buildFlatHdrC2Nuc (uint16_t nbImages=256)
- FliSdkError abortBuildNuc ()
- FliSdkError getBuildNucProgress (int &progress)
- FliSdkError startHttpServer ()
- FliSdkError stopHttpServer ()
- FliSdkError startEthernetGrabber ()
- FliSdkError stopEthernetGrabber ()

Additional Inherited Members

6.5.1 Detailed Description

This class manages the methods specific to the C-RED 3 camera.

6.5.2 Member Enumeration Documentation

6.5.2.1 AgcParam

```
enum FliCredThree::AgcParam
```

Enumerator

level_pix_high_hg	
level_pix_high_mg	
level_pix_low_lg	
level_pix_low_mg	
trigger_nb_frames_hg_to_mg	
trigger_nb_frames_lg_to_mg	
trigger_nb_frames_mg_to_hg	
trigger_nb_frames_mg_to_lg	
trigger_ratio_pixels_hg_to_mg	
trigger_ratio_pixels_lg_to_mg	
trigger_ratio_pixels_mg_to_hg	
trigger_ratio_pixels_mg_to_lg	

6.5.3 Constructor & Destructor Documentation

6.5.3.1 FliCredThree()

```
FliCredThree::FliCredThree (
             IFrameGrabberCL * grabber,
             bool isOem = false )
```

6.5.4 Member Function Documentation

6.5.4.1 abortBuildNuc()

```
FliSdkError FliCredThree::abortBuildNuc ( )
```

6.5.4.2 buildBiasNuc()

```
FliSdkError FliCredThree::buildBiasNuc (
             uint16_t nbImages = 256 )
```

6.5.4.3 buildFlatHdrC1()

```
FliSdkError FliCredThree::buildFlatHdrC1 ( )
```

6.5.4.4 buildFlatHdrC1Nuc()

```
FliSdkError FliCredThree::buildFlatHdrC1Nuc (
             uint16_t nbImages = 256 )
```

6.5.4.5 buildFlatHdrC2()

```
FliSdkError FliCredThree::buildFlatHdrC2 ( )
```

6.5.4.6 buildFlatHdrC2Nuc()

```
FliSdkError FliCredThree::buildFlatHdrC2Nuc (
             uint16_t nbImages = 256 )
```

6.5.4.7 buildFlatNuc()

```
FliSdkError FliCredThree::buildFlatNuc (
             uint16_t nbImages = 256 )
```

6.5.4.8 deleteLicense()

```
FliSdkError FliCredThree::deleteLicense (
             std::string licenseName )
```

6.5.4.9 disableLicense()

```
FliSdkError FliCredThree::disableLicense (
             std::string licenseName )
```

6.5.4.10 enableAdaptBias()

```
FliSdkError FliCredThree::enableAdaptBias (
             bool enable )
```

6.5.4.11 enableAgc()

```
FliSdkError FliCredThree::enableAgc (
             bool enable )
```

6.5.4.12 enableAntiBlooming()

```
FliSdkError FliCredThree::enableAntiBlooming (
             bool enable )
```

6.5.4.13 enableBadPixel()

```
FliSdkError FliCredThree::enableBadPixel (
             bool enable )
```

6.5.4.14 enableHdr()

```
FliSdkError FliCredThree::enableHdr (
             bool enable )
```

6.5.4.15 enableHdrExtended()

```
FliSdkError FliCredThree::enableHdrExtended (
             bool enable )
```

6.5.4.16 enableLicense()

```
FliSdkError FliCredThree::enableLicense (
             std::string licenseName )
```

6.5.4.17 enableRawImages()

```
FliSdkError FliCredThree::enableRawImages (
             bool enable )
```

6.5.4.18 enableRemoteMaintenance()

```
FliSdkError FliCredThree::enableRemoteMaintenance (
             bool enable )
```

6.5.4.19 enableSwSynchro()

```
FliSdkError FliCredThree::enableSwSynchro (
             bool enable )
```

6.5.4.20 enableTcdsAdjust()

```
FliSdkError FliCredThree::enableTcdsAdjust (
             bool enable )
```

6.5.4.21 enableTintGranularity()

```
FliSdkError FliCredThree::enableTintGranularity (
             bool enable )
```

6.5.4.22 enableUnsignedPixels()

```
FliSdkError FliCredThree::enableUnsignedPixels (
             bool enable )
```

6.5.4.23 enableVrefAdjust()

```
FliSdkError FliCredThree::enableVrefAdjust (
             bool enable )
```

6.5.4.24 getAccumulatedUptime()

```
FliSdkError FliCredThree::getAccumulatedUptime (
             std::string & uptime )
```

6.5.4.25 getAdaptBiasState()

```
FliSdkError FliCredThree::getAdaptBiasState (
             bool & enabled )
```

6.5.4.26 getAgcParam()

```
FliSdkError FliCredThree::getAgcParam (
             AgcParam param,
             double & value )
```

6.5.4.27 getAgcPriority()

```
FliSdkError FliCredThree::getAgcPriority (
             std::string & priority )
```

6.5.4.28 getAgcRoi()

```
FliSdkError FliCredThree::getAgcRoi (
             uint16_t & col1,
             uint16_t & row1,
             uint16_t & col2,
             uint16_t & row2 )
```

6.5.4.29 getAgcState()

```
FliSdkError FliCredThree::getAgcState (
             bool & enabled )
```

6.5.4.30 getAllTemp()

```
FliSdkError FliCredThree::getAllTemp (
             double & cpu,
             double & backend,
             double & interfaceTemp,
             double & ambiant,
             double & sensor )
```

6.5.4.31 getAntiBloomingState()

```
FliSdkError FliCredThree::getAntiBloomingState (
             bool & enabled )
```

6.5.4.32 getBadPixelState()

```
FliSdkError FliCredThree::getBadPixelState (
             bool & enabled )
```

6.5.4.33 getBuildNucProgress()

```
FliSdkError FliCredThree::getBuildNucProgress (
             int & progress )
```

6.5.4.34 getConversionGain()

```
FliSdkError FliCredThree::getConversionGain (
             std::string & conversionGain )
```

6.5.4.35 getCropping()

```
FliSdkError FliCredThree::getCropping (
             bool & enabled,
             uint16_t & col1,
             uint16_t & col2,
             uint16_t & row1,
             uint16_t & row2 )
```

6.5.4.36 getDarkOptimLevel()

```
FliSdkError FliCredThree::getDarkOptimLevel (
             int & level )
```

6.5.4.37 getDate()

```
FliSdkError FliCredThree::getDate (
             std::string & date )
```

6.5.4.38 getExtMarkerSource()

```
FliSdkError FliCredThree::getExtMarkerSource (
             std::string & source )
```

6.5.4.39 getExtSynchroExposure()

```
FliSdkError FliCredThree::getExtSynchroExposure (
             std::string & exposure )
```

6.5.4.40 getExtSynchroPolarity()

```
FliSdkError FliCredThree::getExtSynchroPolarity (
             std::string & polarity )
```

6.5.4.41 getFactoryBadPixelMap()

```
FliSdkError FliCredThree::getFactoryBadPixelMap (
            std::vector< bool > & map,
            std::function< void(int)> getProgress = nullptr )
```

6.5.4.42 getHardwareFeatures()

```
FliSdkError FliCredThree::getHardwareFeatures (
            int & features )
```

6.5.4.43 getHdrCalibrationMode()

```
FliSdkError FliCredThree::getHdrCalibrationMode (
            std::string & mode )
```

6.5.4.44 getHdrExtendedState()

```
FliSdkError FliCredThree::getHdrExtendedState (
            bool & enabled )
```

6.5.4.45 getHdrState()

```
FliSdkError FliCredThree::getHdrState (
            bool & enabled )
```

6.5.4.46 getImagePattern()

```
FliSdkError FliCredThree::getImagePattern (
            std::string & pattern )
```

6.5.4.47 getIpAddress()

```
FliSdkError FliCredThree::getIpAddress (
            std::string & ip )
```

6.5.4.48 getIpAlternateDns()

```
FliSdkError FliCredThree::getIpAlternateDns (
             std::string & dns )
```

6.5.4.49 getIpDns()

```
FliSdkError FliCredThree::getIpDns (
             std::string & dns )
```

6.5.4.50 getIpGateway()

```
FliSdkError FliCredThree::getIpGateway (
             std::string & gateway )
```

6.5.4.51 getIpMode()

```
FliSdkError FliCredThree::getIpMode (
             std::string & mode )
```

6.5.4.52 getIpNetmask()

```
FliSdkError FliCredThree::getIpNetmask (
             std::string & netmask )
```

6.5.4.53 getLicenses()

```
FliSdkError FliCredThree::getLicenses (
             std::vector< std::string > & licenses )
```

6.5.4.54 getMaxFpsUsb()

```
FliSdkError FliCredThree::getMaxFpsUsb (
             double & maxFpsUsb )
```

6.5.4.55 getMaxSyncDelay()

```
FliSdkError FliCredThree::getMaxSyncDelay (
             double & maxSyncDelay )
```

6.5.4.56 getMaxTintItr()

```
FliSdkError FliCredThree::getMaxTintItr (
             double & maxTintItr )
```

6.5.4.57 getMinFps()

```
FliSdkError FliCredThree::getMinFps (
             double & minFps )
```

6.5.4.58 getMinSyncDelay()

```
FliSdkError FliCredThree::getMinSyncDelay (
             double & minSyncDelay )
```

6.5.4.59 getNbFramesPerSwTrig()

```
FliSdkError FliCredThree::getNbFramesPerSwTrig (
             int & nbFrames )
```

6.5.4.60 getPreset()

```
FliSdkError FliCredThree::getPreset (
             int & preset )
```

6.5.4.61 getRawImagesState()

```
FliSdkError FliCredThree::getRawImagesState (
             bool & enabled )
```

6.5.4.62 getRemoteMaintenanceState()

```
FliSdkError FliCredThree::getRemoteMaintenanceState (
             bool & enabled )
```

6.5.4.63 getSnakeParam()

```
FliSdkError FliCredThree::getSnakeParam (
             std::string parameter,
             uint16_t & value )
```

6.5.4.64 getSoftwareFeatures()

```
FliSdkError FliCredThree::getSoftwareFeatures (
             int & features )
```

6.5.4.65 getStepSyncDelay()

```
FliSdkError FliCredThree::getStepSyncDelay (
             double & delay )
```

6.5.4.66 getSwSynchroState()

```
FliSdkError FliCredThree::getSwSynchroState (
             bool & enabled )
```

6.5.4.67 getSyncDelay()

```
FliSdkError FliCredThree::getSyncDelay (
             double & delay )
```

6.5.4.68 getSyncSignalSource()

```
FliSdkError FliCredThree::getSyncSignalSource (
             std::string & source )
```

6.5.4.69 getTcdsAdjustState()

```
FliSdkError FliCredThree::getTcdsAdjustState (
            bool & enabled )
```

6.5.4.70 getTelnetState()

```
FliSdkError FliCredThree::getTelnetState (
            bool & enabled )
```

6.5.4.71 getTempAmbiant()

```
FliSdkError FliCredThree::getTempAmbiant (
            double & temp )
```

6.5.4.72 getTempBackEnd()

```
FliSdkError FliCredThree::getTempBackEnd (
            double & temp )
```

6.5.4.73 getTempCpu()

```
FliSdkError FliCredThree::getTempCpu (
            double & temp )
```

6.5.4.74 getTempInterface()

```
FliSdkError FliCredThree::getTempInterface (
            double & temp )
```

6.5.4.75 getTempSnake()

```
FliSdkError FliCredThree::getTempSnake (
            double & temp )
```

6.5.4.76 getTint()

```
FliSdkError FliCredThree::getTint (
             double & tint )
```

6.5.4.77 getTintGranularityState()

```
FliSdkError FliCredThree::getTintGranularityState (
             bool & enabled )
```

6.5.4.78 getTintRange()

```
FliSdkError FliCredThree::getTintRange (
             double & tintMin,
             double & tintMax )
```

6.5.4.79 getTintStep()

```
FliSdkError FliCredThree::getTintStep (
             double & step )
```

6.5.4.80 getTlsydel()

```
FliSdkError FliCredThree::getTlsydel (
             int & val )
```

6.5.4.81 getTotalUptime()

```
FliSdkError FliCredThree::getTotalUptime (
             std::string & uptime )
```

6.5.4.82 getTriggerSource()

```
FliSdkError FliCredThree::getTriggerSource (
             std::string & source )
```

6.5.4.83 getTuning()

```
FliSdkError FliCredThree::getTuning (
             std::string & tuning )
```

6.5.4.84 getUnsignedPixelsState()

```
FliSdkError FliCredThree::getUnsignedPixelsState (
             bool & enabled )
```

6.5.4.85 getUploadFirmwareConnectionInfo()

```
FliSdkError FliCredThree::getUploadFirmwareConnectionInfo (
             std::string & ip,
             uint16_t & port )
```

6.5.4.86 getUptime()

```
FliSdkError FliCredThree::getUptime (
             std::string & uptime )
```

6.5.4.87 getUserBadPixelMap()

```
FliSdkError FliCredThree::getUserBadPixelMap (
             std::vector< bool > & map,
             std::function< void(int)> getProgress = nullptr )
```

6.5.4.88 getVrefAdjustState()

```
FliSdkError FliCredThree::getVrefAdjustState (
             bool & enabled )
```

6.5.4.89 isCroppingValid()

```
FliSdkError FliCredThree::isCroppingValid (
             uint16_t col1,
             uint16_t col2,
             uint16_t row1,
             uint16_t row2 )
```

6.5.4.90 reboot()

```
FliSdkError FliCredThree::reboot ( )
```

6.5.4.91 sendBadPixelFile()

```
FliSdkError FliCredThree::sendBadPixelFile (
             std::string filePath )
```

6.5.4.92 sendBadPixelFromUrl()

```
FliSdkError FliCredThree::sendBadPixelFromUrl (
             std::string url )
```

6.5.4.93 sendBiasHdrC1File()

```
FliSdkError FliCredThree::sendBiasHdrC1File (
             std::string filePath )
```

6.5.4.94 sendBiasHdrC1FromUrl()

```
FliSdkError FliCredThree::sendBiasHdrC1FromUrl (
             std::string url )
```

6.5.4.95 sendBiasHdrC2File()

```
FliSdkError FliCredThree::sendBiasHdrC2File (
             std::string filePath )
```

6.5.4.96 sendBiasHdrC2FromUrl()

```
FliSdkError FliCredThree::sendBiasHdrC2FromUrl (
             std::string url )
```

6.5.4.97 sendFlatHdrC1File()

```
FliSdkError FliCredThree::sendFlatHdrC1File (
             std::string filePath )
```

6.5.4.98 sendFlatHdrC1FromUrl()

```
FliSdkError FliCredThree::sendFlatHdrC1FromUrl (
             std::string url )
```

6.5.4.99 sendFlatHdrC2File()

```
FliSdkError FliCredThree::sendFlatHdrC2File (
             std::string filePath )
```

6.5.4.100 sendFlatHdrC2FromUrl()

```
FliSdkError FliCredThree::sendFlatHdrC2FromUrl (
             std::string url )
```

6.5.4.101 sendLicenseFile()

```
FliSdkError FliCredThree::sendLicenseFile (
             std::string filePath,
             std::string fileName )
```

6.5.4.102 setAgcParam()

```
FliSdkError FliCredThree::setAgcParam (
             AgcParam param,
             double value )
```

6.5.4.103 setAgcPriorityNone()

```
FliSdkError FliCredThree::setAgcPriorityNone ( )
```

6.5.4.104 setAgcPriorityOverExposed()

```
FliSdkError FliCredThree::setAgcPriorityOverExposed ( )
```

6.5.4.105 setAgcPriorityUnderExposed()

```
FliSdkError FliCredThree::setAgcPriorityUnderExposed ( )
```

6.5.4.106 setAgcRoi()

```
FliSdkError FliCredThree::setAgcRoi (
             uint16_t col1,
             uint16_t row1,
             uint16_t col2,
             uint16_t row2 )
```

6.5.4.107 setConversionGainHigh()

```
FliSdkError FliCredThree::setConversionGainHigh ( )
```

6.5.4.108 setConversionGainLow()

```
FliSdkError FliCredThree::setConversionGainLow ( )
```

6.5.4.109 setConversionGainMedium()

```
FliSdkError FliCredThree::setConversionGainMedium ( )
```

6.5.4.110 setCropping()

```
FliSdkError FliCredThree::setCropping (
            bool enable,
            uint16_t col1,
            uint16_t col2,
            uint16_t row1,
            uint16_t row2 )
```

6.5.4.111 setCroppingColumns()

```
FliSdkError FliCredThree::setCroppingColumns (
            uint16_t col1,
            uint16_t col2 )
```

6.5.4.112 setCroppingRows()

```
FliSdkError FliCredThree::setCroppingRows (
            uint16_t row1,
            uint16_t row2 )
```

6.5.4.113 setDarkOptimLevel()

```
FliSdkError FliCredThree::setDarkOptimLevel (
            int level )
```

6.5.4.114 setExtSynchroExposureExternal()

```
FliSdkError FliCredThree::setExtSynchroExposureExternal ( )
```

6.5.4.115 setExtSynchroExposureInternal()

```
FliSdkError FliCredThree::setExtSynchroExposureInternal ( )
```

6.5.4.116 setExtSynchroPolarityInverted()

```
FliSdkError FliCredThree::setExtSynchroPolarityInverted ( )
```

6.5.4.117 setExtSynchroPolarityStandard()

```
FliSdkError FliCredThree::setExtSynchroPolarityStandard ( )
```

6.5.4.118 setFactoryBadPixelMap()

```
FliSdkError FliCredThree::setFactoryBadPixelMap (
             std::vector< bool > & map )
```

6.5.4.119 setFrameMarkerSourceCC1()

```
FliSdkError FliCredThree::setFrameMarkerSourceCC1 ( )
```

6.5.4.120 setFrameMarkerSourceCC2()

```
FliSdkError FliCredThree::setFrameMarkerSourceCC2 ( )
```

6.5.4.121 setFrameMarkerSourceCC3()

```
FliSdkError FliCredThree::setFrameMarkerSourceCC3 ( )
```

6.5.4.122 setFrameMarkerSourceCC4()

```
FliSdkError FliCredThree::setFrameMarkerSourceCC4 ( )
```

6.5.4.123 setFrameMarkerSourceExternal()

```
FliSdkError FliCredThree::setFrameMarkerSourceExternal ( )
```

6.5.4.124 setHdrCalibrationC1()

```
FliSdkError FliCredThree::setHdrCalibrationC1 ( )
```

6.5.4.125 setHdrCalibrationC2()

```
FliSdkError FliCredThree::setHdrCalibrationC2 ( )
```

6.5.4.126 setHdrCalibrationOff()

```
FliSdkError FliCredThree::setHdrCalibrationOff ( )
```

6.5.4.127 setImagePatternConstant()

```
FliSdkError FliCredThree::setImagePatternConstant (
            uint16_t val )
```

6.5.4.128 setImagePatternOff()

```
FliSdkError FliCredThree::setImagePatternOff ( )
```

6.5.4.129 setImagePatternRamp()

```
FliSdkError FliCredThree::setImagePatternRamp ( )
```

6.5.4.130 setNbFramesPerSwTrig()

```
FliSdkError FliCredThree::setNbFramesPerSwTrig (
             uint16_t nbFrames )
```

6.5.4.131 setPreset()

```
FliSdkError FliCredThree::setPreset ( )
```

6.5.4.132 setPresetNumber()

```
FliSdkError FliCredThree::setPresetNumber (
             uint8_t presetNumber )
```

6.5.4.133 setSnakeParam()

```
FliSdkError FliCredThree::setSnakeParam (
             std::string parameter,
             uint16_t value )
```

6.5.4.134 setSyncDelay()

```
FliSdkError FliCredThree::setSyncDelay (
             int delay )
```

6.5.4.135 setSyncSignalSourceCC1()

```
FliSdkError FliCredThree::setSyncSignalSourceCC1 ( )
```

6.5.4.136 setSyncSignalSourceCC2()

```
FliSdkError FliCredThree::setSyncSignalSourceCC2 ( )
```

6.5.4.137 setSyncSignalSourceCC3()

```
FliSdkError FliCredThree::setSyncSignalSourceCC3 ( )
```

6.5.4.138 setSyncSignalSourceCC4()

```
FliSdkError FliCredThree::setSyncSignalSourceCC4 ( )
```

6.5.4.139 setSyncSignalSourceExternal()

```
FliSdkError FliCredThree::setSyncSignalSourceExternal ( )
```

6.5.4.140 setTint()

```
FliSdkError FliCredThree::setTint (
             double tint )
```

6.5.4.141 setTlsyDel()

```
FliSdkError FliCredThree::setTlsyDel (
             int val )
```

6.5.4.142 setTriggerSourceExternal()

```
FliSdkError FliCredThree::setTriggerSourceExternal ( )
```

6.5.4.143 setTriggerSourceSoftware()

```
FliSdkError FliCredThree::setTriggerSourceSoftware ( )
```

6.5.4.144 setTuningGeneralUse()

```
FliSdkError FliCredThree::setTuningGeneralUse ( )
```

6.5.4.145 setTuningLongExposure()

```
FliSdkError FliCredThree::setTuningLongExposure ( )
```

6.5.4.146 setTuningShortExposure()

```
FliSdkError FliCredThree::setTuningShortExposure ( )
```

6.5.4.147 setUserBadPixelMap()

```
FliSdkError FliCredThree::setUserBadPixelMap (
             std::vector< bool > & map )
```

6.5.4.148 setVoltageVref()

```
FliSdkError FliCredThree::setVoltageVref (
             double vref )
```

6.5.4.149 softwareTrig()

```
FliSdkError FliCredThree::softwareTrig ( )
```

6.5.4.150 startEthernetGrabber()

```
FliSdkError FliCredThree::startEthernetGrabber ( )
```

6.5.4.151 startHttpServer()

```
FliSdkError FliCredThree::startHttpServer ( )
```

6.5.4.152 stopEthernetGrabber()

```
FliSdkError FliCredThree::stopEthernetGrabber ( )
```

6.5.4.153 stopHttpServer()

```
FliSdkError FliCredThree::stopHttpServer ( )
```

6.5.4.154 xSendBadPixelFile()

```
FliSdkError FliCredThree::xSendBadPixelFile (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.155 xSendBiasFile()

```
FliSdkError FliCredThree::xSendBiasFile (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.156 xSendBiasHdrC1File()

```
FliSdkError FliCredThree::xSendBiasHdrC1File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.157 xSendBiasHdrC2File()

```
FliSdkError FliCredThree::xSendBiasHdrC2File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.158 xSendFlatFile()

```
FliSdkError FliCredThree::xSendFlatFile (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.159 xSendFlatHdrC1File()

```
FliSdkError FliCredThree::xSendFlatHdrC1File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.160 xSendFlatHdrC2File()

```
FliSdkError FliCredThree::xSendFlatHdrC2File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.5.4.161 xSendLicenseFile()

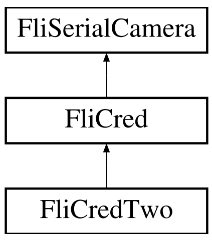
```
FliSdkError FliCredThree::xSendLicenseFile (
            std::string filePath,
            std::string fileName,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6 FliCredTwo Class Reference

This class manages the methods specific to the C-RED 2 and C-RED 2 ER cameras.

`#include <FliCredTwo.h>`

Inheritance diagram for FliCredTwo:



Public Member Functions

- FliCredTwo (IFrameGrabberCL ∗grabber, bool isER=false)
- FliSdkError getCropping (bool &enabled, uint16_t &col1, uint16_t &col2, uint16_t &row1, uint16_t &row2)
- FliSdkError getAllTemp (double &mb, double &fe, double &pw, double &sensor, double &peltier, double &heatsink)
- FliSdkError getNbReadWoReset (int &nbread)
- FliSdkError getRawImagesState (bool &enabled)
- FliSdkError getAntiBloomingState (bool &enabled)
- FliSdkError getTempFrontEnd (double &temp)
- FliSdkError getTempMotherBoard (double &temp)
- FliSdkError getTempPowerBoard (double &temp)
- FliSdkError getTempHeatSink (double &temp)
- FliSdkError getTempPeltier (double &temp)
- FliSdkError getTempSnake (double &temp)
- FliSdkError getTint (double &tint)
- FliSdkError getTintRange (double &tintMin, double &tintMax)
- FliSdkError getBadPixelState (bool &enabled)
- FliSdkError getConversionGain (std::string &conversionGain)
- FliSdkError getDarkOptimLevel (int &level)
- FliSdkError getTempSnakeSetpoint (double &temp)
- FliSdkError getFanMode (std::string &mode)
- FliSdkError getExtSynchroExposure (std::string &exposure)
- FliSdkError getExtSynchroPolarity (std::string &polarity)
- FliSdkError getTuning (std::string &tuning)
- FliSdkError getFanSpeed (int &speed)
- FliSdkError getHdrState (bool &enabled)
- FliSdkError getHdrCalibrationMode (std::string &mode)
- FliSdkError getHdrExtendedState (bool &enabled)
- FliSdkError getLicenses (std::vector< std::string > &licenses)
- FliSdkError getMaxFpsUsb (double &maxFpsUsb)
- FliSdkError getMaxSyncDelay (double &maxSyncDelay)
- FliSdkError getMinSyncDelay (double &minSyncDelay)
- FliSdkError getMaxTintItr (double &maxTintItr)
- FliSdkError getVoltageVref (double &vref)
- FliSdkError getMinFps (double &minFps)
- FliSdkError getNbFramesPerSwTrig (int &nbFrames)
- FliSdkError getTlsydel (int &val)
- FliSdkError getPreset (int &preset)
- FliSdkError getRemoteMaintenanceState (bool &enabled)
- FliSdkError getSwSynchroState (bool &enabled)
- FliSdkError getTcdsAdjustState (bool &enabled)
- FliSdkError getTelnetState (bool &enabled)
- FliSdkError getTintGranularityState (bool &enabled)
- FliSdkError getVrefAdjustState (bool &enabled)
- FliSdkError getStepSyncDelay (double &delay)
- FliSdkError getSyncDelay (double &delay)
- FliSdkError getSynchronization (std::string &synchro)
- FliSdkError getIpAlternateDns (std::string &dns)
- FliSdkError getIpDns (std::string &dns)
- FliSdkError getIpGateway (std::string &gateway)
- FliSdkError getIpMode (std::string &mode)
- FliSdkError getIpNetmask (std::string &netmask)
- FliSdkError getIpAddress (std::string &ip)
- FliSdkError getSnakeParam (std::string parameter, uint16_t &value)

- FliSdkError getPowers (double &extPeltierCurrent, double &extPeltierVoltage, double &extPeltierPower, double &intPeltierCurrent, double &intPeltierVoltage, double &intPeltierPower)
- FliSdkError getPowerExternalPeltier (double &current, double &voltage, double &power)
- FliSdkError getPowerSensor (double &current, double &voltage, double &power)
- FliSdkError getUploadFirmwareConnectionInfo (std::string &ip, uint16_t &port)
- FliSdkError getTriggerSource (std::string &source)
- FliSdkError getSyncSignalSource (std::string &source)
- FliSdkError getExtMarkerSource (std::string &source)
- FliSdkError getHardwareFeatures (int &features)
- FliSdkError getSoftwareFeatures (int &features)
- FliSdkError getFactoryBadPixelMap (std::vector< bool > &map, std::function< void(int)> get↩ Progress=nullptr)
- FliSdkError getUserBadPixelMap (std::vector< bool > &map, std::function< void(int)> getProgress=nullptr)
- FliSdkError getAgcState (bool &enabled)
- FliSdkError getAgcPriority (std::string &priority)
- FliSdkError getAgcRoi (uint16_t &col1, uint16_t &row1, uint16_t &col2, uint16_t &row2)
- FliSdkError getFactoryCorrectionState (bool &enabled)
- FliSdkError getTintStep (double &step)
- FliSdkError getImagePattern (std::string &pattern)
- FliSdkError getDate (std::string &date)
- FliSdkError getUptime (std::string &uptime)
- FliSdkError getAccumulatedUptime (std::string &uptime)
- FliSdkError getTotalUptime (std::string &uptime)
- FliSdkError getUnsignedPixelsState (bool &enabled)
- FliSdkError setCropping (bool enable, uint16_t col1, uint16_t col2, uint16_t row1, uint16_t row2)
- FliSdkError setCroppingColumns (uint16_t col1, uint16_t col2)
- FliSdkError setCroppingRows (uint16_t row1, uint16_t row2)
- FliSdkError setNbReadWoReset (int nbRead)
- FliSdkError setNbFramesPerSwTrig (int nbFrames)
- FliSdkError setDarkOptimLevel (int level)
- FliSdkError setSensorTemp (double temp)
- FliSdkError setTint (double tint)
- FliSdkError setConversionGainHigh ()
- FliSdkError setConversionGainMedium ()
- FliSdkError setConversionGainLow ()
- FliSdkError setExtSynchroExposureInternal ()
- FliSdkError setExtSynchroExposureExternal ()
- FliSdkError setExtSynchroPolarityInverted ()
- FliSdkError setExtSynchroPolarityStandard ()
- FliSdkError setTuningGeneralUse ()
- FliSdkError setTuningShortExposure ()
- FliSdkError setTuningLongExposure ()
- FliSdkError setFanSpeed (int speed)
- FliSdkError setSyncDelay (int delay)
- FliSdkError setTlsyDel (int val)
- FliSdkError setVoltageVref (double vref)
- FliSdkError setFanModeAutomatic ()
- FliSdkError setFanModeManual ()
- FliSdkError setHdrCalibrationC1 ()
- FliSdkError setHdrCalibrationC2 ()
- FliSdkError setHdrCalibrationOff ()
- FliSdkError setSynchronizationCmos ()
- FliSdkError setSynchronizationFullCmos ()
- FliSdkError setSynchronizationLvds ()
- FliSdkError setPreset ()

- FliSdkError setPresetNumber (uint8_t presetNumber)
- FliSdkError setSnakeParam (std::string parameter, uint16_t value)
- FliSdkError setTriggerSourceSoftware ()
- FliSdkError setTriggerSourceExternal ()
- FliSdkError setSyncSignalSourceExternal ()
- FliSdkError setSyncSignalSourceCC1 ()
- FliSdkError setSyncSignalSourceCC2 ()
- FliSdkError setSyncSignalSourceCC3 ()
- FliSdkError setSyncSignalSourceCC4 ()
- FliSdkError setFrameMarkerSourceExternal ()
- FliSdkError setFrameMarkerSourceCC1 ()
- FliSdkError setFrameMarkerSourceCC2 ()
- FliSdkError setFrameMarkerSourceCC3 ()
- FliSdkError setFrameMarkerSourceCC4 ()
- FliSdkError setFactoryBadPixelMap (std::vector< bool > &map)
- FliSdkError setUserBadPixelMap (std::vector< bool > &map)
- FliSdkError setAgcPriorityNone ()
- FliSdkError setAgcPriorityOverExposed ()
- FliSdkError setAgcPriorityUnderExposed ()
- FliSdkError setAgcRoi (uint16_t col1, uint16_t row1, uint16_t col2, uint16_t row2)
- FliSdkError setImagePatternRamp ()
- FliSdkError setImagePatternConstant (uint16_t val)
- FliSdkError setImagePatternOff ()
- FliSdkError enableRawImages (bool enable)
- FliSdkError enableBadPixel (bool enable)
- FliSdkError enableHdr (bool enable)
- FliSdkError enableAntiBlooming (bool enable)
- FliSdkError enableHdrExtended (bool enable)
- FliSdkError enableRemoteMaintenance (bool enable)
- FliSdkError enableSwSynchro (bool enable)
- FliSdkError enableTcdsAdjust (bool enable)
- FliSdkError enableTintGranularity (bool enable)
- FliSdkError enableVrefAdjust (bool enable)
- FliSdkError enableAgc (bool enable)
- FliSdkError enableFactoryCorrection (bool enable)
- FliSdkError enableUnsignedPixels (bool enable)
- FliSdkError reboot ()
- FliSdkError buildFlatHdrC1 ()
- FliSdkError buildFlatHdrC2 ()
- FliSdkError sendBiasHdrC1FromUrl (std::string url)
- FliSdkError sendBiasHdrC2FromUrl (std::string url)
- FliSdkError sendFlatHdrC1FromUrl (std::string url)
- FliSdkError sendFlatHdrC2FromUrl (std::string url)
- FliSdkError sendBiasHdrC1File (std::string filePath)
- FliSdkError sendBiasHdrC2File (std::string filePath)
- FliSdkError sendFlatHdrC1File (std::string filePath)
- FliSdkError sendFlatHdrC2File (std::string filePath)
- FliSdkError xSendBiasFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError xSendBiasHdrC1File (std::string filePath, std::function< void(bool, int, int)> getBlock↩Status=nullptr)
- FliSdkError xSendBiasHdrC2File (std::string filePath, std::function< void(bool, int, int)> getBlock↩Status=nullptr)
- FliSdkError xSendFlatFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError xSendFlatHdrC1File (std::string filePath, std::function< void(bool, int, int)> getBlock↩Status=nullptr)

- FliSdkError xSendFlatHdrC2File (std::string filePath, std::function< void(bool, int, int)> getBlock↩Status=nullptr)
- FliSdkError sendLicenseFile (std::string filePath, std::string fileName)
- FliSdkError xSendLicenseFile (std::string filePath, std::string fileName, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError deleteLicense (std::string licenseName)
- FliSdkError disableLicense (std::string licenseName)
- FliSdkError enableLicense (std::string licenseName)
- FliSdkError softwareTrig ()
- FliSdkError sendBadPixelFile (std::string filePath)
- FliSdkError xSendBadPixelFile (std::string filePath, std::function< void(bool, int, int)> getBlockStatus=nullptr)
- FliSdkError sendBadPixelFromUrl (std::string url)
- FliSdkError isCroppingValid (uint16_t col1, uint16_t col2, uint16_t row1, uint16_t row2)
- FliSdkError buildBiasNuc (uint16_t nbImages=256)
- FliSdkError buildFlatNuc (uint16_t nbImages=256)
- FliSdkError buildFlatHdrC1Nuc (uint16_t nbImages=256)
- FliSdkError buildFlatHdrC2Nuc (uint16_t nbImages=256)
- FliSdkError abortBuildNuc ()
- FliSdkError getBuildNucProgress (int &progress)
- FliSdkError startHttpServer ()
- FliSdkError stopHttpServer ()
- FliSdkError startEthernetGrabber ()
- FliSdkError stopEthernetGrabber ()

Additional Inherited Members

6.6.1 Detailed Description

This class manages the methods specific to the C-RED 2 and C-RED 2 ER cameras.

6.6.2 Constructor & Destructor Documentation

6.6.2.1 FliCredTwo()

```
FliCredTwo::FliCredTwo (
            IFrameGrabberCL * grabber,
            bool isER = false )
```

6.6.3 Member Function Documentation

6.6.3.1 abortBuildNuc()

```
FliSdkError FliCredTwo::abortBuildNuc ( )
```

6.6.3.2 buildBiasNuc()

```
FliSdkError FliCredTwo::buildBiasNuc (
             uint16_t nbImages = 256 )
```

6.6.3.3 buildFlatHdrC1()

```
FliSdkError FliCredTwo::buildFlatHdrC1 ( )
```

6.6.3.4 buildFlatHdrC1Nuc()

```
FliSdkError FliCredTwo::buildFlatHdrC1Nuc (
             uint16_t nbImages = 256 )
```

6.6.3.5 buildFlatHdrC2()

```
FliSdkError FliCredTwo::buildFlatHdrC2 ( )
```

6.6.3.6 buildFlatHdrC2Nuc()

```
FliSdkError FliCredTwo::buildFlatHdrC2Nuc (
             uint16_t nbImages = 256 )
```

6.6.3.7 buildFlatNuc()

```
FliSdkError FliCredTwo::buildFlatNuc (
             uint16_t nbImages = 256 )
```

6.6.3.8 deleteLicense()

```
FliSdkError FliCredTwo::deleteLicense (
             std::string licenseName )
```

6.6.3.9 disableLicense()

```
FliSdkError FliCredTwo::disableLicense (
             std::string licenseName )
```

6.6.3.10 enableAgc()

```
FliSdkError FliCredTwo::enableAgc (
             bool enable )
```

6.6.3.11 enableAntiBlooming()

```
FliSdkError FliCredTwo::enableAntiBlooming (
             bool enable )
```

6.6.3.12 enableBadPixel()

```
FliSdkError FliCredTwo::enableBadPixel (
             bool enable )
```

6.6.3.13 enableFactoryCorrection()

```
FliSdkError FliCredTwo::enableFactoryCorrection (
             bool enable )
```

6.6.3.14 enableHdr()

```
FliSdkError FliCredTwo::enableHdr (
             bool enable )
```

6.6.3.15 enableHdrExtended()

```
FliSdkError FliCredTwo::enableHdrExtended (
             bool enable )
```

6.6.3.16 enableLicense()

```
FliSdkError FliCredTwo::enableLicense (
             std::string licenseName )
```

6.6.3.17 enableRawImages()

```
FliSdkError FliCredTwo::enableRawImages (
             bool enable )
```

6.6.3.18 enableRemoteMaintenance()

```
FliSdkError FliCredTwo::enableRemoteMaintenance (
             bool enable )
```

6.6.3.19 enableSwSynchro()

```
FliSdkError FliCredTwo::enableSwSynchro (
             bool enable )
```

6.6.3.20 enableTcdsAdjust()

```
FliSdkError FliCredTwo::enableTcdsAdjust (
             bool enable )
```

6.6.3.21 enableTintGranularity()

```
FliSdkError FliCredTwo::enableTintGranularity (
             bool enable )
```

6.6.3.22 enableUnsignedPixels()

```
FliSdkError FliCredTwo::enableUnsignedPixels (
             bool enable )
```

6.6.3.23 enableVrefAdjust()

```
FliSdkError FliCredTwo::enableVrefAdjust (
             bool enable )
```

6.6.3.24 getAccumulatedUptime()

```
FliSdkError FliCredTwo::getAccumulatedUptime (
             std::string & uptime )
```

6.6.3.25 getAgcPriority()

```
FliSdkError FliCredTwo::getAgcPriority (
             std::string & priority )
```

6.6.3.26 getAgcRoi()

```
FliSdkError FliCredTwo::getAgcRoi (
             uint16_t & col1,
             uint16_t & row1,
             uint16_t & col2,
             uint16_t & row2 )
```

6.6.3.27 getAgcState()

```
FliSdkError FliCredTwo::getAgcState (
             bool & enabled )
```

6.6.3.28 getAllTemp()

```
FliSdkError FliCredTwo::getAllTemp (
             double & mb,
             double & fe,
             double & pw,
             double & sensor,
             double & peltier,
             double & heatsink )
```

6.6.3.29 getAntiBloomingState()

```
FliSdkError FliCredTwo::getAntiBloomingState (
            bool & enabled )
```

6.6.3.30 getBadPixelState()

```
FliSdkError FliCredTwo::getBadPixelState (
            bool & enabled )
```

6.6.3.31 getBuildNucProgress()

```
FliSdkError FliCredTwo::getBuildNucProgress (
            int & progress )
```

6.6.3.32 getConversionGain()

```
FliSdkError FliCredTwo::getConversionGain (
            std::string & conversionGain )
```

6.6.3.33 getCropping()

```
FliSdkError FliCredTwo::getCropping (
            bool & enabled,
            uint16_t & col1,
            uint16_t & col2,
            uint16_t & row1,
            uint16_t & row2 )
```

6.6.3.34 getDarkOptimLevel()

```
FliSdkError FliCredTwo::getDarkOptimLevel (
            int & level )
```

6.6.3.35 getDate()

```
FliSdkError FliCredTwo::getDate (
             std::string & date )
```

6.6.3.36 getExtMarkerSource()

```
FliSdkError FliCredTwo::getExtMarkerSource (
             std::string & source )
```

6.6.3.37 getExtSynchroExposure()

```
FliSdkError FliCredTwo::getExtSynchroExposure (
             std::string & exposure )
```

6.6.3.38 getExtSynchroPolarity()

```
FliSdkError FliCredTwo::getExtSynchroPolarity (
             std::string & polarity )
```

6.6.3.39 getFactoryBadPixelMap()

```
FliSdkError FliCredTwo::getFactoryBadPixelMap (
             std::vector< bool > & map,
             std::function< void(int)> getProgress = nullptr )
```

6.6.3.40 getFactoryCorrectionState()

```
FliSdkError FliCredTwo::getFactoryCorrectionState (
             bool & enabled )
```

6.6.3.41 getFanMode()

```
FliSdkError FliCredTwo::getFanMode (
             std::string & mode )
```

6.6.3.42 getFanSpeed()

```
FliSdkError FliCredTwo::getFanSpeed (
             int & speed )
```

6.6.3.43 getHardwareFeatures()

```
FliSdkError FliCredTwo::getHardwareFeatures (
             int & features )
```

6.6.3.44 getHdrCalibrationMode()

```
FliSdkError FliCredTwo::getHdrCalibrationMode (
             std::string & mode )
```

6.6.3.45 getHdrExtendedState()

```
FliSdkError FliCredTwo::getHdrExtendedState (
             bool & enabled )
```

6.6.3.46 getHdrState()

```
FliSdkError FliCredTwo::getHdrState (
             bool & enabled )
```

6.6.3.47 getImagePattern()

```
FliSdkError FliCredTwo::getImagePattern (
             std::string & pattern )
```

6.6.3.48 getIpAddress()

```
FliSdkError FliCredTwo::getIpAddress (
             std::string & ip )
```

6.6.3.49 getIpAlternateDns()

```
FliSdkError FliCredTwo::getIpAlternateDns (
             std::string & dns )
```

6.6.3.50 getIpDns()

```
FliSdkError FliCredTwo::getIpDns (
             std::string & dns )
```

6.6.3.51 getIpGateway()

```
FliSdkError FliCredTwo::getIpGateway (
             std::string & gateway )
```

6.6.3.52 getIpMode()

```
FliSdkError FliCredTwo::getIpMode (
             std::string & mode )
```

6.6.3.53 getIpNetmask()

```
FliSdkError FliCredTwo::getIpNetmask (
             std::string & netmask )
```

6.6.3.54 getLicenses()

```
FliSdkError FliCredTwo::getLicenses (
             std::vector< std::string > & licenses )
```

6.6.3.55 getMaxFpsUsb()

```
FliSdkError FliCredTwo::getMaxFpsUsb (
             double & maxFpsUsb )
```

6.6.3.56 getMaxSyncDelay()

```
FliSdkError FliCredTwo::getMaxSyncDelay (
             double & maxSyncDelay )
```

6.6.3.57 getMaxTintItr()

```
FliSdkError FliCredTwo::getMaxTintItr (
             double & maxTintItr )
```

6.6.3.58 getMinFps()

```
FliSdkError FliCredTwo::getMinFps (
             double & minFps )
```

6.6.3.59 getMinSyncDelay()

```
FliSdkError FliCredTwo::getMinSyncDelay (
             double & minSyncDelay )
```

6.6.3.60 getNbFramesPerSwTrig()

```
FliSdkError FliCredTwo::getNbFramesPerSwTrig (
             int & nbFrames )
```

6.6.3.61 getNbReadWoReset()

```
FliSdkError FliCredTwo::getNbReadWoReset (
             int & nbread )
```

6.6.3.62 getPowerExternalPeltier()

```
FliSdkError FliCredTwo::getPowerExternalPeltier (
             double & current,
             double & voltage,
             double & power )
```

6.6.3.63 getPowers()

```
FliSdkError FliCredTwo::getPowers (
             double & extPeltierCurrent,
             double & extPeltierVoltage,
             double & extPeltierPower,
             double & intPeltierCurrent,
             double & intPeltierVoltage,
             double & intPeltierPower )
```

6.6.3.64 getPowerSensor()

```
FliSdkError FliCredTwo::getPowerSensor (
             double & current,
             double & voltage,
             double & power )
```

6.6.3.65 getPreset()

```
FliSdkError FliCredTwo::getPreset (
             int & preset )
```

6.6.3.66 getRawImagesState()

```
FliSdkError FliCredTwo::getRawImagesState (
             bool & enabled )
```

6.6.3.67 getRemoteMaintenanceState()

```
FliSdkError FliCredTwo::getRemoteMaintenanceState (
             bool & enabled )
```

6.6.3.68 getSnakeParam()

```
FliSdkError FliCredTwo::getSnakeParam (
             std::string parameter,
             uint16_t & value )
```

6.6.3.69 getSoftwareFeatures()

```
FliSdkError FliCredTwo::getSoftwareFeatures (
             int & features )
```

6.6.3.70 getStepSyncDelay()

```
FliSdkError FliCredTwo::getStepSyncDelay (
             double & delay )
```

6.6.3.71 getSwSynchroState()

```
FliSdkError FliCredTwo::getSwSynchroState (
             bool & enabled )
```

6.6.3.72 getSyncDelay()

```
FliSdkError FliCredTwo::getSyncDelay (
             double & delay )
```

6.6.3.73 getSynchronization()

```
FliSdkError FliCredTwo::getSynchronization (
             std::string & synchro )
```

6.6.3.74 getSyncSignalSource()

```
FliSdkError FliCredTwo::getSyncSignalSource (
             std::string & source )
```

6.6.3.75 getTcdsAdjustState()

```
FliSdkError FliCredTwo::getTcdsAdjustState (
             bool & enabled )
```

6.6.3.76 getTelnetState()

```
FliSdkError FliCredTwo::getTelnetState (
             bool & enabled )
```

6.6.3.77 getTempFrontEnd()

```
FliSdkError FliCredTwo::getTempFrontEnd (
             double & temp )
```

6.6.3.78 getTempHeatSink()

```
FliSdkError FliCredTwo::getTempHeatSink (
             double & temp )
```

6.6.3.79 getTempMotherBoard()

```
FliSdkError FliCredTwo::getTempMotherBoard (
             double & temp )
```

6.6.3.80 getTempPeltier()

```
FliSdkError FliCredTwo::getTempPeltier (
             double & temp )
```

6.6.3.81 getTempPowerBoard()

```
FliSdkError FliCredTwo::getTempPowerBoard (
             double & temp )
```

6.6.3.82 getTempSnake()

```
FliSdkError FliCredTwo::getTempSnake (
             double & temp )
```

6.6.3.83 getTempSnakeSetpoint()

```
FliSdkError FliCredTwo::getTempSnakeSetpoint (
             double & temp )
```

6.6.3.84 getTint()

```
FliSdkError FliCredTwo::getTint (
             double & tint )
```

6.6.3.85 getTintGranularityState()

```
FliSdkError FliCredTwo::getTintGranularityState (
             bool & enabled )
```

6.6.3.86 getTintRange()

```
FliSdkError FliCredTwo::getTintRange (
             double & tintMin,
             double & tintMax )
```

6.6.3.87 getTintStep()

```
FliSdkError FliCredTwo::getTintStep (
             double & step )
```

6.6.3.88 getTlsydel()

```
FliSdkError FliCredTwo::getTlsydel (
             int & val )
```

6.6.3.89 getTotalUptime()

```
FliSdkError FliCredTwo::getTotalUptime (
             std::string & uptime )
```

6.6.3.90 getTriggerSource()

```
FliSdkError FliCredTwo::getTriggerSource (
             std::string & source )
```

6.6.3.91 getTuning()

```
FliSdkError FliCredTwo::getTuning (
             std::string & tuning )
```

6.6.3.92 getUnsignedPixelsState()

```
FliSdkError FliCredTwo::getUnsignedPixelsState (
             bool & enabled )
```

6.6.3.93 getUploadFirmwareConnectionInfo()

```
FliSdkError FliCredTwo::getUploadFirmwareConnectionInfo (
             std::string & ip,
             uint16_t & port )
```

6.6.3.94 getUptime()

```
FliSdkError FliCredTwo::getUptime (
             std::string & uptime )
```

6.6.3.95 getUserBadPixelMap()

```
FliSdkError FliCredTwo::getUserBadPixelMap (
             std::vector< bool > & map,
             std::function< void(int)> getProgress = nullptr )
```

6.6.3.96 getVoltageVref()

```
FliSdkError FliCredTwo::getVoltageVref (
             double & vref )
```

6.6.3.97 getVrefAdjustState()

```
FliSdkError FliCredTwo::getVrefAdjustState (
            bool & enabled )
```

6.6.3.98 isCroppingValid()

```
FliSdkError FliCredTwo::isCroppingValid (
            uint16_t col1,
            uint16_t col2,
            uint16_t row1,
            uint16_t row2 )
```

6.6.3.99 reboot()

```
FliSdkError FliCredTwo::reboot ( )
```

6.6.3.100 sendBadPixelFile()

```
FliSdkError FliCredTwo::sendBadPixelFile (
            std::string filePath )
```

6.6.3.101 sendBadPixelFromUrl()

```
FliSdkError FliCredTwo::sendBadPixelFromUrl (
            std::string url )
```

6.6.3.102 sendBiasHdrC1File()

```
FliSdkError FliCredTwo::sendBiasHdrC1File (
            std::string filePath )
```

6.6.3.103 sendBiasHdrC1FromUrl()

```
FliSdkError FliCredTwo::sendBiasHdrC1FromUrl (
            std::string url )
```

6.6.3.104 sendBiasHdrC2File()

```
FliSdkError FliCredTwo::sendBiasHdrC2File (
            std::string filePath )
```

6.6.3.105 sendBiasHdrC2FromUrl()

```
FliSdkError FliCredTwo::sendBiasHdrC2FromUrl (
            std::string url )
```

6.6.3.106 sendFlatHdrC1File()

```
FliSdkError FliCredTwo::sendFlatHdrC1File (
            std::string filePath )
```

6.6.3.107 sendFlatHdrC1FromUrl()

```
FliSdkError FliCredTwo::sendFlatHdrC1FromUrl (
            std::string url )
```

6.6.3.108 sendFlatHdrC2File()

```
FliSdkError FliCredTwo::sendFlatHdrC2File (
            std::string filePath )
```

6.6.3.109 sendFlatHdrC2FromUrl()

```
FliSdkError FliCredTwo::sendFlatHdrC2FromUrl (
            std::string url )
```

6.6.3.110 sendLicenseFile()

```
FliSdkError FliCredTwo::sendLicenseFile (
            std::string filePath,
            std::string fileName )
```

6.6.3.111 setAgcPriorityNone()

```
FliSdkError FliCredTwo::setAgcPriorityNone ( )
```

6.6.3.112 setAgcPriorityOverExposed()

```
FliSdkError FliCredTwo::setAgcPriorityOverExposed ( )
```

6.6.3.113 setAgcPriorityUnderExposed()

```
FliSdkError FliCredTwo::setAgcPriorityUnderExposed ( )
```

6.6.3.114 setAgcRoi()

```
FliSdkError FliCredTwo::setAgcRoi (
             uint16_t col1,
             uint16_t row1,
             uint16_t col2,
             uint16_t row2 )
```

6.6.3.115 setConversionGainHigh()

```
FliSdkError FliCredTwo::setConversionGainHigh ( )
```

6.6.3.116 setConversionGainLow()

```
FliSdkError FliCredTwo::setConversionGainLow ( )
```

6.6.3.117 setConversionGainMedium()

```
FliSdkError FliCredTwo::setConversionGainMedium ( )
```

6.6.3.118 setCropping()

```
FliSdkError FliCredTwo::setCropping (
             bool enable,
             uint16_t col1,
             uint16_t col2,
             uint16_t row1,
             uint16_t row2 )
```

6.6.3.119 setCroppingColumns()

```
FliSdkError FliCredTwo::setCroppingColumns (
             uint16_t col1,
             uint16_t col2 )
```

6.6.3.120 setCroppingRows()

```
FliSdkError FliCredTwo::setCroppingRows (
             uint16_t row1,
             uint16_t row2 )
```

6.6.3.121 setDarkOptimLevel()

```
FliSdkError FliCredTwo::setDarkOptimLevel (
             int level )
```

6.6.3.122 setExtSynchroExposureExternal()

```
FliSdkError FliCredTwo::setExtSynchroExposureExternal ( )
```

6.6.3.123 setExtSynchroExposureInternal()

```
FliSdkError FliCredTwo::setExtSynchroExposureInternal ( )
```

6.6.3.124 setExtSynchroPolarityInverted()

```
FliSdkError FliCredTwo::setExtSynchroPolarityInverted ( )
```

6.6.3.125 setExtSynchroPolarityStandard()

```
FliSdkError FliCredTwo::setExtSynchroPolarityStandard ( )
```

6.6.3.126 setFactoryBadPixelMap()

```
FliSdkError FliCredTwo::setFactoryBadPixelMap (
             std::vector< bool > & map )
```

6.6.3.127 setFanModeAutomatic()

```
FliSdkError FliCredTwo::setFanModeAutomatic ( )
```

6.6.3.128 setFanModeManual()

```
FliSdkError FliCredTwo::setFanModeManual ( )
```

6.6.3.129 setFanSpeed()

```
FliSdkError FliCredTwo::setFanSpeed (
             int speed )
```

6.6.3.130 setFrameMarkerSourceCC1()

```
FliSdkError FliCredTwo::setFrameMarkerSourceCC1 ( )
```

6.6.3.131 setFrameMarkerSourceCC2()

```
FliSdkError FliCredTwo::setFrameMarkerSourceCC2 ( )
```

6.6.3.132 setFrameMarkerSourceCC3()

```
FliSdkError FliCredTwo::setFrameMarkerSourceCC3 ( )
```

6.6.3.133 setFrameMarkerSourceCC4()

```
FliSdkError FliCredTwo::setFrameMarkerSourceCC4 ( )
```

6.6.3.134 setFrameMarkerSourceExternal()

```
FliSdkError FliCredTwo::setFrameMarkerSourceExternal ( )
```

6.6.3.135 setHdrCalibrationC1()

```
FliSdkError FliCredTwo::setHdrCalibrationC1 ( )
```

6.6.3.136 setHdrCalibrationC2()

```
FliSdkError FliCredTwo::setHdrCalibrationC2 ( )
```

6.6.3.137 setHdrCalibrationOff()

```
FliSdkError FliCredTwo::setHdrCalibrationOff ( )
```

6.6.3.138 setImagePatternConstant()

```
FliSdkError FliCredTwo::setImagePatternConstant (
             uint16_t val )
```

6.6.3.139 setImagePatternOff()

```
FliSdkError FliCredTwo::setImagePatternOff ( )
```

6.6.3.140 setImagePatternRamp()

```
FliSdkError FliCredTwo::setImagePatternRamp ( )
```

6.6.3.141 setNbFramesPerSwTrig()

```
FliSdkError FliCredTwo::setNbFramesPerSwTrig (
             int nbFrames )
```

6.6.3.142 setNbReadWoReset()

```
FliSdkError FliCredTwo::setNbReadWoReset (
             int nbRead )
```

6.6.3.143 setPreset()

```
FliSdkError FliCredTwo::setPreset ( )
```

6.6.3.144 setPresetNumber()

```
FliSdkError FliCredTwo::setPresetNumber (
             uint8_t presetNumber )
```

6.6.3.145 setSensorTemp()

```
FliSdkError FliCredTwo::setSensorTemp (
             double temp )
```

6.6.3.146 setSnakeParam()

```
FliSdkError FliCredTwo::setSnakeParam (
             std::string parameter,
             uint16_t value )
```

6.6.3.147 setSyncDelay()

```
FliSdkError FliCredTwo::setSyncDelay (
             int delay )
```

6.6.3.148 setSynchronizationCmos()

```
FliSdkError FliCredTwo::setSynchronizationCmos ( )
```

6.6.3.149 setSynchronizationFullCmos()

```
FliSdkError FliCredTwo::setSynchronizationFullCmos ( )
```

6.6.3.150 setSynchronizationLvds()

```
FliSdkError FliCredTwo::setSynchronizationLvds ( )
```

6.6.3.151 setSyncSignalSourceCC1()

```
FliSdkError FliCredTwo::setSyncSignalSourceCC1 ( )
```

6.6.3.152 setSyncSignalSourceCC2()

```
FliSdkError FliCredTwo::setSyncSignalSourceCC2 ( )
```

6.6.3.153 setSyncSignalSourceCC3()

```
FliSdkError FliCredTwo::setSyncSignalSourceCC3 ( )
```

6.6.3.154 setSyncSignalSourceCC4()

```
FliSdkError FliCredTwo::setSyncSignalSourceCC4 ( )
```

6.6.3.155 setSyncSignalSourceExternal()

```
FliSdkError FliCredTwo::setSyncSignalSourceExternal ( )
```

6.6.3.156 setTint()

```
FliSdkError FliCredTwo::setTint (
             double tint )
```

6.6.3.157 setTlsyDel()

```
FliSdkError FliCredTwo::setTlsyDel (
             int val )
```

6.6.3.158 setTriggerSourceExternal()

```
FliSdkError FliCredTwo::setTriggerSourceExternal ( )
```

6.6.3.159 setTriggerSourceSoftware()

```
FliSdkError FliCredTwo::setTriggerSourceSoftware ( )
```

6.6.3.160 setTuningGeneralUse()

```
FliSdkError FliCredTwo::setTuningGeneralUse ( )
```

6.6.3.161 setTuningLongExposure()

```
FliSdkError FliCredTwo::setTuningLongExposure ( )
```

6.6.3.162 setTuningShortExposure()

```
FliSdkError FliCredTwo::setTuningShortExposure ( )
```

6.6.3.163 setUserBadPixelMap()

```
FliSdkError FliCredTwo::setUserBadPixelMap (
             std::vector< bool > & map )
```

6.6.3.164 setVoltageVref()

```
FliSdkError FliCredTwo::setVoltageVref (
             double vref )
```

6.6.3.165 softwareTrig()

```
FliSdkError FliCredTwo::softwareTrig ( )
```

6.6.3.166 startEthernetGrabber()

```
FliSdkError FliCredTwo::startEthernetGrabber ( )
```

6.6.3.167 startHttpServer()

```
FliSdkError FliCredTwo::startHttpServer ( )
```

6.6.3.168 stopEthernetGrabber()

```
FliSdkError FliCredTwo::stopEthernetGrabber ( )
```

6.6.3.169 stopHttpServer()

```
FliSdkError FliCredTwo::stopHttpServer ( )
```

6.6.3.170 xSendBadPixelFile()

```
FliSdkError FliCredTwo::xSendBadPixelFile (
             std::string filePath,
             std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.171 xSendBiasFile()

```
FliSdkError FliCredTwo::xSendBiasFile (
             std::string filePath,
             std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.172 xSendBiasHdrC1File()

```
FliSdkError FliCredTwo::xSendBiasHdrC1File (
             std::string filePath,
             std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.173 xSendBiasHdrC2File()

```
FliSdkError FliCredTwo::xSendBiasHdrC2File (
             std::string filePath,
             std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.174 xSendFlatFile()

```
FliSdkError FliCredTwo::xSendFlatFile (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.175 xSendFlatHdrC1File()

```
FliSdkError FliCredTwo::xSendFlatHdrC1File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.176 xSendFlatHdrC2File()

```
FliSdkError FliCredTwo::xSendFlatHdrC2File (
            std::string filePath,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.6.3.177 xSendLicenseFile()

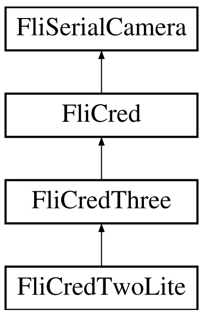
```
FliSdkError FliCredTwo::xSendLicenseFile (
            std::string filePath,
            std::string fileName,
            std::function< void(bool, int, int)> getBlockStatus = nullptr )
```

6.7 FliCredTwoLite Class Reference

This class manages the methods specific to the C-RED 2 Lite camera.

`#include <FliCredTwoLite.h>`

Inheritance diagram for FliCredTwoLite:



Public Types

- enum CoolingMode { MANUAL, AUTOMATIC, CUSTOM_STEPS }

Public Member Functions

- FliCredTwoLite (IFrameGrabberCL ∗grabber)
- FliSdkError setCoolingState (bool enable)
- FliSdkError setCoolingMode (CoolingMode mode)
- FliSdkError setCoolingFirstPoint (int16_t firstPoint)
- FliSdkError setCoolingStepWidth (uint8_t stepWidth)
- FliSdkError setSensorSetpoint (int16_t temp)
- FliSdkError getCoolingMode (CoolingMode &mode)
- FliSdkError getCoolingFirstPoint (int16_t &firstPoint)
- FliSdkError getCoolingStepWidth (uint8_t &stepWidth)
- FliSdkError getSensorSetpoint (int16_t &temp)
- FliSdkError getTecPower (double &current, double &voltage, double &power)
- FliSdkError getCoolingState (bool &enabled)
- FliSdkError getCurrentStep (std::string &step)

Additional Inherited Members

6.7.1 Detailed Description

This class manages the methods specific to the C-RED 2 Lite camera.

6.7.2 Member Enumeration Documentation

6.7.2.1 CoolingMode

```
enum FliCredTwoLite::CoolingMode
```

Enumerator

MANUAL	
AUTOMATIC	
CUSTOM_STEPS	

6.7.3 Constructor & Destructor Documentation

6.7.3.1 FliCredTwoLite()

```
FliCredTwoLite::FliCredTwoLite (
             IFrameGrabberCL * grabber )
```

6.7.4 Member Function Documentation

6.7.4.1 getCoolingFirstPoint()

```
FliSdkError FliCredTwoLite::getCoolingFirstPoint (
             int16_t & firstPoint )
```

6.7.4.2 getCoolingMode()

```
FliSdkError FliCredTwoLite::getCoolingMode (
             CoolingMode & mode )
```

6.7.4.3 getCoolingState()

```
FliSdkError FliCredTwoLite::getCoolingState (
             bool & enabled )
```

6.7.4.4 getCoolingStepWidth()

```
FliSdkError FliCredTwoLite::getCoolingStepWidth (
             uint8_t & stepWidth )
```

6.7.4.5 getCurrentStep()

```
FliSdkError FliCredTwoLite::getCurrentStep (
             std::string & step )
```

6.7.4.6 getSensorSetpoint()

```
FliSdkError FliCredTwoLite::getSensorSetpoint (
             int16_t & temp )
```

6.7.4.7 getTecPower()

```
FliSdkError FliCredTwoLite::getTecPower (
             double & current,
             double & voltage,
             double & power )
```

6.7.4.8 setCoolingFirstPoint()

```
FliSdkError FliCredTwoLite::setCoolingFirstPoint (
             int16_t firstPoint )
```

6.7.4.9 setCoolingMode()

```
FliSdkError FliCredTwoLite::setCoolingMode (
             CoolingMode mode )
```

6.7.4.10 setCoolingState()

```
FliSdkError FliCredTwoLite::setCoolingState (
             bool enable )
```

6.7.4.11 setCoolingStepWidth()

```
FliSdkError FliCredTwoLite::setCoolingStepWidth (
             uint8_t stepWidth )
```

6.7.4.12 setSensorSetpoint()

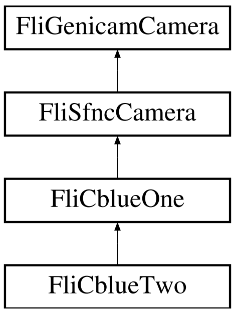
```
FliSdkError FliCredTwoLite::setSensorSetpoint (
             int16_t temp )
```

6.8 FliGenicamCamera Class Reference

This is the base class of all genicam camera (C-BLUE)

```
#include <FliGenicamCamera.h>
```

Inheritance diagram for FliGenicamCamera:



Public Member Functions

- FliGenicamCamera (IFrameGrabberGenicam ∗grabber)
- virtual ∼FliGenicamCamera ()
- Fli::CameraModel getCameraModel ()

  Get the current camera model.
- IFrameGrabberGenicam ∗ getAssociatedGrabber ()

  Get the associated grabber.
- const std::map< std::string, BaseFeature ∗ > & getFeaturesList ()

  Get the list of all the camera features.
- bool getStringFeature (const std::string &featureName, std::string &val)

  Get the string value of a feature.
- bool setStringFeature (const std::string &featureName, std::string val)

  Set the string value of a feature.
- bool getDoubleFeature (const std::string &featureName, double &val)

  Get the double value of a feature.
- bool setDoubleFeature (const std::string &featureName, double val)

  Set the double value of a feature.
- bool getIntegerFeature (const std::string &featureName, int64_t &val)

  Get the integer value of a feature.
- bool setIntegerFeature (const std::string &featureName, int64_t val)

  Set the integer value of a feature.
- bool getBooleanFeature (const std::string &featureName, bool &val)

  Get the boolean value of a feature.
- bool setBooleanFeature (const std::string &featureName, bool val)

  Set the boolean value of a feature.
- bool executeFeature (const std::string &featureName)

  Execute the desired feature.
- bool getFeatureLength (const std::string &featureName, int64_t &length)

  Get the length in bytes of the feature.
- bool getDoubleMinFeature (const std::string &featureName, double &val)

  Get the double minimum value of feature.

- bool getDoubleMaxFeature (const std::string &featureName, double &val)

  Get the double maximum value of feature.
- bool getIntegerMinFeature (const std::string &featureName, int64_t &val)

  Get the integer minimum value of feature.
- bool getIntegerMaxFeature (const std::string &featureName, int64_t &val)

  Get the double maximum value of feature.
- bool getIntegerIncrementFeature (const std::string &featureName, int64_t &val)

  Get the integer increment value of feature.
- bool getDoubleIncrementFeature (const std::string &featureName, double &val)

  Get the double increment value of feature.
- bool getPollingInterval (const std::string &featureName, int64_t &interval)

  Get the polling interval of feature.
- bool getRepresentation (const std::string &featureName, IFrameGrabberGenicam::Representation &repres)

  Get the representation of feature.
- bool getAccessMode (const std::string &featureName, IFrameGrabberGenicam::AccessMode &mode)

  Get the access mode of feature.
- bool getVisibility (const std::string &featureName, IFrameGrabberGenicam::Visibility &visibility)

  Get the visibility of feature.
- bool setRawData (const std::string &featureName, const std::vector< unsigned char > &val)

  Send raw data to feature.
- bool getRawData (const std::string &featureName, std::vector< unsigned char > &val, int64_t size=-1)

  Get raw data from feature.
- void addCallbackAllRegisters (std::function< void(std::string, void ∗val)> callback, void ∗ptr)

  Register a callback to all features.
- void addCallbackDimensionsRegisters (std::function< void(std::string, void ∗val)> callback, void ∗ptr)

  Register a callback to all the dimensionnal features.
- void removeCallbackAllRegisters (void ∗ptr)

  Remove all registers callback.

Protected Attributes

- IFrameGrabberGenicam ∗ _grabber
- Fli::CameraModel _cameraModel
- std::map< std::string, BaseFeature ∗ > _stringToFeature

6.8.1 Detailed Description

This is the base class of all genicam camera (C-BLUE)

6.8.2 Constructor & Destructor Documentation

6.8.2.1 FliGenicamCamera()

```
FliGenicamCamera::FliGenicamCamera (
            IFrameGrabberGenicam ∗ grabber )  [explicit]
```

6.8.2.2 ∼FliGenicamCamera()

```
virtual FliGenicamCamera::∼FliGenicamCamera ( )  [virtual]
```

6.8.3 Member Function Documentation

6.8.3.1 addCallbackAllRegisters()

```
void FliGenicamCamera::addCallbackAllRegisters (
             std::function< void(std::string, void *val)> callback,
             void * ptr )
```

Register a callback to all features.

Parameters

callback	: the function callback which is called with the feature name and a pointer to the value
ptr	: a pointer used for id

6.8.3.2 addCallbackDimensionsRegisters()

```
void FliGenicamCamera::addCallbackDimensionsRegisters (
             std::function< void(std::string, void *val)> callback,
             void * ptr )
```

Register a callback to all the dimensionnal features.

Parameters

callback	: the function callback which is called with the feature name and a pointer to the value
ptr	: a pointer used for id

6.8.3.3 executeFeature()

```
bool FliGenicamCamera::executeFeature (
             const std::string & featureName )  [inline]
```

Execute the desired feature.

Parameters

featureName	the desired feature name

Returns

true if function is well done else false

6.8.3.4 getAccessMode()

```
bool FliGenicamCamera::getAccessMode (
            const std::string & featureName,
            IFrameGrabberGenicam::AccessMode & mode )  [inline]
```

Get the access mode of feature.

Parameters

featureName	the desired feature name
mode	the value container

Returns

true if function is well done else false

6.8.3.5 getAssociatedGrabber()

```
IFrameGrabberGenicam* FliGenicamCamera::getAssociatedGrabber ( )
```

Get the associated grabber.

Returns

Pointer on the grabber object

6.8.3.6 getBooleanFeature()

```
bool FliGenicamCamera::getBooleanFeature (
            const std::string & featureName,
            bool & val )  [inline]
```

Get the boolean value of a feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.7 getCameraModel()

```
Fli::CameraModel FliGenicamCamera::getCameraModel ( )
```

Get the current camera model.

Returns

Camera cmodel

6.8.3.8 getDoubleFeature()

```
bool FliGenicamCamera::getDoubleFeature (
            const std::string & featureName,
            double & val )  [inline]
```

Get the double value of a feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.9 getDoubleIncrementFeature()

```
bool FliGenicamCamera::getDoubleIncrementFeature (
            const std::string & featureName,
            double & val )  [inline]
```

Get the double increment value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.10 getDoubleMaxFeature()

```
bool FliGenicamCamera::getDoubleMaxFeature (
            const std::string & featureName,
            double & val )  [inline]
```

Get the double maximum value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.11 getDoubleMinFeature()

```
bool FliGenicamCamera::getDoubleMinFeature (
            const std::string & featureName,
            double & val )  [inline]
```

Get the double minimum value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.12 getFeatureLength()

```
bool FliGenicamCamera::getFeatureLength (
            const std::string & featureName,
            int64_t & length )  [inline]
```

Get the length in bytes of the feature.

Parameters

featureName	the desired feature name
length	the value container

Returns

true if function is well done else false

6.8.3.13 getFeaturesList()

```
const std::map<std::string, BaseFeature*>& FliGenicamCamera::getFeaturesList ( )
```

Get the list of all the camera features.

Returns

A map which link the feature name to the BaseFeature object

6.8.3.14 getIntegerFeature()

```
bool FliGenicamCamera::getIntegerFeature (
            const std::string & featureName,
            int64_t & val )  [inline]
```

Get the integer value of a feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.15 getIntegerIncrementFeature()

```
bool FliGenicamCamera::getIntegerIncrementFeature (
            const std::string & featureName,
            int64_t & val )  [inline]
```

Get the integer increment value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.16 getIntegerMaxFeature()

```
bool FliGenicamCamera::getIntegerMaxFeature (
            const std::string & featureName,
            int64_t & val )  [inline]
```

Get the double maximum value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.17 getIntegerMinFeature()

```
bool FliGenicamCamera::getIntegerMinFeature (
            const std::string & featureName,
            int64_t & val )  [inline]
```

Get the integer minimum value of feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.18 getPollingInterval()

```
bool FliGenicamCamera::getPollingInterval (
            const std::string & featureName,
            int64_t & interval )  [inline]
```

Get the polling interval of feature.

Parameters

featureName	the desired feature name
interval	the value container

Returns

true if function is well done else false

6.8.3.19 getRawData()

```
bool FliGenicamCamera::getRawData (
            const std::string & featureName,
            std::vector< unsigned char > & val,
            int64_t size = -1 )  [inline]
```

Get raw data from feature.

Parameters

featureName	the desired feature name
val	the data container
size	: desired size

Returns

true if function is well done else false

6.8.3.20 getRepresentation()

```
bool FliGenicamCamera::getRepresentation (
            const std::string & featureName,
            IFrameGrabberGenicam::Representation & repres )  [inline]
```

Get the representation of feature.

Parameters

featureName	the desired feature name
repres	the value container

Returns

true if function is well done else false

6.8.3.21 getStringFeature()

```
bool FliGenicamCamera::getStringFeature (
             const std::string & featureName,
             std::string & val )  [inline]
```

Get the string value of a feature.

Parameters

featureName	the desired feature name
val	the value container

Returns

true if function is well done else false

6.8.3.22 getVisibility()

```
bool FliGenicamCamera::getVisibility (
             const std::string & featureName,
             IFrameGrabberGenicam::Visibility & visibility )  [inline]
```

Get the visibility of feature.

Parameters

featureName	the desired feature name
visibility	the value container

Returns

true if function is well done else false

6.8.3.23 removeCallbackAllRegisters()

```
void FliGenicamCamera::removeCallbackAllRegisters (
             void * ptr )
```

Remove all registers callback.

Parameters

ptr	: a pointer used for id

6.8.3.24 setBooleanFeature()

```
bool FliGenicamCamera::setBooleanFeature (
             const std::string & featureName,
             bool val )  [inline]
```

Set the boolean value of a feature.

Parameters

featureName	the desired feature name
val	the value to send

Returns

true if function is well done else false

6.8.3.25 setDoubleFeature()

```
bool FliGenicamCamera::setDoubleFeature (
             const std::string & featureName,
             double val )  [inline]
```

Set the double value of a feature.

Parameters

featureName	the desired feature name
val	the value to send

Returns

true if function is well done else false

6.8.3.26 setIntegerFeature()

```
bool FliGenicamCamera::setIntegerFeature (
            const std::string & featureName,
            int64_t val ) [inline]
```

Set the integer value of a feature.

Parameters

featureName	the desired feature name
val	the value to send

Returns

true if function is well done else false

6.8.3.27 setRawData()

```
bool FliGenicamCamera::setRawData (
            const std::string & featureName,
            const std::vector< unsigned char > & val ) [inline]
```

Send raw data to feature.

Parameters

featureName	the desired feature name
val	the data container

Returns

true if function is well done else false

6.8.3.28 setStringFeature()

```
bool FliGenicamCamera::setStringFeature (
            const std::string & featureName,
            std::string val ) [inline]
```

Set the string value of a feature.

Parameters

featureName	the desired feature name
val	the value to send

Returns

true if function is well done else false

6.8.4 Member Data Documentation

6.8.4.1 _cameraModel

```
Fli::CameraModel FliGenicamCamera::_cameraModel  [protected]
```

6.8.4.2 _grabber

```
IFrameGrabberGenicam* FliGenicamCamera::_grabber  [protected]
```

6.8.4.3 _stringToFeature

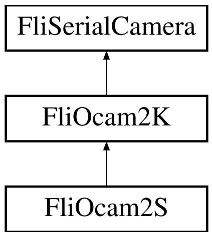
```
std::map<std::string, BaseFeature*> FliGenicamCamera::_stringToFeature  [protected]
```

6.9 FliOcam2K Class Reference

This class manages the methods specific to the OCAM2K camera.

```
#include <FliOcam2K.h>
```

Inheritance diagram for FliOcam2K:



Public Member Functions

- FliOcam2K (IFrameGrabberCL ∗grabber)
- FliSdkError setWorkMode (Ocam2Mode mode)
- Ocam2Conf getConf ()
- FliSdkError getAllTemp (double &ccdTemp, double &cpuTemp, double &powerTemp, double &biasTemp, double &waterTemp, double &leftTemp, double &rightTemp, double &setTemp)
- FliSdkError enableBias (bool enable)

  enableBias enable or disable the bias into the camera
- FliSdkError enableFlat (bool enable)

  enableFlat enable or disable the flat into the camera
- FliSdkError protectionReset ()

  protectionReset send the command "protection reset" to the camera
- FliSdkError setBiasOffset (unsigned int offset)
- FliSdkError setFps (double fps)
- FliSdkError getFps (double &fps)
- FliSdkError getFpsMax (double &fps)
- FliSdkError setFpsMax ()
- FliSdkError setGain (unsigned int gain)
- FliSdkError sendBiasFile (std::string filePath)

  sendBiasFile send the bias file to the camera
- FliSdkError sendFlatFile (std::string filePath)

  sendFlatFile send the flat file to the camera
- FliSdkError getCoolingState (Ocam2CoolingState &state)
- FliSdkError getCoolingValue (int64_t &val)
- FliSdkError resetCoolingAlarm ()

  resetCoolingAlarm send the command "temp reset" to the camera
- FliSdkError disableCooling ()

  disableCooling send the command "cooling off" to the camera
- FliSdkError setCoolingValue (int64_t val)

Protected Member Functions

- bool isOldFirmware ()
- bool isInterface0 ()
- bool sendInterface0Command (const std::string &command, std::string &response, bool echo=false, int timeout=0)
- bool sendInterface1Command (const std::string &command, std::string &response, bool echo=false, int timeout=0)

Protected Attributes

- Ocam2Conf _conf

6.9.1 Detailed Description

This class manages the methods specific to the OCAM2K camera.

6.9.2 Constructor & Destructor Documentation

6.9.2.1 FliOcam2K()

```
FliOcam2K::FliOcam2K (
             IFrameGrabberCL * grabber )
```

6.9.3 Member Function Documentation

6.9.3.1 disableCooling()

```
FliSdkError FliOcam2K::disableCooling ( )
```

disableCooling send the command "cooling off" to the camera

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.2 enableBias()

```
FliSdkError FliOcam2K::enableBias (
             bool enable )
```

enableBias enable or disable the bias into the camera

Parameters

enable	: enable the bias if true, disable it if false

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.3 enableFlat()

```
FliSdkError FliOcam2K::enableFlat (
             bool enable )
```

enableFlat enable or disable the flat into the camera

Parameters

enable	: enable the flat if true, disable it if false

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.4 getAllTemp()

```
FliSdkError FliOcam2K::getAllTemp (
             double & ccdTemp,
             double & cpuTemp,
             double & powerTemp,
             double & biasTemp,
             double & waterTemp,
             double & leftTemp,
             double & rightTemp,
             double & setTemp )
```

6.9.3.5 getConf()

```
Ocam2Conf FliOcam2K::getConf ( )
```

6.9.3.6 getCoolingState()

```
FliSdkError FliOcam2K::getCoolingState (
             Ocam2CoolingState & state )
```

6.9.3.7 getCoolingValue()

```
FliSdkError FliOcam2K::getCoolingValue (
             int64_t & val )
```

6.9.3.8 getFps()

```
FliSdkError FliOcam2K::getFps (
             double & fps )
```

6.9.3.9 getFpsMax()

```
FliSdkError FliOcam2K::getFpsMax (
             double & fps )
```

6.9.3.10 isInterface0()

```
bool FliOcam2K::isInterface0 ( )  [protected]
```

6.9.3.11 isOldFirmware()

```
bool FliOcam2K::isOldFirmware ( )  [protected]
```

6.9.3.12 protectionReset()

```
FliSdkError FliOcam2K::protectionReset ( )
```

protectionReset send the command "protection reset" to the camera

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.13 resetCoolingAlarm()

```
FliSdkError FliOcam2K::resetCoolingAlarm ( )
```

resetCoolingAlarm send the command "temp reset" to the camera

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.14 sendBiasFile()

```
FliSdkError FliOcam2K::sendBiasFile (
             std::string filePath )
```

sendBiasFile send the bias file to the camera

Parameters

filePath	the file name and path that describe the bias

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.9.3.15 sendFlatFile()

```
FliSdkError FliOcam2K::sendFlatFile (
             std::string filePath )
```

sendFlatFile send the flat file to the camera

Parameters

filePath	the file name and path that describe the flat

Returns

FLISDK_NO_ERROR if no error or an FliSdkError else

6.9.3.16 sendInterface0Command()

```
bool FliOcam2K::sendInterface0Command (
             const std::string & command,
             std::string & response,
             bool echo = false,
             int timeout = 0 )  [protected]
```

6.9.3.17 sendInterface1Command()

```
bool FliOcam2K::sendInterface1Command (
             const std::string & command,
             std::string & response,
             bool echo = false,
             int timeout = 0 )  [protected]
```

6.9.3.18 setBiasOffset()

```
FliSdkError FliOcam2K::setBiasOffset (
             unsigned int offset )
```

6.9.3.19 setCoolingValue()

```
FliSdkError FliOcam2K::setCoolingValue (
             int64_t val )
```

6.9.3.20 setFps()

```
FliSdkError FliOcam2K::setFps (
             double fps )
```

6.9.3.21 setFpsMax()

```
FliSdkError FliOcam2K::setFpsMax ( )
```

6.9.3.22 setGain()

```
FliSdkError FliOcam2K::setGain (
             unsigned int gain )
```

6.9.3.23 setWorkMode()

```
FliSdkError FliOcam2K::setWorkMode (
             Ocam2Mode mode )
```

6.9.4 Member Data Documentation

6.9.4.1 _conf

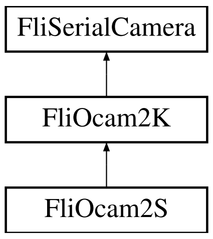
```
Ocam2Conf FliOcam2K::_conf  [protected]
```

6.10 FliOcam2S Class Reference

This class manages the methods specific to the OCAM2S camera.

```
#include <FliOcam2S.h>
```

Inheritance diagram for FliOcam2S:



Public Member Functions

- FliOcam2S (IFrameGrabberCL ∗grabber)
- FliSdkError enableShutter (bool enable)

  enableShutter set the shutter on or off
- FliSdkError setShutterInternal ()
- FliSdkError setShutterExternal ()
- FliSdkError setShutterSingle ()
- FliSdkError setShutterBurst ()
- FliSdkError setShutterSweepMode (unsigned int mode)
- FliSdkError setShutterPulseWidth (unsigned int ns)
- FliSdkError setShutterBlanking (unsigned int ns)
- FliSdkError setShutterPulsePosition (unsigned int ns)
- FliSdkError setShutterStep (unsigned int ns)
- FliSdkError setShutterEnd (unsigned int ns)
- FliSdkError setShutterPulseCount (unsigned int count)
- FliSdkError enableShutterBlockOnRead (bool enable)

  enableShutterBlockOnRead set the shutter blockonread to 1 or 0
- FliSdkError enableShutterCorrectGlitch (bool enable)

  enableShutterCorrectGlitch set the shutter correctglitch to 1 or 0
- FliSdkError getShutterState (Shutter &shutter)
- FliSdkError sendShutterBias (std::string buf)

  sendShutterBias load the shutter bias to the camera

Additional Inherited Members

6.10.1 Detailed Description

This class manages the methods specific to the OCAM2S camera.

6.10.2 Constructor & Destructor Documentation

6.10.2.1 FliOcam2S()

```
FliOcam2S::FliOcam2S (
             IFrameGrabberCL * grabber )
```

6.10.3 Member Function Documentation

6.10.3.1 enableShutter()

```
FliSdkError FliOcam2S::enableShutter (
             bool enable )
```

enableShutter set the shutter on or off

Parameters

enable	: set the shutter to "on" if true or "off" if false

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.10.3.2 enableShutterBlockOnRead()

```
FliSdkError FliOcam2S::enableShutterBlockOnRead (
             bool enable )
```

enableShutterBlockOnRead set the shutter blockonread to 1 or 0

Parameters

enable	: set the shutter blockonread to "1" if true or "0" if false

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.10.3.3 enableShutterCorrectGlitch()

```
FliSdkError FliOcam2S::enableShutterCorrectGlitch (
             bool enable )
```

enableShutterCorrectGlitch set the shutter correctglitch to 1 or 0

Parameters

enable	: set the shutter correctglitch to "1" if true or "0" if false

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.10.3.4 getShutterState()

```
FliSdkError FliOcam2S::getShutterState (
             Shutter & shutter )
```

6.10.3.5 sendShutterBias()

```
FliSdkError FliOcam2S::sendShutterBias (
             std::string buf )
```

sendShutterBias load the shutter bias to the camera

Parameters

buf	the buffer that contain the bias to be loaded

Returns

FLISDK_NO_ERROR if no error else an FliSdkError

6.10.3.6 setShutterBlanking()

```
FliSdkError FliOcam2S::setShutterBlanking (
             unsigned int ns )
```

6.10.3.7 setShutterBurst()

```
FliSdkError FliOcam2S::setShutterBurst ( )
```

6.10.3.8 setShutterEnd()

```
FliSdkError FliOcam2S::setShutterEnd (
            unsigned int ns )
```

6.10.3.9 setShutterExternal()

```
FliSdkError FliOcam2S::setShutterExternal ( )
```

6.10.3.10 setShutterInternal()

```
FliSdkError FliOcam2S::setShutterInternal ( )
```

6.10.3.11 setShutterPulseCount()

```
FliSdkError FliOcam2S::setShutterPulseCount (
            unsigned int count )
```

6.10.3.12 setShutterPulsePosition()

```
FliSdkError FliOcam2S::setShutterPulsePosition (
            unsigned int ns )
```

6.10.3.13 setShutterPulseWidth()

```
FliSdkError FliOcam2S::setShutterPulseWidth (
            unsigned int ns )
```

6.10.3.14 setShutterSingle()

```
FliSdkError FliOcam2S::setShutterSingle ( )
```

6.10.3.15 setShutterStep()

```
FliSdkError FliOcam2S::setShutterStep (
             unsigned int ns )
```

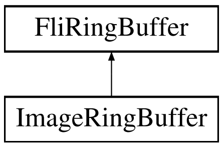
6.10.3.16 setShutterSweepMode()

```
FliSdkError FliOcam2S::setShutterSweepMode (
             unsigned int mode )
```

6.11 FliRingBuffer Class Reference

```
#include <FliRingBuffer.h>
```

Inheritance diagram for FliRingBuffer:



Public Member Functions

- virtual uint32_t getFilling () const =0

  Get buffer filling.
- virtual int64_t getLastImageIndex () const =0

  Get the last image acquired index.
- virtual void setSizeInMo (uint16_t sizeMo)=0

  Change the buffer capacity in Mo.
- virtual void setSizeInFrames (uint32_t nbFrames)=0

  Change the buffer capacity in number of images.
- virtual void setSizeInFramesThermo (uint32_t nbFrames)=0

  Change the buffer capacity in number of images for a thermographic analysis (∗.thr.raw files)
- virtual uint16_t getSizeInMo ()=0

  Get current buffer size.
- virtual uint32_t getSizeInFrames ()=0

  Give the images capacity of the buffer.
- virtual void enable (bool enable)=0

  Enable or disable internal ring buffer of the SDK.
- virtual bool isEnabled ()=0

  Return true if the buffer is enabled else false.
- virtual void reset ()=0

  Reset the buffer.
- virtual void enableGrabN (uint32_t nbFrames)=0

  Enable grab N mode, the buffer will stop copy images when nbFrames images is hit.

- virtual void disableGrabN ()=0

  Disable grab N mode.
- virtual bool isGrabNFinished () const =0

  State of the grab N.
- virtual bool isGrabNEnabled () const =0

  State of the grab N mode.
- virtual uint32_t getNumberOfWrap ()=0

  Get the number of times that the buffer had been full since reset.
- virtual void enableSubstractMode (bool enable)=0

  Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.
- virtual void enableAccumulationMode (bool enable)=0
- virtual void resetAccumulation ()=0
- virtual uint16_t nbFramesInAccumulation ()=0
- virtual uint64_t getNbCountError ()=0

  Get the number of frame count error.
- virtual void setFowlerOffset (uint16_t offset)=0

6.11.1 Member Function Documentation

6.11.1.1 disableGrabN()

```
virtual void FliRingBuffer::disableGrabN ( )  [pure virtual]
```

Disable grab N mode.

Implemented in ImageRingBuffer.

6.11.1.2 enable()

```
virtual void FliRingBuffer::enable (
            bool enable )  [pure virtual]
```

Enable or disable internal ring buffer of the SDK.

Attention

If ring buffer is disabled loadBuffer, saveBuffer, getRawImage, getImage and getImage16b will be disabled. grabN and error count will be disable too.

Implemented in ImageRingBuffer.

6.11.1.3 enableAccumulationMode()

```
virtual void FliRingBuffer::enableAccumulationMode (
            bool enable )  [pure virtual]
```

Implemented in ImageRingBuffer.

6.11.1.4 enableGrabN()

```
virtual void FliRingBuffer::enableGrabN (
            uint32_t nbFrames )  [pure virtual]
```

Enable grab N mode, the buffer will stop copy images when nbFrames images is hit.

Parameters

nbFrames	: number of frames to grab.

Implemented in ImageRingBuffer.

6.11.1.5 enableSubstractMode()

```
virtual void FliRingBuffer::enableSubstractMode (
            bool enable )  [pure virtual]
```

Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.

Parameters

enable	enable/disable the mode

Implemented in ImageRingBuffer.

6.11.1.6 getFilling()

```
virtual uint32_t FliRingBuffer::getFilling ( ) const  [pure virtual]
```

Get buffer filling.

Returns

a number representing the filling

Implemented in ImageRingBuffer.

6.11.1.7 getLastImageIndex()

```
virtual int64_t FliRingBuffer::getLastImageIndex ( ) const  [pure virtual]
```

Get the last image acquired index.

Returns

the index or -1 if no image in buffer

Implemented in ImageRingBuffer.

6.11.1.8 getNbCountError()

```
virtual uint64_t FliRingBuffer::getNbCountError ( )  [pure virtual]
```

Get the number of frame count error.

Returns

the number of count error

Implemented in ImageRingBuffer.

6.11.1.9 getNumberOfWrap()

```
virtual uint32_t FliRingBuffer::getNumberOfWrap ( )  [pure virtual]
```

Get the number of times that the buffer had been full since reset.

Returns

the number of wrap

Implemented in ImageRingBuffer.

6.11.1.10 getSizeInFrames()

```
virtual uint32_t FliRingBuffer::getSizeInFrames ( )  [pure virtual]
```

Give the images capacity of the buffer.

Returns

FliSdkError

Implemented in ImageRingBuffer.

6.11.1.11 getSizeInMo()

```
virtual uint16_t FliRingBuffer::getSizeInMo ( )  [pure virtual]
```

Get current buffer size.

Returns

the buffer size in Mo

Implemented in ImageRingBuffer.

6.11.1.12 isEnabled()

```
virtual bool FliRingBuffer::isEnabled ( )  [pure virtual]
```

Return true if the buffer is enabled else false.

Implemented in ImageRingBuffer.

6.11.1.13 isGrabNEnabled()

```
virtual bool FliRingBuffer::isGrabNEnabled ( ) const  [pure virtual]
```

State of the grab N mode.

Returns

true if grab N mode activated else false

Implemented in ImageRingBuffer.

6.11.1.14 isGrabNFinished()

```
virtual bool FliRingBuffer::isGrabNFinished ( ) const  [pure virtual]
```

State of the grab N.

Returns

true if the grab is over else false

Implemented in ImageRingBuffer.

6.11.1.15 nbFramesInAccumulation()

```
virtual uint16_t FliRingBuffer::nbFramesInAccumulation ( )  [pure virtual]
```

Implemented in ImageRingBuffer.

6.11.1.16 reset()

```
virtual void FliRingBuffer::reset ( )  [pure virtual]
```

Reset the buffer.

Implemented in ImageRingBuffer.

6.11.1.17 resetAccumulation()

```
virtual void FliRingBuffer::resetAccumulation ( )  [pure virtual]
```

Implemented in ImageRingBuffer.

6.11.1.18 setFowlerOffset()

```
virtual void FliRingBuffer::setFowlerOffset (
             uint16_t offset )  [pure virtual]
```

Implemented in ImageRingBuffer.

6.11.1.19 setSizeInFrames()

```
virtual void FliRingBuffer::setSizeInFrames (
             uint32_t nbFrames )  [pure virtual]
```

Change the buffer capacity in number of images.

Parameters

nbFrames	: capacity of the ring buffer in nb images

Implemented in ImageRingBuffer.

6.11.1.20 setSizeInFramesThermo()

```
virtual void FliRingBuffer::setSizeInFramesThermo (
             uint32_t nbFrames )  [pure virtual]
```

Change the buffer capacity in number of images for a thermographic analysis (∗.thr.raw files)

Parameters

nbFrames	: capacity of the ring buffer in nb images

Implemented in ImageRingBuffer.

6.11.1.21 setSizeInMo()

```
virtual void FliRingBuffer::setSizeInMo (
             uint16_t sizeMo )  [pure virtual]
```

Change the buffer capacity in Mo.

Parameters

sizeMo	: capacity of the ring buffer in Mo

Implemented in ImageRingBuffer.

6.12 FliSdk Class Reference

This class manages the interface with the camera and the grabber.

```
#include <FliSdk.h>
```

Public Types

- enum Mode { Full, GrabOnly, ConfigOnly }

Public Member Functions

- FliSdk ()

  Constructor.
- virtual ∼FliSdk ()

  Destructor.
- FliSdk (const FliSdk &)=delete
- FliSdk & operator= (const FliSdk &)=delete
- std::vector< std::string > detectGrabbers ()

Start the grabbers detection.
- std::vector< std::string > detectCameras (bool *invertedCl=nullptr)

  Start the cameras detection.
- std::vector< std::string > detectCameras (const std::vector< std::string > &grabbers, bool *inverted←Cl=nullptr)

  Start the cameras detection only using the grabbers in "grabbers" list.
- std::vector< std::string > detectEthernetCameras (const std::vector< std::string > &ips, const std::string &sshLogin, const std::string &sshPassword)

  Start the cameras detection only using the grabbers in "grabbers" list.
- bool setCamera (std::string cameraName)

  Set the camera to be used.
- std::string getCurrentCameraName () const

  returns the current camera name
- bool isCurrentCameraLink () const

  returns true if the current camera has a camera link, false otherwise
- bool setGrabber (std::string grabberName)

  Set the grabber to be used.
- void setMode (Mode mode)

  Set the mode of use of the sdk.
- Mode getMode ()

  Get the current mode of use of the sdk.
- void setImageDimension (uint16_t width, uint16_t height)

  Force the image dimension apply to the grabber.
- void setImageDimensionImageRingBuffer (uint16_t width, uint16_t height)

  Force the image dimension apply to the image ring buffer needed when there is no grabber but images loaded from files.
- void setImageDimensionImageRingBufferThermo (uint16_t width, uint16_t height)

  Force the image dimension apply to the thermographic image ring buffer needed when there is no grabber but thermographic images loaded from files (.thr.raw files)*
- FliSdkError update ()

  Update the changes, must be call after setCamera, setGrabber or setMode to take effects.
- std::vector< std::string > getDetectedCameras () const

  Get the detected cameras names.
- std::vector< std::string > getDetectedGrabbers () const

  Get the detected grabbers names.
- void forceCurrentCameraModel (Fli::CameraModel model)

  use this function when a camera is undefined
- Fli::CameraModel getCurrentCameraModel ()

  returns the current camera model
- FliSdkError start ()

  Start the grabber (must be initialized before)
- FliSdkError stop ()

  Stop the grabber.
- bool isStarted () const

  Get the state of the grabber (started or stopped)
- FliCredOne * credOne ()

  Get C-RED One camera interface.
- FliCredTwo * credTwo ()

  Get C-RED 2 camera interface.
- FliCredTwoLite * credTwoLite ()

  Get C-RED 2 LITE camera interface.

- FliCredThree ∗ credThree ()
  Get C-RED 3 camera interface.
- FliOcam2K ∗ ocam2k ()
  Get Ocam2K camera interface.
- FliOcam2S ∗ ocam2s ()
  Get Ocam2S camera interface.
- FliCamera ∗ camera ()
  Get general camera interface for C-RED cameras (deprecated, use cred() instead)
- FliSerialCamera ∗ serialCamera ()
  Get common camera interface for C-RED and OCAM2 cameras.
- FliCred ∗ cred ()
  Get general camera interface for C-RED cameras.
- FliGenicamCamera ∗ genicamCamera ()
  Get commond interface for genicam camera.
- FliSfncCamera ∗ sfncCamera ()
  Get commond interface for genicam camera.
- FliSfncCamera ∗ cblueSfnc ()
  Get Cblue SFNC camera interface (DEPRECATED please use sfncCamera instead)
- FliCblueOne ∗ cblueOne ()
  Get C-BLUE One camera interface.
- FliCblueTwo ∗ cblueTwo ()
  Get C-BLUE 2 camera interface.
- void setNbImagesPerBuffer (uint8_t nbImages)
  Set set number of images the grabber should acquire before trigger, use this function for high FPS.
- FliRingBuffer & ringBuffer ()
  Return the interface used to interact with the SDK ring buffer.
- FliSdkError enableGrabN (uint32_t nbFrames)
  Enable grab N mode.
- FliSdkError disableGrabN ()
  Disable grab N mode.
- bool isGrabNFinished ()
  State of the grab N.
- bool isGrabNEnabled ()
  State of the grab N mode.
- const unsigned char ∗ getRawImage (int64_t index=-1)
  Get the image at index or the last image if index is -1, without processing.
- double getRealFps () const
  Get the buffer acquisition rate.
- uint32_t getBufferFilling ()
  Get buffer filling.
- void setBufferSize (uint16_t sizeMo)
  Change the buffer capacity in Mo.
- void setBufferSizeInImages (uint64_t nbImages)
  Change the buffer capacity in number of images.
- uint16_t getBufferSize ()
  Get current buffer size.
- uint32_t getBufferNbTimesFull ()
  Get the number of times that the buffer had been full since reset.
- FliSdkError loadBuffer (const std::string &path, CroppingData &bufferCrop)
  Load a buffer from a file, in the ringBuffer of the SDK.
- FliSdkError loadBuffer (const std::string &path, Fli::LoadBufferInfo &bufferInfo, bool inRingBuffer=false)

Load a buffer from a file, allocate memory, and return that memory to the user.

- FliSdkError loadBuffer (const uint8_t ∗buffer, uint32_t nbImages, uint64_t imageSize=0)

  Load a buffer in the ringBuffer of the SDK.
- bool isUnsignedPixel ()

  Return the pixel sign (int16 or uint16)
- bool isMono8Pixel ()

  Return the pixel size (1 byte if true, 2 bytes if false)
- void enableMono8Pixel (bool enable)
- void enableMono8PixelThermo ()
- void enableUnsignedPixel (bool enable)

  Change the pixel sign (int16 or uint16)
- void resetBuffer ()

  Reset the buffer.
- void enableRingBuffer (bool enable)

  Enable or disable internal ring buffer of the SDK.
- const std::map< std::string, std::string > getAvailableSaveFormats () const

  Return a map with the full name of the save format in the key and the extension in the value Example <"TIFF", ".tif">
- FliSdkError saveBuffer (std::string path, uint32_t start, uint32_t end, std::function< bool(int)> progression↩ Callback=nullptr, bool withMetadata=false, uint16_t offset=0, bool forceUnsigned=false, uint16_t decimation=1)

  Save the buffer at path.
- FliSdkError saveBuffer (const std::string &path, const Fli::LoadBufferInfo &info, uint32_t start, uint32_↩ t end, std::function< bool(int)> progressionCallback=nullptr, bool withMetadata=false, uint16_t offset=0, bool forceUnsigned=false, uint16_t decimation=1, ProcessingId id=-1)

  Save as above but with a LoadBufferInfo struct.
- uint32_t getImagesCapacity ()

  Give the images capacity of the buffer.
- uint8_t ∗ getImage (int64_t index=-1, ProcessingId id=-1)

  Get the RGB processed image at the given index, if no index then the last image is processed The buffer is overwritten only when the function is recalled.
- unsigned int getSize (ProcessingId id=-1)

  getSize return the total size of the buffer returned by getImage
- uint8_t ∗ getImage16b (int64_t index=-1, ProcessingId id=-1)

  Get the 16bits grayscale processed image at the given index, if no index then the last image is processed The buffer is overwritten only when the function is recalled.
- IImageProcessing ∗ imageProcessing (ProcessingId id=-1)

  A pointer to the image processing interface.
- FliSdkError isCroppingDataValid (CroppingData croppingData)

  Check if the cropping data is valid for Cred2 & Cred3.
- FliSdkError isCroppingDataValid (std::string columns, std::string rows)

  Check if the cropping data is valid for Cred1.
- FliSdkError getCroppingState (bool &enabled, CroppingData &croppingData)

  Get the cropping data from the camera.
- FliSdkError setCroppingState (bool enable, CroppingData croppingData)

  Set the cropping data.
- void getCurrentImageDimension (uint16_t &width, uint16_t &height)

  Get the current image dimansion considering cropping.
- uint64_t getNbCountError ()

  Get the number of frame count error.
- unsigned int getOcamFrameNumber (int64_t index=-1)

  Get the frame number of ocam image at index.
- void setOcamFrameNumberOffset (uint8_t offset)

Set the offset for the frame number.
- void addRawImageReceivedObserver (IRawImageReceivedObserver ∗obs, bool beforeCopy=true)

  Add an observer on the raw image received.
- void removeRawImageReceivedObserver (IRawImageReceivedObserver ∗obs)

  Remove an observer.
- std::string version ()

  Get the version of the sdk.
- void display8bImage (uint8_t ∗image, std::string windowName="")

  Open an Opencv window to display image.
- void display16bImage (uint8_t ∗image, std::string windowName="", bool unsignedPixel=true)

  Open an Opencv window to display image.
- void enableObserversNotif (bool enable)

  enable observer to be notified
- bool observersNotifEnabled ()
- void addObserver (IFliSdkObserver ∗obs)

  add a FliSdk state observer
- void removeObserver (IFliSdkObserver ∗obs)

  remove a FliSdk state observer
- ProcessingId addImageProcessing ()

  add an image processing and return an id
- void removeImageProcessing (ProcessingId id)

  remove an image processing
- void setBurstFilter (int16_t id)

  Set the burst filter for id.
- int16_t getBurstFilter ()

  Get the current burst filter id applied.
- void initLog (std::string appName)

  init SDK logging
- void log (const std::string &text)

  add text to log file
- void logOutside (const std::string &text)

  add text to log file from outside the SDK
- void enableSubstractMode (bool enable)

  Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.
- void enableFowlerProcessing (bool enable)

  enable the fowler processing for Cred1
- FliSdkError addEthernetCamera (std::string ip, std::string userName, std::string sshPassword, std::string &cameraName)

  Try to detect an ethernet camera and add it in the list.
- FliSdkError addFakeEthernetCamera (std::string ip, uint16_t comPort, uint16_t streamPort, std::string &cameraName, bool genicam=false)

  Add fake ethernet camera (use with FliFakeCamera software)
- FliSdkError enableImageTagStateChanged (bool enabled)

  Change Image Tag State to be used when mode Grab Only with web software link to camera that will set the Tags inside the camera in parallel.
- void defineGrabOnlySlowMode (bool slowmode)

  For grabb only mode the user need to define if the camera is in slowmode or not.
- void enablePowerOverCXP (bool enable)

  Enable the power on the CXP cables, only available for Matrox CXP Grabber.
- void enableIOsForCCsFrameGrabber (bool enable)

  Enable or disable the M_IO_SOURCE of CC, available only for Matrox CL Grabber.

- void setupFixedCCsFrameGrabber (int set)

  Set the CC IO_SOURCE for one set (and the other 3 will be unset), available only for Matrox CL Grabber.
- bool openMatroxGenicamBrowser ()

  Open CXP Matrox browser.
- void setFowlerOffset (uint16_t offset)

  Set the value of the Fowler offset to apply on sum of the images.
- void enableFollowUpTheRamp (bool enable)

  Enable the initialisation of the pixel sum for the follow up.
- bool getGrabberIsUSB ()

  Find out if the grabber is an USB one.
- IFrameGrabber ∗ getCurrentGrabber ()

  getCurrentGrabber getter of the pointer to the current grabber
- bool exitAllGrabbers ()

  Exit (calling method exit()) for all the grabber to be done before a delete and outside any destructor.
- std::list< IFrameGrabber ∗ > listAllGrabbers ()

  listAllGrabbers return the list of pointers of all the current grabbers
- int detectOneCamera (IFrameGrabber ∗aGrabber)

  detectOneCamera detect only one camera linked to a given grabber

6.12.1 Detailed Description

This class manages the interface with the camera and the grabber.

6.12.2 Member Enumeration Documentation

6.12.2.1 Mode

```
enum FliSdk::Mode
```

Enumerator

Full	Mode Full when the grabber and the serial port are both opened for the application.
GrabOnly	Mode GrabOnly when the grabber is opened but the serial port is closed.
ConfigOnly	Mode ConfigOnly when the serial port is opened but the grabber is closed.

6.12.3 Constructor & Destructor Documentation

6.12.3.1 FliSdk() [1/2]

```
FliSdk::FliSdk ( )
```

Constructor.

6.12.3.2 ∼FliSdk()

```
virtual FliSdk::∼FliSdk ( ) [virtual]
```

Destructor.

6.12.3.3 FliSdk() [2/2]

```
FliSdk::FliSdk (
            const FliSdk & ) [delete]
```

6.12.4 Member Function Documentation

6.12.4.1 addEthernetCamera()

```
FliSdkError FliSdk::addEthernetCamera (
            std::string ip,
            std::string userName,
            std::string sshPassword,
            std::string & cameraName )
```

Try to detect an ethernet camera and add it in the list.

Parameters

ip	: ip of the camera or a range of ip to auto detect (ex: 192.168.0.1-60)
userName	: the ssh user name of the camera
sshPassword	: the ssh password of the camera
cameraName	: return the detected camera name

6.12.4.2 addFakeEthernetCamera()

```
FliSdkError FliSdk::addFakeEthernetCamera (
            std::string ip,
            uint16_t comPort,
            uint16_t streamPort,
            std::string & cameraName,
            bool genicam = false )
```

Add fake ethernet camera (use with FliFakeCamera software)

Parameters

ip	: ip of the fake camera
comPort	: port for com
streamPort	: port for video stream
cameraName	: return the detected camera name
genicam	: set true if is a genicam camera else false

6.12.4.3 addImageProcessing()

```
ProcessingId FliSdk::addImageProcessing ( )
```

add an image processing and return an id

6.12.4.4 addObserver()

```
void FliSdk::addObserver (
             IFliSdkObserver * obs )
```

add a FliSdk state observer

6.12.4.5 addRawImageReceivedObserver()

```
void FliSdk::addRawImageReceivedObserver (
             IRawImageReceivedObserver * obs,
             bool beforeCopy = true )
```

Add an observer on the raw image received.

Parameters

obs	pointer on the observer
beforeCopy	if true then the observer will be notified before the copy in the ringbuffer (image from grabber), else after the copy in the ringBuffer (image from ringBuffer). if beforeCopy is set to true, user will have only the time of the buffer overflow of the grabber but less time between the grabber and the notification. if beforeCopy is set to false, user will have more time because the ringBuffer can be bigger than the grabber buffer but it will have a copy between the grabber and the notification. If you want to switch from before to after or after to before then call removeRawImageReceivedObserver before addRawImageReceivedObserver

6.12.4.6 camera()

```
FliCamera* FliSdk::camera ( )
```

Get general camera interface for C-RED cameras (deprecated, use cred() instead)

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.7 cblueOne()

```
FliCblueOne* FliSdk::cblueOne ( )
```

Get C-BLUE One camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.8 cblueSfnc()

```
FliSfncCamera* FliSdk::cblueSfnc ( )
```

Get Cblue SFNC camera interface (DEPRECATED please use sfncCamera instead)

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.9 cblueTwo()

```
FliCblueTwo* FliSdk::cblueTwo ( )
```

Get C-BLUE 2 camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.10 cred()

```
FliCred* FliSdk::cred ( )
```

Get general camera interface for C-RED cameras.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.11 credOne()

```
FliCredOne* FliSdk::credOne ( )
```

Get C-RED One camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.12 credThree()

```
FliCredThree* FliSdk::credThree ( )
```

Get C-RED 3 camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.13 credTwo()

```
FliCredTwo* FliSdk::credTwo ( )
```

Get C-RED 2 camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.14 credTwoLite()

```
FliCredTwoLite* FliSdk::credTwoLite ( )
```

Get C-RED 2 LITE camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.15 defineGrabOnlySlowMode()

```
void FliSdk::defineGrabOnlySlowMode (
            bool slowmode )
```

For grabb only mode the user need to define if the camera is in slowmode or not.

Parameters

slowmode	: a boolean to define the slowmode (true) or the normal mode (false)

6.12.4.16 detectCameras() [1/2]

```
std::vector<std::string> FliSdk::detectCameras (
            bool * invertedCl = nullptr )
```

Start the cameras detection.

Returns

a list with the names of detected cameras

Attention

This function must be called after detectGrabbers()

6.12.4.17 detectCameras() [2/2]

```
std::vector<std::string> FliSdk::detectCameras (
            const std::vector< std::string > & grabbers,
            bool * invertedCl = nullptr )
```

Start the cameras detection only using the grabbers in "grabbers" list.

Returns

a list with the names of detected cameras

Attention

This function must be called after detectGrabbers()

6.12.4.18 detectEthernetCameras()

```
std::vector<std::string> FliSdk::detectEthernetCameras (
            const std::vector< std::string > & ips,
            const std::string & sshLogin,
            const std::string & sshPassword )
```

Start the cameras detection only using the grabbers in "grabbers" list.

Returns

a list with the names of detected cameras

Attention

This function must be called after detectGrabbers()

6.12.4.19 detectGrabbers()

```
std::vector<std::string> FliSdk::detectGrabbers ( )
```

Start the grabbers detection.

Returns

a list with the names of detected grabbers

Attention

This function must be called before detectCameras()

6.12.4.20 detectOneCamera()

```
int FliSdk::detectOneCamera (
            IFrameGrabber * aGrabber )
```

detectOneCamera detect only one camera linked to a given grabber

Parameters

aGrabber	the grabber to use for the detection

Returns

0 no camera 1 or more a camera is connected

6.12.4.21 disableGrabN()

```
FliSdkError FliSdk::disableGrabN ( )
```

Disable grab N mode.

Returns

FliSdkError

6.12.4.22 display16bImage()

```
void FliSdk::display16bImage (
            uint8_t * image,
            std::string windowName = "",
            bool unsignedPixel = true )
```

Open an Opencv window to display image.

Parameters

image	pointer to the image buffer
windowName	name of the window
unsignedPixel	indicate if pixel are signed/unsigned

6.12.4.23 display8bImage()

```
void FliSdk::display8bImage (
            uint8_t * image,
            std::string windowName = "" )
```

Open an Opencv window to display image.

Parameters

image	pointer to the image buffer
windowName	name of the window

6.12.4.24 enableFollowUpTheRamp()

```
void FliSdk::enableFollowUpTheRamp (
            bool enable )
```

Enable the initialisation of the pixel sum for the follow up.

Parameters

enable	true to enable, else false

6.12.4.25 enableFowlerProcessing()

```
void FliSdk::enableFowlerProcessing (
            bool enable )
```

enable the fowler processing for Cred1

6.12.4.26 enableGrabN()

```
FliSdkError FliSdk::enableGrabN (
            uint32_t nbFrames )
```

Enable grab N mode.

Parameters

nbFrames	: number of frames to grab.

Returns

FliSdkError

6.12.4.27 enableImageTagStateChanged()

```
FliSdkError FliSdk::enableImageTagStateChanged (
            bool enabled )
```

Change Image Tag State to be used when mode Grab Only with web software link to camera that will set the Tags inside the camera in parallel.

Parameters

enabled	: a boolean to enable (true) / disable (false) the state

6.12.4.28 enableIOsForCCsFrameGrabber()

```
void FliSdk::enableIOsForCCsFrameGrabber (
            bool enable )
```

Enable or disable the M_IO_SOURCE of CC, available only for Matrox CL Grabber.

Parameters

enable	if true or disable if false the M_IO_SOURCE of CC

6.12.4.29 enableMono8Pixel()

```
void FliSdk::enableMono8Pixel (
            bool enable )
```

6.12.4.30 enableMono8PixelThermo()

```
void FliSdk::enableMono8PixelThermo ( )
```

6.12.4.31 enableObserversNotif()

```
void FliSdk::enableObserversNotif (
            bool enable )
```

enable observer to be notified

6.12.4.32 enablePowerOverCXP()

```
void FliSdk::enablePowerOverCXP (
            bool enable )
```

Enable the power on the CXP cables, only available for Matrox CXP Grabber.

Parameters

enable	the power if true, else disable

6.12.4.33 enableRingBuffer()

```
void FliSdk::enableRingBuffer (
            bool enable )
```

Enable or disable internal ring buffer of the SDK.

Attention

If ring buffer is disabled loadBuffer, saveBuffer, getRawImage, getImage and getImage16b will be disabled. grabN and error count will be disable too.

6.12.4.34 enableSubstractMode()

```
void FliSdk::enableSubstractMode (
            bool enable )
```

Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.

Parameters

enable	enable/disable the mode

6.12.4.35 enableUnsignedPixel()

```
void FliSdk::enableUnsignedPixel (
             bool enable )
```

Change the pixel sign (int16 or uint16)

6.12.4.36 exitAllGrabbers()

```
bool FliSdk::exitAllGrabbers ( )
```

Exit (calling method exit()) for all the grabber to be done before a delete and outside any destructor.

Returns

true if the exits succeeded, false otherwise

6.12.4.37 forceCurrentCameraModel()

```
void FliSdk::forceCurrentCameraModel (
             Fli::CameraModel model )
```

use this function when a camera is undefined

Parameters

model	: model to set to the camera

6.12.4.38 genicamCamera()

```
FliGenicamCamera* FliSdk::genicamCamera ( )
```

Get commond interface for genicam camera.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.39 getAvailableSaveFormats()

```
const std::map<std::string, std::string> FliSdk::getAvailableSaveFormats ( ) const
```

Return a map with the full name of the save format in the key and the extension in the value Example <"TIFF", ".tif">

6.12.4.40 getBufferFilling()

```
uint32_t FliSdk::getBufferFilling ( )
```

Get buffer filling.

Returns

a number representing the filling

6.12.4.41 getBufferNbTimesFull()

```
uint32_t FliSdk::getBufferNbTimesFull ( )
```

Get the number of times that the buffer had been full since reset.

Returns

the number

6.12.4.42 getBufferSize()

```
uint16_t FliSdk::getBufferSize ( )
```

Get current buffer size.

Returns

the buffer size in Mo

6.12.4.43 getBurstFilter()

```
int16_t FliSdk::getBurstFilter ( )
```

Get the current burst filter id applied.

6.12.4.44 getCroppingState()

```
FliSdkError FliSdk::getCroppingState (
             bool & enabled,
             CroppingData & croppingData )
```

Get the cropping data from the camera.

Parameters

enabled	a reference to a bool from the user
croppingData	a reference of the cropping data of user

Returns

FliSdkError

6.12.4.45 getCurrentCameraModel()

```
Fli::CameraModel FliSdk::getCurrentCameraModel ( )
```

returns the current camera model

6.12.4.46 getCurrentCameraName()

```
std::string FliSdk::getCurrentCameraName ( ) const
```

returns the current camera name

6.12.4.47 getCurrentGrabber()

```
IFrameGrabber* FliSdk::getCurrentGrabber ( )
```

getCurrentGrabber getter of the pointer to the current grabber

Returns

the pointer to the current grabber or nullptr if none

6.12.4.48 getCurrentImageDimension()

```
void FliSdk::getCurrentImageDimension (
            uint16_t & width,
            uint16_t & height )
```

Get the current image dimansion considering cropping.

Parameters

width	reference to user variable width
height	reference to user variable height

6.12.4.49 getDetectedCameras()

```
std::vector<std::string> FliSdk::getDetectedCameras ( ) const
```

Get the detected cameras names.

Returns

a list with the names of detected cameras

6.12.4.50 getDetectedGrabbers()

```
std::vector<std::string> FliSdk::getDetectedGrabbers ( ) const
```

Get the detected grabbers names.

Returns

a list with the names of detected grabbers

6.12.4.51 getGrabberIsUSB()

```
bool FliSdk::getGrabberIsUSB ( )
```

Find out if the grabber is an USB one.

Returns

true if the grabber is an USB one, false otherwise

6.12.4.52 getImage()

```
uint8_t* FliSdk::getImage (
            int64_t index = -1,
            ProcessingId id = -1 )
```

Get the RGB processed image at the given index, if no index then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

index	: index of the image in the buffer
id	: id of the imageProcessing to get the image

Returns

a pointer to the processed image

6.12.4.53 getImage16b()

```
uint8_t* FliSdk::getImage16b (
            int64_t index = -1,
            ProcessingId id = -1 )
```

Get the 16bits grayscale processed image at the given index, if no index then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

index	: index of the image in the buffer
id	: id of the imageProcessing to get the image

Returns

a pointer to the processed image

6.12.4.54 getImagesCapacity()

```
uint32_t FliSdk::getImagesCapacity ( )
```

Give the images capacity of the buffer.

Returns

FliSdkError

6.12.4.55 getMode()

```
Mode FliSdk::getMode ( )
```

Get the current mode of use of the sdk.

Returns

mode used (full, grabOnly, configOnly)

6.12.4.56 getNbCountError()

```
uint64_t FliSdk::getNbCountError ( )
```

Get the number of frame count error.

Returns

the number of count error

6.12.4.57 getOcamFrameNumber()

```
unsigned int FliSdk::getOcamFrameNumber (
            int64_t index = -1 )
```

Get the frame number of ocam image at index.

Parameters

index	index of the image in the buffer, -1 is last image

Returns

the frame number of the image at index

6.12.4.58 getRawImage()

```
const unsigned char* FliSdk::getRawImage (
            int64_t index = -1 )
```

Get the image at index or the last image if index is -1, without processing.

Parameters

index	: index of the image in the buffer.

Returns

pointer to the image array if index is valid else nullptr

6.12.4.59 getRealFps()

```
double FliSdk::getRealFps ( ) const
```

Get the buffer acquisition rate.

Returns

a number representing acquisition FPS

6.12.4.60 getSize()

```
unsigned int FliSdk::getSize (
              ProcessingId id = -1 )
```

getSize return the total size of the buffer returned by getImage

Parameters

id	: id of the imageProcessing to get the image

Returns

the total size of the buffer

6.12.4.61 imageProcessing()

```
IImageProcessing* FliSdk::imageProcessing (
              ProcessingId id = -1 )
```

A pointer to the image processing interface.

Parameters

id	: id of the imageProcessing

Returns

pointer of type IImageProcessing

6.12.4.62 initLog()

```
void FliSdk::initLog (
            std::string appName )
```

init SDK logging

Parameters

appName	: appName will be used for the name of the file

6.12.4.63 isCroppingDataValid() [1/2]

```
FliSdkError FliSdk::isCroppingDataValid (
            CroppingData croppingData )
```

Check if the cropping data is valid for Cred2 & Cred3.

Parameters

croppingData	the cropping data of user

Returns

FliSdkError

6.12.4.64 isCroppingDataValid() [2/2]

```
FliSdkError FliSdk::isCroppingDataValid (
            std::string columns,
            std::string rows )
```

Check if the cropping data is valid for Cred1.

Parameters

columns	columns cropping
rows	rows cropping

Returns

FliSdkError

6.12.4.65 isCurrentCameraLink()

```
bool FliSdk::isCurrentCameraLink ( ) const
```

returns true if the current camera has a camera link, false otherwise

6.12.4.66 isGrabNEnabled()

```
bool FliSdk::isGrabNEnabled ( )
```

State of the grab N mode.

Returns

true if grab N mode activated else false

6.12.4.67 isGrabNFinished()

```
bool FliSdk::isGrabNFinished ( )
```

State of the grab N.

Returns

true if the grab is over else false

6.12.4.68 isMono8Pixel()

```
bool FliSdk::isMono8Pixel ( )
```

Return the pixel size (1 byte if true, 2 bytes if false)

6.12.4.69 isStarted()

```
bool FliSdk::isStarted ( ) const
```

Get the state of the grabber (started or stopped)

Returns

true if grabber is started else false

6.12.4.70 isUnsignedPixel()

```
bool FliSdk::isUnsignedPixel ( )
```

Return the pixel sign (int16 or uint16)

6.12.4.71 listAllGrabbers()

```
std::list<IFrameGrabber *> FliSdk::listAllGrabbers ( )
```

listAllGrabbers return the list of pointers of all the current grabbers

Returns

a list of grabbers pointers

6.12.4.72 loadBuffer() [1/3]

```
FliSdkError FliSdk::loadBuffer (
             const std::string & path,
             CroppingData & bufferCrop )
```

Load a buffer from a file, in the ringBuffer of the SDK.

Parameters

path	path to the file
bufferCrop	a ref to CroppingData to get current cropping

Returns

FliSdkError

6.12.4.73 loadBuffer() [2/3]

```
FliSdkError FliSdk::loadBuffer (
             const std::string & path,
             Fli::LoadBufferInfo & bufferInfo,
             bool inRingBuffer = false )
```

Load a buffer from a file, allocate memory, and return that memory to the user.

User must delete this memory if not used. For a raw file, user have to set width, height and isMono8 info in the LoadBufferInfo.

Parameters

path	path to the file
bufferInfo	struct with images and info
inRingBuffer	bool load buffer in ring buffer (in case of thermo) false by default

Returns

FliSdkError

6.12.4.74 loadBuffer() [3/3]

```
FliSdkError FliSdk::loadBuffer (
            const uint8_t * buffer,
            uint32_t nbImages,
            uint64_t imageSize = 0 )
```

Load a buffer in the ringBuffer of the SDK.

Parameters

buffer	data buffer
nbImages	nbImages in the buffer
imageSize	: the size of one image

Returns

FliSdkError

6.12.4.75 log()

```
void FliSdk::log (
            const std::string & text )
```

add text to log file

Parameters

text	: text to add

6.12.4.76 logOutside()

```
void FliSdk::logOutside (
             const std::string & text )
```

add text to log file from outside the SDK

Parameters

text	: text to add

6.12.4.77 observersNotifEnabled()

```
bool FliSdk::observersNotifEnabled ( )
```

6.12.4.78 ocam2k()

```
FliOcam2K* FliSdk::ocam2k ( )
```

Get Ocam2K camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.79 ocam2s()

```
FliOcam2S* FliSdk::ocam2s ( )
```

Get Ocam2S camera interface.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.80 openMatroxGenicamBrowser()

```
bool FliSdk::openMatroxGenicamBrowser ( )
```

Open CXP Matrox browser.

Returns

true if the braoser is opend, false otherwise

6.12.4.81 operator=()

```
FliSdk& FliSdk::operator= (
             const FliSdk & )  [delete]
```

6.12.4.82 removeImageProcessing()

```
void FliSdk::removeImageProcessing (
             ProcessingId id )
```

remove an image processing

6.12.4.83 removeObserver()

```
void FliSdk::removeObserver (
             IFliSdkObserver * obs )
```

remove a FliSdk state observer

6.12.4.84 removeRawImageReceivedObserver()

```
void FliSdk::removeRawImageReceivedObserver (
             IRawImageReceivedObserver * obs )
```

Remove an observer.

Parameters

obs	pointer on the observer

6.12.4.85 resetBuffer()

```
void FliSdk::resetBuffer ( )
```

Reset the buffer.

6.12.4.86 ringBuffer()

```
FliRingBuffer& FliSdk::ringBuffer ( )
```

Return the interface used to interact with the SDK ring buffer.

6.12.4.87 saveBuffer() [1/2]

```
FliSdkError FliSdk::saveBuffer (
             const std::string & path,
             const Fli::LoadBufferInfo & info,
             uint32_t start,
             uint32_t end,
             std::function< bool(int)> progressionCallback = nullptr,
             bool withMetadata = false,
             uint16_t offset = 0,
             bool forceUnsigned = false,
             uint16_t decimation = 1,
             ProcessingId id = -1 )
```

Save as above but with a LoadBufferInfo struct.

6.12.4.88 saveBuffer() [2/2]

```
FliSdkError FliSdk::saveBuffer (
             std::string path,
             uint32_t start,
             uint32_t end,
             std::function< bool(int)> progressionCallback = nullptr,
             bool withMetadata = false,
             uint16_t offset = 0,
             bool forceUnsigned = false,
             uint16_t decimation = 1 )
```

Save the buffer at path.

Parameters

path	: path of the file
start	: start index of the buffer
end	: end index of the buffer
progressionCallback	: a callback to notify the progression of the save, return false to stop the save
withMetadata	: true to include camera conf in metadata
offset	: apply an offset on all the pixels of all images
forceUnsigned	: force the save with unsigned pixels type
decimation	: apply a decimation on the index of saved images

Returns

FliSdkError

6.12.4.89 serialCamera()

```
FliSerialCamera* FliSdk::serialCamera ( )
```

Get common camera interface for C-RED and OCAM2 cameras.

Returns

a pointer to the FliSerialCamera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.90 setBufferSize()

```
void FliSdk::setBufferSize (
             uint16_t sizeMo )
```

Change the buffer capacity in Mo.

Parameters

sizeMo	: capacity of the ring buffer in Mo

6.12.4.91 setBufferSizeInImages()

```
void FliSdk::setBufferSizeInImages (
             uint64_t nbImages )
```

Change the buffer capacity in number of images.

Parameters

nbImages	: capacity of the ring buffer in nb images

6.12.4.92 setBurstFilter()

```
void FliSdk::setBurstFilter (
             int16_t id )
```

Set the burst filter for id.

Parameters

id	: id to display

6.12.4.93 setCamera()

```
bool FliSdk::setCamera (
             std::string cameraName )
```

Set the camera to be used.

Parameters

cameraName	name of the camera

Returns

true if camera exists else false

Attention

Call update() to apply.

6.12.4.94 setCroppingState()

```
FliSdkError FliSdk::setCroppingState (
             bool enable,
             CroppingData croppingData )
```

Set the cropping data.

Parameters

enable	enable or disable cropping
croppingData	cropping data

Returns

FliSdkError

6.12.4.95 setFowlerOffset()

```
void FliSdk::setFowlerOffset (
            uint16_t offset )
```

Set the value of the Fowler offset to apply on sum of the images.

Parameters

offset	the value of the offset (between 0 and 65535), default is 0

6.12.4.96 setGrabber()

```
bool FliSdk::setGrabber (
            std::string grabberName )
```

Set the grabber to be used.

Parameters

grabberName	name of the grabber

Returns

true if grabber exists else false

Attention

Call update() to apply.

6.12.4.97 setImageDimension()

```
void FliSdk::setImageDimension (
            uint16_t width,
            uint16_t height )
```

Force the image dimension apply to the grabber.

Parameters

width	width of image
height	height of image

6.12.4.98 setImageDimensionImageRingBuffer()

```
void FliSdk::setImageDimensionImageRingBuffer (
            uint16_t width,
            uint16_t height )
```

Force the image dimension apply to the image ring buffer needed when there is no grabber but images loaded from files.

Parameters

width	width of image
height	height of image

6.12.4.99 setImageDimensionImageRingBufferThermo()

```
void FliSdk::setImageDimensionImageRingBufferThermo (
            uint16_t width,
            uint16_t height )
```

Force the image dimension apply to the thermographic image ring buffer needed when there is no grabber but thermographic images loaded from files (∗.thr.raw files)

Parameters

width	width of image
height	height of image

6.12.4.100 setMode()

```
void FliSdk::setMode (
            Mode mode )
```

Set the mode of use of the sdk.

Parameters

mode	mode used (full, grabOnly, configOnly)

Attention

Call update() to apply.

6.12.4.101 setNbImagesPerBuffer()

```
void FliSdk::setNbImagesPerBuffer (
            uint8_t nbImages )
```

Set set number of images the grabber should acquire before trigger, use this function for high FPS.

Parameters

nbImages	: number of images.

6.12.4.102 setOcamFrameNumberOffset()

```
void FliSdk::setOcamFrameNumberOffset (
            uint8_t offset )
```

Set the offset for the frame number.

Parameters

offset	0 for simulator, 8 for camera

6.12.4.103 setupFixedCCsFrameGrabber()

```
void FliSdk::setupFixedCCsFrameGrabber (
            int set )
```

Set the CC IO_SOURCE for one set (and the other 3 will be unset), available only for Matrox CL Grabber.

Parameters

set	a value between 1 to 4

6.12.4.104 sfncCamera()

```
FliSfncCamera* FliSdk::sfncCamera ( )
```

Get commond interface for genicam camera.

Returns

a pointer to the camera object (nullptr if name doesn't exist or if sdk not initialized)

6.12.4.105 start()

```
FliSdkError FliSdk::start ( )
```

Start the grabber (must be initialized before)

Returns

FliSdkError

6.12.4.106 stop()

```
FliSdkError FliSdk::stop ( )
```

Stop the grabber.

Returns

FliSdkError

6.12.4.107 update()

```
FliSdkError FliSdk::update ( )
```

Update the changes, must be call after setCamera, setGrabber or setMode to take effects.

Returns

FlISdkError

6.12.4.108 version()

```
std::string FliSdk::version ( )
```

Get the version of the sdk.

Returns

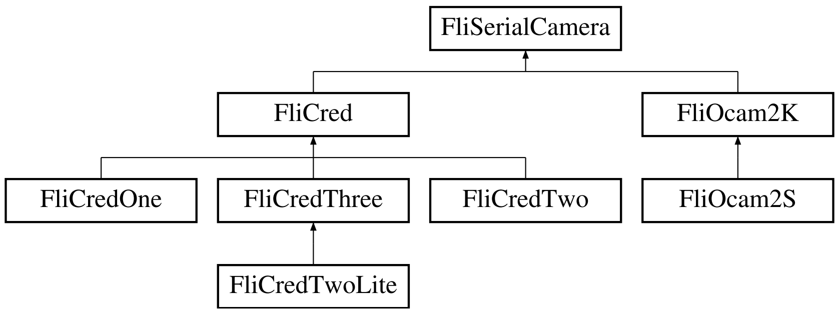
a string containing verison of sdk

6.13 FliSerialCamera Class Reference

This class is the base class of all serial camera (CameraLink). It implements common C-RED and Ocam functions.

```
#include <FliSerialCamera.h>
```

Inheritance diagram for FliSerialCamera:



Public Member Functions

- FliSerialCamera (IFrameGrabberCL ∗grabber)
- virtual ∼FliSerialCamera ()
- FliSdkError getModel (Fli::CameraModel &model)
- void getCurrentImageDimension (uint16_t &width, uint16_t &height)
- FliSdkError getFps (double &fps)
- FliSdkError getFpsMax (double &fps)
- FliSdkError setFps (double fps)
- FliSdkError enableBias (bool enable)
- FliSdkError enableFlat (bool enable)
- bool sendCommand (const std::string &command, std::string &response, int timeout=0, bool filtered=true, bool echo=false)

  Send a command to the camera and get the response in one time.
- FliSdkError sendCommand (const std::string &command, int timeout=0, std::function< void(std::string)> getStringStream=nullptr, bool echo=false)

  Send a command to the camera and get the response with a callback called at each readSerial.
- void resynchronizeSerial ()

  Resynchronize the serial, can be done sometimes.
- void purgeSerial (int timeout)

  Resynchronize the serial, can be done sometimes.
- void addObserver (IFliCameraObserver ∗obs)
- void removeObserver (IFliCameraObserver ∗obs)
- void writeSerial (const std::string &str)
- std::string readSerial ()
- void setCustomSerial (ICustomSerial ∗customSerial)
- void sleep (int ms)
- bool isCameraConnected ()

Protected Member Functions

- bool isNumber (const std::string &s)
- void getRawData (std::string &s)
- void notifyObservers (const std::string &command)
- void grabberWriteSerial (const std::string command, bool echo)
- void grabberReadSerial (std::string &buf, bool echo)

Protected Attributes

- IFrameGrabberCL ∗ _grabber
- Fli::CameraModel _cameraModel
- std::list< IFliCameraObserver ∗ > _observers
- bool _croppingFromFunction
- ICustomSerial ∗ _customSerial
- bool _needEcho

Friends

- class FliSdkImpl
- class FliSdkImplCL
- class FliCred
- class FliCredOne
- class FliCredTwo
- class FliCredTwoLite
- class FliCredThree
- class FliOcam2K
- class FliOcam2S

6.13.1 Detailed Description

This class is the base class of all serial camera (CameraLink). It implements common C-RED and Ocam functions.

6.13.2 Constructor & Destructor Documentation

6.13.2.1 FliSerialCamera()

```
FliSerialCamera::FliSerialCamera (
              IFrameGrabberCL ∗ grabber )
```

6.13.2.2 ∼FliSerialCamera()

```
virtual FliSerialCamera::∼FliSerialCamera ( )  [virtual]
```

6.13.3 Member Function Documentation

6.13.3.1 addObserver()

```
void FliSerialCamera::addObserver (
            IFliCameraObserver * obs )  [inline]
```

6.13.3.2 enableBias()

```
FliSdkError FliSerialCamera::enableBias (
            bool enable )
```

6.13.3.3 enableFlat()

```
FliSdkError FliSerialCamera::enableFlat (
            bool enable )
```

6.13.3.4 getCurrentImageDimension()

```
void FliSerialCamera::getCurrentImageDimension (
            uint16_t & width,
            uint16_t & height )
```

6.13.3.5 getFps()

```
FliSdkError FliSerialCamera::getFps (
            double & fps )
```

6.13.3.6 getFpsMax()

```
FliSdkError FliSerialCamera::getFpsMax (
            double & fps )
```

6.13.3.7 getModel()

```
FliSdkError FliSerialCamera::getModel (
            Fli::CameraModel & model )
```

6.13.3.8 getRawData()

```
void FliSerialCamera::getRawData (
            std::string & s )  [protected]
```

6.13.3.9 grabberReadSerial()

```
void FliSerialCamera::grabberReadSerial (
            std::string & buf,
            bool echo )  [protected]
```

6.13.3.10 grabberWriteSerial()

```
void FliSerialCamera::grabberWriteSerial (
            const std::string command,
            bool echo )  [protected]
```

6.13.3.11 isCameraConnected()

```
bool FliSerialCamera::isCameraConnected ( )
```

6.13.3.12 isNumber()

```
bool FliSerialCamera::isNumber (
            const std::string & s )  [protected]
```

6.13.3.13 notifyObservers()

```
void FliSerialCamera::notifyObservers (
            const std::string & command )  [protected]
```

6.13.3.14 purgeSerial()

```
void FliSerialCamera::purgeSerial (
            int timeout )
```

Resynchronize the serial, can be done sometimes.

6.13.3.15 readSerial()

```
std::string FliSerialCamera::readSerial ( )
```

6.13.3.16 removeObserver()

```
void FliSerialCamera::removeObserver (
            IFliCameraObserver * obs )  [inline]
```

6.13.3.17 resynchronizeSerial()

```
void FliSerialCamera::resynchronizeSerial ( )
```

Resynchronize the serial, can be done sometimes.

6.13.3.18 sendCommand() [1/2]

```
FliSdkError FliSerialCamera::sendCommand (
            const std::string & command,
            int timeout = 0,
            std::function< void(std::string)> getStringStream = nullptr,
            bool echo = false )
```

Send a command to the camera and get the response with a callback called at each readSerial.

Parameters

command	command to send
timeout	command timeout
getStringStream	callback called each time read serial is called

Returns

a FliSdkError

6.13.3.19 sendCommand() [2/2]

```
bool FliSerialCamera::sendCommand (
            const std::string & command,
            std::string & response,
            int timeout = 0,
            bool filtered = true,
            bool echo = false )
```

Send a command to the camera and get the response in one time.

Parameters

command	command to send
response	response of the camera
timeout	command timeout
filtered	if true all useless string in response will be deleted

Returns

true if command is ok else false

6.13.3.20 setCustomSerial()

```
void FliSerialCamera::setCustomSerial (
            ICustomSerial * customSerial )
```

6.13.3.21 setFps()

```
FliSdkError FliSerialCamera::setFps (
            double fps )
```

6.13.3.22 sleep()

```
void FliSerialCamera::sleep (
            int ms ) [inline]
```

6.13.3.23 writeSerial()

```
void FliSerialCamera::writeSerial (
             const std::string & str )
```

6.13.4 Friends And Related Function Documentation

6.13.4.1 FliCred

```
friend class FliCred  [friend]
```

6.13.4.2 FliCredOne

```
friend class FliCredOne  [friend]
```

6.13.4.3 FliCredThree

```
friend class FliCredThree  [friend]
```

6.13.4.4 FliCredTwo

```
friend class FliCredTwo  [friend]
```

6.13.4.5 FliCredTwoLite

```
friend class FliCredTwoLite  [friend]
```

6.13.4.6 FliOcam2K

```
friend class FliOcam2K  [friend]
```

6.13.4.7 FliOcam2S

```
friend class FliOcam2S  [friend]
```

6.13.4.8 FliSdkImpl

```
friend class FliSdkImpl  [friend]
```

6.13.4.9 FliSdkImplCL

```
friend class FliSdkImplCL  [friend]
```

6.13.5 Member Data Documentation

6.13.5.1 _cameraModel

```
Fli::CameraModel FliSerialCamera::_cameraModel  [protected]
```

6.13.5.2 _croppingFromFunction

```
bool FliSerialCamera::_croppingFromFunction  [protected]
```

6.13.5.3 _customSerial

```
ICustomSerial* FliSerialCamera::_customSerial  [protected]
```

6.13.5.4 _grabber

```
IFrameGrabberCL* FliSerialCamera::_grabber  [protected]
```

6.13.5.5 _needEcho

```
bool FliSerialCamera::_needEcho  [protected]
```

6.13.5.6 _observers

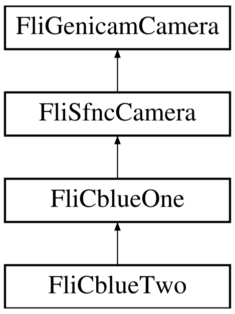
```
std::list<IFliCameraObserver*> FliSerialCamera::_observers  [protected]
```

6.14 FliSfncCamera Class Reference

This class defined all the register of an SFNC compliant camera.

```
#include <FliSfncCamera.h>
```

Inheritance diagram for FliSfncCamera:



Public Member Functions

- FliSfncCamera (IFrameGrabberGenicam ∗grabber)
- virtual ∼FliSfncCamera ()

Public Attributes

- GenicamFeature< bool > ∗ CameraPresence
- GenicamFeature< FliSfncCameraEnum::DeviceTypeEnum > ∗ DeviceType

    Returns the device type.
- GenicamFeature< FliSfncCameraEnum::DeviceScanTypeEnum > ∗ DeviceScanType

    Scan type of the sensor of the device.
- GenicamFeature< std::string > ∗ DeviceVendorName

    Name of the manufacturer of the device.
- GenicamFeature< std::string > ∗ DeviceModelName

    Model of the device.
- GenicamFeature< std::string > ∗ DeviceFamilyName

    Identifier of the product family of the device.
- GenicamFeature< std::string > ∗ DeviceManufacturerInfo

Manufacturer information about the device.

- GenicamFeature< std::string > ∗ DeviceVersion

  Version of the device.
- GenicamFeature< std::string > ∗ DeviceFirmwareVersion

  Version of the firmware in the device.
- GenicamFeature< std::string > ∗ DeviceSerialNumber

  Device's serial number. This string is a unique identifier of the device.
- GenicamFeature< std::string > ∗ DeviceUserID

  User-programmable device identifier.
- GenicamFeature< int64_t > ∗ DeviceSFNCVersionMajor

  Major version of the Standard Features Naming Convention that was used to create the device's GenICam XML.
- GenicamFeature< int64_t > ∗ DeviceSFNCVersionMinor

  Minor version of the Standard Features Naming Convention that was used to create the device's GenICam XML.
- GenicamFeature< int64_t > ∗ DeviceSFNCVersionSubMinor

  Sub minor version of Standard Features Naming Convention that was used to create the device's GenICam XML.
- GenicamFeature< int64_t > ∗ DeviceManifestEntrySelector

  Selects the manifest entry to reference.
- GenicamFeature< int64_t > ∗ DeviceManifestXMLMajorVersion

  Indicates the major version number of the GenICam XML file of the selected manifest entry.
- GenicamFeature< int64_t > ∗ DeviceManifestXMLMinorVersion

  Indicates the minor version number of the GenICam XML file of the selected manifest entry.
- GenicamFeature< int64_t > ∗ DeviceManifestXMLSubMinorVersion

  Indicates the subminor version number of the GenICam XML file of the selected manifest entry.
- GenicamFeature< int64_t > ∗ DeviceManifestSchemaMajorVersion

  Indicates the major version number of the schema file of the selected manifest entry.
- GenicamFeature< int64_t > ∗ DeviceManifestSchemaMinorVersion

  Indicates the minor version number of the schema file of the selected manifest entry.
- GenicamFeature< std::string > ∗ DeviceManifestPrimaryURL

  Indicates the first URL to the GenICam XML device description file of the selected manifest entry.
- GenicamFeature< std::string > ∗ DeviceManifestSecondaryURL

  Indicates the second URL to the GenICam XML device description file of the selected manifest entry.
- GenicamFeature< FliSfncCameraEnum::DeviceTLTypeEnum > ∗ DeviceTLType

  Transport Layer type of the device.
- GenicamFeature< int64_t > ∗ DeviceTLVersionMajor

  Major version of the Transport Layer of the device.
- GenicamFeature< int64_t > ∗ DeviceTLVersionMinor

  Minor version of the Transport Layer of the device.
- GenicamFeature< int64_t > ∗ DeviceTLVersionSubMinor

  Sub minor version of the Transport Layer of the device.
- GenicamFeature< int64_t > ∗ DeviceGenCPVersionMajor

  Major version of the GenCP protocol supported by the device.
- GenicamFeature< int64_t > ∗ DeviceGenCPVersionMinor

  Minor version of the GenCP protocol supported by the device.
- GenicamFeature< int64_t > ∗ DeviceMaxThroughput

  Maximum bandwidth of the data that can be streamed out of the device. This can be used to estimate if the physical connection(s) can sustain transfer of free-running images from the camera at its maximum speed.
- GenicamFeature< int64_t > ∗ DeviceConnectionSelector

  Selects which Connection of the device to control.
- GenicamFeature< int64_t > ∗ DeviceConnectionSpeed

  Indicates the speed of transmission of the specified Connection.
- GenicamFeature< FliSfncCameraEnum::DeviceConnectionStatusEnum > ∗ DeviceConnectionStatus

Indicates the status of the specified Connection.
- GenicamFeature< int64_t > ∗ DeviceLinkSelector

    Selects which Link of the device to control.
- GenicamFeature< int64_t > ∗ DeviceLinkSpeed

    Indicates the speed of transmission negotiated on the specified Link.
- GenicamFeature< FliSfncCameraEnum::DeviceLinkThroughputLimitModeEnum > ∗ DeviceLinkThroughputLimitMode

    Controls if the DeviceLinkThroughputLimit is active. When disabled, lower level TL specific features are expected to control the throughput. When enabled, DeviceLinkThroughputLimit controls the overall throughput.
- GenicamFeature< int64_t > ∗ DeviceLinkThroughputLimit

    Limits the maximum bandwidth of the data that will be streamed out by the device on the selected Link. If necessary, delays will be uniformly inserted between transport layer packets in order to control the peak bandwidth.
- GenicamFeature< int64_t > ∗ DeviceLinkConnectionCount

    Returns the number of physical connection of the device used by a particular Link.
- GenicamFeature< FliSfncCameraEnum::DeviceLinkHeartbeatModeEnum > ∗ DeviceLinkHeartbeatMode

    Activate or deactivate the Link's heartbeat.
- GenicamFeature< double > ∗ DeviceLinkHeartbeatTimeout

    Controls the current heartbeat timeout of the specific Link.
- GenicamFeature< double > ∗ DeviceLinkCommandTimeout

    Indicates the command timeout of the specified Link. This corresponds to the maximum response time of the device for a command sent on that link.
- GenicamFeature< int64_t > ∗ DeviceStreamChannelCount

    Indicates the number of streaming channels supported by the device.
- GenicamFeature< int64_t > ∗ DeviceStreamChannelSelector

    Selects the stream channel to control.
- GenicamFeature< FliSfncCameraEnum::DeviceStreamChannelTypeEnum > ∗ DeviceStreamChannelType

    Reports the type of the stream channel.
- GenicamFeature< int64_t > ∗ DeviceStreamChannelLink

    Index of device's Link to use for streaming the specified stream channel.
- GenicamFeature< FliSfncCameraEnum::DeviceStreamChannelEndiannessEnum > ∗ DeviceStreamChannelEndianness

    Endianness of multi-byte pixel data for this stream.
- GenicamFeature< int64_t > ∗ DeviceStreamChannelPacketSize

    Specifies the stream packet size, in bytes, to send on the selected channel for a Transmitter or specifies the maximum packet size supported by a receiver.
- GenicamFeature< int64_t > ∗ DeviceEventChannelCount

    Indicates the number of event channels supported by the device.
- GenicamFeature< FliSfncCameraEnum::DeviceCharacterSetEnum > ∗ DeviceCharacterSet

    Character set used by the strings of the device.
- GenicamFeature ∗ DeviceReset

    Resets the device to its power up state. After reset, the device must be rediscovered.
- GenicamFeature< FliSfncCameraEnum::DeviceIndicatorModeEnum > ∗ DeviceIndicatorMode

    Controls the behavior of the indicators (such as LEDs) showing the status of the Device.
- GenicamFeature ∗ DeviceFeaturePersistenceStart

    Indicate to the device and GenICam XML to get ready for persisting of all streamable features.
- GenicamFeature ∗ DeviceFeaturePersistenceEnd

    Indicate to the device the end of feature persistence.
- GenicamFeature ∗ DeviceRegistersStreamingStart

    Prepare the device for registers streaming without checking for consistency.
- GenicamFeature ∗ DeviceRegistersStreamingEnd

    Announce the end of registers streaming. This will do a register set validation for consistency and activate it. This will also update the DeviceRegistersValid flag.
- GenicamFeature ∗ DeviceRegistersCheck

    Perform the validation of the current register set for consistency. This will update the DeviceRegistersValid flag.

- GenicamFeature< bool > ∗ DeviceRegistersValid

    Returns if the current register set is valid and consistent.
- GenicamFeature< FliSfncCameraEnum::DeviceRegistersEndiannessEnum > ∗ DeviceRegistersEndianness

    Endianness of the registers of the device.
- GenicamFeature< FliSfncCameraEnum::DeviceTemperatureSelectorEnum > ∗ DeviceTemperatureSelector

    Selects the location within the device, where the temperature will be measured.
- GenicamFeature< double > ∗ DeviceTemperature

    Device temperature in degrees Celsius (C). It is measured at the location selected by DeviceTemperatureSelector.
- GenicamFeature< FliSfncCameraEnum::DeviceClockSelectorEnum > ∗ DeviceClockSelector

    Selects the clock frequency to access from the device.
- GenicamFeature< double > ∗ DeviceClockFrequency

    Returns the frequency of the selected Clock.
- GenicamFeature< FliSfncCameraEnum::DeviceSerialPortSelectorEnum > ∗ DeviceSerialPortSelector

    Selects which serial port of the device to control.
- GenicamFeature< FliSfncCameraEnum::DeviceSerialPortBaudRateEnum > ∗ DeviceSerialPortBaudRate

    This feature controls the baud rate used by the selected serial port.
- GenicamFeature< int64_t > ∗ Timestamp

    Reports the current value of the device timestamp counter.
- GenicamFeature ∗ TimestampReset

    Resets the current value of the device timestamp counter.
- GenicamFeature ∗ TimestampLatch

    Latches the current timestamp counter into TimestampLatchValue.
- GenicamFeature< int64_t > ∗ TimestampLatchValue

    Returns the latched value of the timestamp counter.
- GenicamFeature< std::string > ∗ UserSetDescription

    Description of the selected User Set content.
- GenicamFeature< int64_t > ∗ SensorWidth

    Effective width of the sensor in pixels.
- GenicamFeature< int64_t > ∗ SensorHeight

    Effective height of the sensor in pixels.
- GenicamFeature< double > ∗ SensorPixelWidth

    Physical size (pitch) in the x direction of a photo sensitive pixel unit.
- GenicamFeature< double > ∗ SensorPixelHeight

    Physical size (pitch) in the y direction of a photo sensitive pixel unit.
- GenicamFeature< std::string > ∗ SensorName

    Product name of the imaging Sensor.
- GenicamFeature< FliSfncCameraEnum::SensorShutterModeEnum > ∗ SensorShutterMode

    Specifies the shutter mode of the device.
- GenicamFeature< FliSfncCameraEnum::SensorTapsEnum > ∗ SensorTaps

    Number of taps of the camera sensor.
- GenicamFeature< FliSfncCameraEnum::SensorDigitizationTapsEnum > ∗ SensorDigitizationTaps

    Number of digitized samples outputted simultaneously by the camera A/D conversion stage.
- GenicamFeature< int64_t > ∗ WidthMax

    Maximum width of the image (in pixels). The dimension is calculated after horizontal binning, decimation or any other function changing the horizontal dimension of the image.
- GenicamFeature< int64_t > ∗ HeightMax

    Maximum height of the image (in pixels). This dimension is calculated after vertical binning, decimation or any other function changing the vertical dimension of the image.
- GenicamFeature< FliSfncCameraEnum::RegionSelectorEnum > ∗ RegionSelector

    Selects the Region of interest to control. The RegionSelector feature allows devices that are able to extract multiple regions out of an image, to configure the features of those individual regions independently.

- GenicamFeature< FliSfncCameraEnum::RegionModeEnum > ∗ RegionMode

  Controls if the selected Region of interest is active and streaming.
- GenicamFeature< FliSfncCameraEnum::RegionDestinationEnum > ∗ RegionDestination

  Control the destination of the selected region.
- GenicamFeature< int64_t > ∗ RegionIDValue

  Returns a unique Identifier value that corresponds to the selected Region.
- GenicamFeature< FliSfncCameraEnum::ComponentSelectorEnum > ∗ ComponentSelector

  Selects a component to activate/deactivate its data streaming.
- GenicamFeature< bool > ∗ ComponentEnable

  Controls if the selected component streaming is active.
- GenicamFeature< int64_t > ∗ ComponentIDValue

  Returns a unique Identifier value that corresponds to type of the component selected by ComponentSelector.
- GenicamFeature< FliSfncCameraEnum::GroupSelectorEnum > ∗ GroupSelector

  Selects a Group of component to control or inquire. The GroupSelector determines which components Group will be used for the selected features.
- GenicamFeature< int64_t > ∗ GroupIDValue

  Returns a unique Identifier value corresponding to the selected Group of Components. If no grouping is required, this value should be set to 0.
- GenicamFeature< int64_t > ∗ Width

  Width of the image provided by the device (in pixels).
- GenicamFeature< int64_t > ∗ Height

  Height of the image provided by the device (in pixels).
- GenicamFeature< int64_t > ∗ OffsetX

  Horizontal offset from the origin to the region of interest (in pixels).
- GenicamFeature< int64_t > ∗ OffsetY

  Vertical offset from the origin to the region of interest (in pixels).
- GenicamFeature< bool > ∗ LinePitchEnable

  This feature controls whether the LinePitch feature is writable. Otherwise LinePitch is implicitly controlled by the combination of features like Width, PixelFormat, etc...
- GenicamFeature< int64_t > ∗ LinePitch

  Total number of bytes between the starts of 2 consecutive lines. This feature is used to facilitate alignment of image data.
- GenicamFeature< FliSfncCameraEnum::BinningSelectorEnum > ∗ BinningSelector

  Selects which binning engine is controlled by the BinningHorizontal and BinningVertical features.
- GenicamFeature< FliSfncCameraEnum::BinningHorizontalModeEnum > ∗ BinningHorizontalMode

  Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.
- GenicamFeature< int64_t > ∗ BinningHorizontal

  Number of horizontal photo-sensitive cells to combine together. This reduces the horizontal resolution (width) of the image.
- GenicamFeature< FliSfncCameraEnum::BinningVerticalModeEnum > ∗ BinningVerticalMode

  Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.
- GenicamFeature< int64_t > ∗ BinningVertical

  Number of vertical photo-sensitive cells to combine together. This reduces the vertical resolution (height) of the image.
- GenicamFeature< FliSfncCameraEnum::DecimationHorizontalModeEnum > ∗ DecimationHorizontalMode

  Sets the mode used to reduce the horizontal resolution when DecimationHorizontal is used.
- GenicamFeature< int64_t > ∗ DecimationHorizontal

  Horizontal sub-sampling of the image. This reduces the horizontal resolution (width) of the image by the specified horizontal decimation factor.
- GenicamFeature< FliSfncCameraEnum::DecimationVerticalModeEnum > ∗ DecimationVerticalMode

  Sets the mode used to reduce the Vertical resolution when DecimationVertical is used.
- GenicamFeature< int64_t > ∗ DecimationVertical

Vertical sub-sampling of the image. This reduces the vertical resolution (height) of the image by the specified vertical decimation factor.
- GenicamFeature< bool > ∗ ReverseX

  Flip horizontally the image sent by the device. The Region of interest is applied after the flipping.
- GenicamFeature< bool > ∗ ReverseY

  Flip vertically the image sent by the device. The Region of interest is applied after the flipping.
- GenicamFeature< FliSfncCameraEnum::PixelFormatEnum > ∗ PixelFormat

  Format of the pixels provided by the device. It represents all the information provided by PixelSize, PixelColorFilter combined in a single feature.
- GenicamFeature< FliSfncCameraEnum::PixelFormatInfoSelectorEnum > ∗ PixelFormatInfoSelector

  Select the pixel format for which the information will be returned.
- GenicamFeature< int64_t > ∗ PixelFormatInfoID

  Returns the value used by the streaming channels to identify the selected pixel format.
- GenicamFeature< FliSfncCameraEnum::PixelSizeEnum > ∗ PixelSize

  Total size in bits of a pixel of the image.
- GenicamFeature< FliSfncCameraEnum::PixelColorFilterEnum > ∗ PixelColorFilter

  Type of color filter that is applied to the image.
- GenicamFeature< int64_t > ∗ PixelDynamicRangeMin

  Minimum value that can be returned during the digitization process. This corresponds to the darkest value of the camera. For color camera, this returns the smallest value that each color component can take.
- GenicamFeature< int64_t > ∗ PixelDynamicRangeMax

  Maximum value that will be returned during the digitization process. This corresponds to the brightest value of the camera. For color camera, this returns the biggest value that each color component can take.
- GenicamFeature< FliSfncCameraEnum::TestPatternGeneratorSelectorEnum > ∗ TestPatternGeneratorSelector

  Selects which test pattern generator is controlled by the TestPattern feature.
- GenicamFeature< FliSfncCameraEnum::TestPatternEnum > ∗ TestPattern

  Selects the type of test pattern that is generated by the device as image source.
- GenicamFeature< FliSfncCameraEnum::DeinterlacingEnum > ∗ Deinterlacing

  Controls how the device performs de-interlacing.
- GenicamFeature< FliSfncCameraEnum::ImageCompressionModeEnum > ∗ ImageCompressionMode

  Enable a specific image compression mode as the base mode for image transfer. Optionally, chunk data can be appended to the compressed image (See the REF _Ref397502619 \h chapter).
- GenicamFeature< FliSfncCameraEnum::ImageCompressionRateOptionEnum > ∗ ImageCompressionRateOption

  Two rate controlling options are offered: fixed bit rate or fixed quality. The exact implementation to achieve one or the other is vendor-specific.
- GenicamFeature< int64_t > ∗ ImageCompressionQuality

  Control the quality of the produced compressed stream.
- GenicamFeature< double > ∗ ImageCompressionBitrate

  Control the rate of the produced compressed stream.
- GenicamFeature< FliSfncCameraEnum::ImageCompressionJPEGFormatOptionEnum > ∗ ImageCompressionJPEGFormatOp

  When JPEG is selected as the compression format, a device might optionally offer better control over JPEG-specific options through this feature.
- GenicamFeature< FliSfncCameraEnum::AcquisitionModeEnum > ∗ AcquisitionMode

  Sets the acquisition mode of the device. It defines mainly the number of frames to capture during an acquisition and the way the acquisition stops.
- GenicamFeature ∗ AcquisitionStart

  Starts the Acquisition of the device. The number of frames captured is specified by AcquisitionMode.
- GenicamFeature ∗ AcquisitionStop

  Stops the Acquisition of the device at the end of the current Frame. It is mainly used when AcquisitionMode is Continuous but can be used in any acquisition mode.
- GenicamFeature< FliSfncCameraEnum::AcquisitionStopModeEnum > ∗ AcquisitionStopMode

Controls how the AcquisitionStop command and the acquisition stopped using a trigger (e.g. AcquisitionActive, FrameBurstActive, FrameActive or FrameEnd trigger), ends an ongoing frame. This feature is mainly used in Linescan devices where each line in a frame is acquired sequentially.

- GenicamFeature ∗ AcquisitionAbort

  Aborts the Acquisition immediately. This will end the capture without completing the current Frame or waiting on a trigger. If no Acquisition is in progress, the command is ignored.
- GenicamFeature ∗ AcquisitionArm

  Arms the device before an AcquisitionStart command. This optional command validates all the current features for consistency and prepares the device for a fast start of the Acquisition.
- GenicamFeature< int64_t > ∗ AcquisitionFrameCount

  Number of frames to acquire in MultiFrame Acquisition mode.
- GenicamFeature< int64_t > ∗ AcquisitionBurstFrameCount

  Number of frames to acquire for each FrameBurstStart trigger.
- GenicamFeature< double > ∗ AcquisitionFrameRate

  Controls the acquisition rate (in Hertz) at which the frames are captured.
- GenicamFeature< bool > ∗ AcquisitionFrameRateEnable

  Controls if the AcquisitionFrameRate feature is writable and used to control the acquisition rate. Otherwise, the acquisition rate is implicitly controlled by the combination of other features like ExposureTime, etc...
- GenicamFeature< double > ∗ AcquisitionLineRate

  Controls the rate (in Hertz) at which the Lines in a Frame are captured.
- GenicamFeature< bool > ∗ AcquisitionLineRateEnable

  Controls if the AcquisitionLineRate feature is writable and used to control the acquisition rate. Otherwise, the acquisition rate is implicitly controlled by the combination of other features like ExposureTime, etc...
- GenicamFeature< FliSfncCameraEnum::AcquisitionStatusSelectorEnum > ∗ AcquisitionStatusSelector

  Selects the internal acquisition signal to read using AcquisitionStatus.
- GenicamFeature< bool > ∗ AcquisitionStatus

  Reads the state of the internal acquisition signal selected using AcquisitionStatusSelector.
- GenicamFeature< FliSfncCameraEnum::TriggerSelectorEnum > ∗ TriggerSelector

  Selects the type of trigger to configure.
- GenicamFeature< FliSfncCameraEnum::TriggerModeEnum > ∗ TriggerMode

  Controls if the selected trigger is active.
- GenicamFeature ∗ TriggerSoftware

  Generates an internal trigger. TriggerSource must be set to Software.
- GenicamFeature< FliSfncCameraEnum::TriggerSourceEnum > ∗ TriggerSource

  Specifies the internal signal or physical input Line to use as the trigger source. The selected trigger must have its TriggerMode set to On.
- GenicamFeature< FliSfncCameraEnum::TriggerActivationEnum > ∗ TriggerActivation

  Specifies the activation mode of the trigger.
- GenicamFeature< FliSfncCameraEnum::TriggerOverlapEnum > ∗ TriggerOverlap

  Specifies the type trigger overlap permitted with the previous frame or line. This defines when a valid trigger will be accepted (or latched) for a new frame or a new line.
- GenicamFeature< double > ∗ TriggerDelay

  Specifies the delay in microseconds (us) to apply after the trigger reception before activating it.
- GenicamFeature< int64_t > ∗ TriggerDivider

  Specifies a division factor for the incoming trigger pulses.
- GenicamFeature< int64_t > ∗ TriggerMultiplier

  Specifies a multiplication factor for the incoming trigger pulses. It is generally used in conjunction with TriggerDivider to control the ratio of triggers that are accepted.
- GenicamFeature< FliSfncCameraEnum::ExposureModeEnum > ∗ ExposureMode

  Sets the operation mode of the Exposure.
- GenicamFeature< FliSfncCameraEnum::ExposureTimeModeEnum > ∗ ExposureTimeMode

  Sets the configuration mode of the ExposureTime feature.
- GenicamFeature< FliSfncCameraEnum::ExposureTimeSelectorEnum > ∗ ExposureTimeSelector

Selects which exposure time is controlled by the ExposureTime feature. This allows for independent control over the exposure components.
- GenicamFeature< double > ∗ ExposureTime

  Sets the Exposure time when ExposureMode is Timed and ExposureAuto is Off. This controls the duration where the photosensitive cells are exposed to light.
- GenicamFeature< FliSfncCameraEnum::ExposureAutoEnum > ∗ ExposureAuto

  Sets the automatic exposure mode when ExposureMode is Timed. The exact algorithm used to implement this control is device-specific.
- GenicamFeature< FliSfncCameraEnum::MultiSlopeModeEnum > ∗ MultiSlopeMode

  Controls multi-slope exposure state.
- GenicamFeature< int64_t > ∗ MultiSlopeKneePointCount

  The number of knee-points as well as the number of additional exposure slopes used for multi-slope exposure.
- GenicamFeature< int64_t > ∗ MultiSlopeKneePointSelector

  Selects the parameters for controlling an additional slope in multi-slope exposure.
- GenicamFeature< double > ∗ MultiSlopeExposureLimit

  Percent of the ExposureTime at a certain knee-point of multi-slope exposure.
- GenicamFeature< double > ∗ MultiSlopeSaturationThreshold

  The percentage of the full saturation that is applied at a certain knee-point of a multi-slope exposure.
- GenicamFeature< double > ∗ MultiSlopeIntensityLimit

  The relative intensity which divides intensities influenced by different exposure slopes.
- GenicamFeature< double > ∗ MultiSlopeExposureGradient

  The gradient of the additional slope that is defined by this knee-point.
- GenicamFeature< bool > ∗ CxpFirstLineTriggerWithFrameStart

  Specifies if a FrameStart trigger also triggers the first LineStart at the same time.
- GenicamFeature< FliSfncCameraEnum::GainSelectorEnum > ∗ GainSelector

  Selects which Gain is controlled by the various Gain features.
- GenicamFeature< double > ∗ Gain

  Controls the selected gain as an absolute physical value. This is an amplification factor applied to the video signal.
- GenicamFeature< FliSfncCameraEnum::GainAutoEnum > ∗ GainAuto

  Sets the automatic gain control (AGC) mode. The exact algorithm used to implement AGC is device-specific.
- GenicamFeature< FliSfncCameraEnum::GainAutoBalanceEnum > ∗ GainAutoBalance

  Sets the mode for automatic gain balancing between the sensor color channels or taps. The gain coefficients of each channel or tap are adjusted so they are matched.
- GenicamFeature< FliSfncCameraEnum::BlackLevelSelectorEnum > ∗ BlackLevelSelector

  Selects which Black Level is controlled by the various Black Level features.
- GenicamFeature< double > ∗ BlackLevel

  Controls the analog black level as an absolute physical value. This represents a DC offset applied to the video signal.
- GenicamFeature< FliSfncCameraEnum::BlackLevelAutoEnum > ∗ BlackLevelAuto

  Controls the mode for automatic black level adjustment. The exact algorithm used to implement this adjustment is device-specific.
- GenicamFeature< FliSfncCameraEnum::BlackLevelAutoBalanceEnum > ∗ BlackLevelAutoBalance

  Controls the mode for automatic black level balancing between the sensor color channels or taps. The black level coefficients of each channel are adjusted so they are matched.
- GenicamFeature< FliSfncCameraEnum::WhiteClipSelectorEnum > ∗ WhiteClipSelector

  Selects which White Clip to control.
- GenicamFeature< double > ∗ WhiteClip

  Controls the maximal intensity taken by the video signal before being clipped as an absolute physical value. The video signal will never exceed the white clipping point: it will saturate at that level.
- GenicamFeature< FliSfncCameraEnum::BalanceRatioSelectorEnum > ∗ BalanceRatioSelector

  Selects which Balance ratio to control.
- GenicamFeature< double > ∗ BalanceRatio

  Controls ratio of the selected color component to a reference color component. It is used for white balancing.

- GenicamFeature< FliSfncCameraEnum::BalanceWhiteAutoEnum > * BalanceWhiteAuto

  Controls the mode for automatic white balancing between the color channels. The white balancing ratios are automatically adjusted.
- GenicamFeature< double > * Gamma

  Controls the gamma correction of pixel intensity. This is typically used to compensate for non-linearity of the display system (such as CRT).
- GenicamFeature< FliSfncCameraEnum::LUTSelectorEnum > * LUTSelector

  Selects which LUT to control.
- GenicamFeature< bool > * LUTEnable

  Activates the selected LUT.
- GenicamFeature< int64_t > * LUTIndex

  Control the index (offset) of the coefficient to access in the selected LUT.
- GenicamFeature< int64_t > * LUTValue

  Returns the Value at entry LUTIndex of the LUT selected by LUTSelector.
- GenicamFeature< FliSfncCameraEnum::ColorTransformationSelectorEnum > * ColorTransformationSelector

  Selects which Color Transformation module is controlled by the various Color Transformation features.
- GenicamFeature< bool > * ColorTransformationEnable

  Activates the selected Color Transformation module.
- GenicamFeature< FliSfncCameraEnum::ColorTransformationValueSelectorEnum > * ColorTransformationValueSelector

  Selects the Gain factor or Offset of the Transformation matrix to access in the selected Color Transformation module.
- GenicamFeature< double > * ColorTransformationValue

  Represents the value of the selected Gain factor or Offset inside the Transformation matrix.
- GenicamFeature< FliSfncCameraEnum::LineSelectorEnum > * LineSelector

  Selects the physical line (or pin) of the external device connector or the virtual line of the Transport Layer to configure.
- GenicamFeature< FliSfncCameraEnum::LineModeEnum > * LineMode

  Controls if the physical Line is used to Input or Output a signal.
- GenicamFeature< bool > * LineInverter

  Controls the inversion of the signal of the selected input or output Line.
- GenicamFeature< bool > * LineStatus

  Returns the current status of the selected input or output Line.
- GenicamFeature< int64_t > * LineStatusAll

  Returns the current status of all available Line signals at time of polling in a single bitfield.
- GenicamFeature< FliSfncCameraEnum::LineSourceEnum > * LineSource

  Selects which internal acquisition or I/O source signal to output on the selected Line. LineMode must be Output.
- GenicamFeature< FliSfncCameraEnum::LineFormatEnum > * LineFormat

  Controls the current electrical format of the selected physical input or output Line.
- GenicamFeature< FliSfncCameraEnum::UserOutputSelectorEnum > * UserOutputSelector

  Selects which bit of the User Output register will be set by UserOutputValue.
- GenicamFeature< bool > * UserOutputValue

  Sets the value of the bit selected by UserOutputSelector.
- GenicamFeature< int64_t > * UserOutputValueAll

  Sets the value of all the bits of the User Output register. It is subject to the UserOutputValueAllMask.
- GenicamFeature< int64_t > * UserOutputValueAllMask

  Sets the write mask to apply to the value specified by UserOutputValueAll before writing it in the User Output register. If the UserOutputValueAllMask feature is present, setting the user Output register using UserOutputValueAll will only change the bits that have a corresponding bit in the mask set to one.
- GenicamFeature< FliSfncCameraEnum::CounterSelectorEnum > * CounterSelector

  Selects which Counter to configure.
- GenicamFeature< FliSfncCameraEnum::CounterEventSourceEnum > * CounterEventSource

  Select the events that will be the source to increment the Counter.
- GenicamFeature< FliSfncCameraEnum::CounterEventActivationEnum > * CounterEventActivation

Selects the Activation mode Event Source signal.
- GenicamFeature< FliSfncCameraEnum::CounterResetSourceEnum > ∗ CounterResetSource

  Selects the signals that will be the source to reset the Counter.
- GenicamFeature< FliSfncCameraEnum::CounterResetActivationEnum > ∗ CounterResetActivation

  Selects the Activation mode of the Counter Reset Source signal.
- GenicamFeature ∗ CounterReset

  Does a software reset of the selected Counter and starts it. The counter starts counting events immediately after the reset unless a Counter trigger is active. CounterReset can be used to reset the Counter independently from the CounterResetSource. To disable the counter temporarily, set CounterEventSource to Off.
- GenicamFeature< int64_t > ∗ CounterValue

  Reads or writes the current value of the selected Counter.
- GenicamFeature< int64_t > ∗ CounterValueAtReset

  Reads the value of the selected Counter when it was reset by a trigger or by an explicit CounterReset command.
- GenicamFeature< int64_t > ∗ CounterDuration

  Sets the duration (or number of events) before the CounterEnd event is generated.
- GenicamFeature< FliSfncCameraEnum::CounterStatusEnum > ∗ CounterStatus

  Returns the current status of the Counter.
- GenicamFeature< FliSfncCameraEnum::CounterTriggerSourceEnum > ∗ CounterTriggerSource

  Selects the source to start the Counter.
- GenicamFeature< FliSfncCameraEnum::CounterTriggerActivationEnum > ∗ CounterTriggerActivation

  Selects the activation mode of the trigger to start the Counter.
- GenicamFeature< FliSfncCameraEnum::TimerSelectorEnum > ∗ TimerSelector

  Selects which Timer to configure.
- GenicamFeature< double > ∗ TimerDuration

  Sets the duration (in microseconds) of the Timer pulse.
- GenicamFeature< double > ∗ TimerDelay

  Sets the duration (in microseconds) of the delay to apply at the reception of a trigger before starting the Timer.
- GenicamFeature ∗ TimerReset

  Does a software reset of the selected timer and starts it. The timer starts immediately after the reset unless a timer trigger is active.
- GenicamFeature< double > ∗ TimerValue

  Reads or writes the current value (in microseconds) of the selected Timer.
- GenicamFeature< FliSfncCameraEnum::TimerStatusEnum > ∗ TimerStatus

  Returns the current status of the Timer.
- GenicamFeature< FliSfncCameraEnum::TimerTriggerSourceEnum > ∗ TimerTriggerSource

  Selects the source of the trigger to start the Timer.
- GenicamFeature< FliSfncCameraEnum::TimerTriggerActivationEnum > ∗ TimerTriggerActivation

  Selects the activation mode of the trigger to start the Timer.
- GenicamFeature< double > ∗ TimerTriggerArmDelay

  Sets the minimum period between two valid timer triggers.
- GenicamFeature< FliSfncCameraEnum::EncoderSelectorEnum > ∗ EncoderSelector

  Selects which Encoder to configure.
- GenicamFeature< FliSfncCameraEnum::EncoderSourceAEnum > ∗ EncoderSourceA

  Selects the signal which will be the source of the A input of the Encoder.
- GenicamFeature< FliSfncCameraEnum::EncoderSourceBEnum > ∗ EncoderSourceB

  Selects the signal which will be the source of the B input of the Encoder.
- GenicamFeature< FliSfncCameraEnum::EncoderModeEnum > ∗ EncoderMode

  Selects if the count of encoder uses FourPhase mode with jitter filtering or the HighResolution mode without jitter filtering.
- GenicamFeature< int64_t > ∗ EncoderDivider

  Sets how many Encoder increments/decrements are needed to generate an Encoder output pulse signal.

- GenicamFeature< FliSfncCameraEnum::EncoderOutputModeEnum > * EncoderOutputMode

  Selects the conditions for the Encoder interface to generate a valid Encoder output signal.
- GenicamFeature< FliSfncCameraEnum::EncoderStatusEnum > * EncoderStatus

  Returns the motion status of the encoder.
- GenicamFeature< double > * EncoderTimeout

  Sets the maximum time interval between encoder counter increments before the status turns to static.
- GenicamFeature< FliSfncCameraEnum::EncoderResetSourceEnum > * EncoderResetSource

  Selects the signals that will be the source to reset the Encoder.
- GenicamFeature< FliSfncCameraEnum::EncoderResetActivationEnum > * EncoderResetActivation

  Selects the Activation mode of the Encoder Reset Source signal.
- GenicamFeature * EncoderReset

  Does a software reset of the selected Encoder and starts it. The Encoder starts counting events immediately after the reset. EncoderReset can be used to reset the Encoder independently from the EncoderResetSource.
- GenicamFeature< int64_t > * EncoderValue

  Reads or writes the current value of the position counter of the selected Encoder.
- GenicamFeature< int64_t > * EncoderValueAtReset

  Reads the value of the of the position counter of the selected Encoder when it was reset by a signal or by an explicit EncoderReset command.
- GenicamFeature< double > * EncoderResolution

  Defines the resolution of one encoder step.
- GenicamFeature< FliSfncCameraEnum::LogicBlockSelectorEnum > * LogicBlockSelector

  Specifies the Logic Block to configure.
- GenicamFeature< FliSfncCameraEnum::LogicBlockFunctionEnum > * LogicBlockFunction

  Selects the combinational logic Function of the Logic Block to configure.
- GenicamFeature< int64_t > * LogicBlockInputNumber

  Specifies the number of active signal inputs of the Logic Block.
- GenicamFeature< int64_t > * LogicBlockInputSelector

  Selects the Logic Block's input to configure.
- GenicamFeature< FliSfncCameraEnum::LogicBlockInputSourceEnum > * LogicBlockInputSource

  Selects the source signal for the input into the Logic Block. True or False indicates the input is forced constant.
- GenicamFeature< bool > * LogicBlockInputInverter

  Selects if the selected Logic Block Input source signal is inverted. This feature is not available when the LogicBlock↩ InputSource is set to True or False.
- GenicamFeature< int64_t > * LogicBlockLUTIndex

  Controls the index of the truth table to access in the selected LUT.
- GenicamFeature< bool > * LogicBlockLUTValue

  Read or Write the Value associated with the entry at index LogicBlockLUTIndex of the selected LUT.
- GenicamFeature< int64_t > * LogicBlockLUTValueAll

  Sets the values of all the output bits of the selected LUT in one access ignoring LogicBlockLUTIndex. LogicBlockL↩ UTValueAll value can be any binary number and each bit correspond to the output value for the corresponding index (i.e. Bit 0 = LUT Index 0 output binary value).
- GenicamFeature< FliSfncCameraEnum::LogicBlockLUTSelectorEnum > * LogicBlockLUTSelector

  Selects which of the two LUTs to configure when the selected Logic Block is a Latched dual LUTs (i.e: Logical↩ BlockFunction = LatchedLUT).
- GenicamFeature< FliSfncCameraEnum::SoftwareSignalSelectorEnum > * SoftwareSignalSelector

  Selects which Software Signal features to control.
- GenicamFeature * SoftwareSignalPulse

  Generates a pulse signal that can be used as a software trigger. This command can be used to trigger other modules that accept a SoftwareSignal as trigger source.
- GenicamFeature< FliSfncCameraEnum::ActionUnconditionalModeEnum > * ActionUnconditionalMode

  Enables the unconditional action command mode where action commands are processed even when the primary control channel is closed.

- GenicamFeature< int64_t > * ActionDeviceKey

    Provides the device key that allows the device to check the validity of action commands. The device internal assertion of an action signal is only authorized if the ActionDeviceKey and the action device key value in the protocol message are equal.
- GenicamFeature< int64_t > * ActionQueueSize

    Indicates the size of the scheduled action commands queue. This number represents the maximum number of scheduled action commands that can be pending at a given point in time.
- GenicamFeature< int64_t > * ActionSelector

    Selects to which Action Signal further Action settings apply.
- GenicamFeature< int64_t > * ActionGroupMask

    Provides the mask that the device will use to validate the action on reception of the action protocol message.
- GenicamFeature< int64_t > * ActionGroupKey

    Provides the key that the device will use to validate the action on reception of the action protocol message.
- GenicamFeature< FliSfncCameraEnum::EventSelectorEnum > * EventSelector

    Selects which Event to signal to the host application.
- GenicamFeature< FliSfncCameraEnum::EventNotificationEnum > * EventNotification

    Activate or deactivate the notification to the host application of the occurrence of the selected Event.
- GenicamFeature< int64_t > * EventAcquisitionTrigger

    Returns the unique Identifier of the Acquisition Trigger type of Event.
- GenicamFeature< int64_t > * EventAcquisitionTriggerTimestamp

    Returns the Timestamp of the Acquisition Trigger Event.
- GenicamFeature< int64_t > * EventAcquisitionTriggerFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Acquisition Trigger Event.
- GenicamFeature< int64_t > * EventAcquisitionTriggerMissed

    Returns the unique Identifier of the Acquisition Trigger Missed type of Event.
- GenicamFeature< int64_t > * EventAcquisitionTriggerMissedTimestamp

    Returns the Timestamp of the Acquisition Trigger Missed Event.
- GenicamFeature< int64_t > * EventAcquisitionTriggerMissedFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Acquisition Trigger Missed Event.
- GenicamFeature< int64_t > * EventAcquisitionStart

    Returns the unique Identifier of the Acquisition Start type of Event.
- GenicamFeature< int64_t > * EventAcquisitionStartTimestamp

    Returns the Timestamp of the Acquisition Start Event.
- GenicamFeature< int64_t > * EventAcquisitionStartFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Acquisition Start Event.
- GenicamFeature< int64_t > * EventAcquisitionEnd

    Returns the unique Identifier of the Acquisition End type of Event.
- GenicamFeature< int64_t > * EventAcquisitionEndTimestamp

    Returns the Timestamp of the Acquisition End Event.
- GenicamFeature< int64_t > * EventAcquisitionEndFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Acquisition End Event.
- GenicamFeature< int64_t > * EventAcquisitionTransferStart

    Returns the unique Identifier of the Acquisition Transfer Start type of Event.
- GenicamFeature< int64_t > * EventAcquisitionTransferStartTimestamp

    Returns the Timestamp of the Acquisition Transfer Start Event.
- GenicamFeature< int64_t > * EventAcquisitionTransferStartFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Acquisition Transfer Start Event.
- GenicamFeature< int64_t > * EventAcquisitionTransferEnd

    Returns the unique Identifier of the Acquisition Transfer End type of Event.
- GenicamFeature< int64_t > * EventAcquisitionTransferEndTimestamp

    Returns the Timestamp of the Acquisition Transfer End Event.

- GenicamFeature< int64_t > ∗ EventAcquisitionTransferEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Acquisition Transfer End Event.
- GenicamFeature< int64_t > ∗ EventAcquisitionError

  Returns the unique Identifier of the Acquisition Error type of Event.
- GenicamFeature< int64_t > ∗ EventAcquisitionErrorTimestamp

  Returns the Timestamp of the Acquisition Error Event.
- GenicamFeature< int64_t > ∗ EventAcquisitionErrorFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Acquisition Error Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstStart

  Returns the unique Identifier of the Frame Burst Start type of Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstStartTimestamp

  Returns the Timestamp of the Frame Burst Start Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Burst Start Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstEnd

  Returns the unique Identifier of the Frame Burst End type of Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstEndTimestamp

  Returns the Timestamp of the Frame Burst End Event.
- GenicamFeature< int64_t > ∗ EventFrameBurstEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Burst End Event.
- GenicamFeature< int64_t > ∗ EventFrameTrigger

  Returns the unique Identifier of the Frame Trigger type of Event.
- GenicamFeature< int64_t > ∗ EventFrameTriggerTimestamp

  Returns the Timestamp of the Frame Trigger Event.
- GenicamFeature< int64_t > ∗ EventFrameTriggerFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Trigger Event.
- GenicamFeature< int64_t > ∗ EventFrameTriggerMissed

  Returns the unique Identifier of the Frame Trigger Missed type of Event.
- GenicamFeature< int64_t > ∗ EventFrameTriggerMissedTimestamp

  Returns the Timestamp of the Frame Trigger Missed Event.
- GenicamFeature< int64_t > ∗ EventFrameTriggerMissedFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Trigger Missed Event.
- GenicamFeature< int64_t > ∗ EventFrameStart

  Returns the unique Identifier of the Frame Start type of Event.
- GenicamFeature< int64_t > ∗ EventFrameStartTimestamp

  Returns the Timestamp of the Frame Start Event.
- GenicamFeature< int64_t > ∗ EventFrameStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Start Event.
- GenicamFeature< int64_t > ∗ EventFrameEnd

  Returns the unique Identifier of the Frame End type of Event.
- GenicamFeature< int64_t > ∗ EventFrameEndTimestamp

  Returns the Timestamp of the Frame End Event.
- GenicamFeature< int64_t > ∗ EventFrameEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame End Event.
- GenicamFeature< int64_t > ∗ EventFrameTransferStart

  Returns the unique Identifier of the Frame Transfer Start type of Event.
- GenicamFeature< int64_t > ∗ EventFrameTransferStartTimestamp

  Returns the Timestamp of the Frame Transfer Start Event.
- GenicamFeature< int64_t > ∗ EventFrameTransferStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Transfer Start Event.
- GenicamFeature< int64_t > ∗ EventFrameTransferEnd

Returns the unique Identifier of the Frame Transfer End type of Event.

- GenicamFeature< int64_t > ∗ EventFrameTransferEndTimestamp

  Returns the Timestamp of the Frame Transfer End Event.
- GenicamFeature< int64_t > ∗ EventFrameTransferEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Frame Transfer End Event.
- GenicamFeature< int64_t > ∗ EventLineTrigger

  Returns the unique Identifier of the Line Trigger type of Event.
- GenicamFeature< int64_t > ∗ EventLineTriggerTimestamp

  Returns the Timestamp of the Line Trigger Event.
- GenicamFeature< int64_t > ∗ EventLineTriggerFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line Trigger Event.
- GenicamFeature< int64_t > ∗ EventLineTriggerMissed

  Returns the unique Identifier of the Line Trigger Missed type of Event.
- GenicamFeature< int64_t > ∗ EventLineTriggerMissedTimestamp

  Returns the Timestamp of the Line Trigger Missed Event.
- GenicamFeature< int64_t > ∗ EventLineTriggerMissedFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line Trigger Missed Event.
- GenicamFeature< int64_t > ∗ EventLineStart

  Returns the unique Identifier of the Line Start type of Event.
- GenicamFeature< int64_t > ∗ EventLineStartTimestamp

  Returns the Timestamp of the Line Start Event.
- GenicamFeature< int64_t > ∗ EventLineStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line Start Event.
- GenicamFeature< int64_t > ∗ EventLineEnd

  Returns the unique Identifier of the Line End type of Event.
- GenicamFeature< int64_t > ∗ EventLineEndTimestamp

  Returns the Timestamp of the Line End Event.
- GenicamFeature< int64_t > ∗ EventLineEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line End Event.
- GenicamFeature< int64_t > ∗ EventExposureStart

  Returns the unique Identifier of the Exposure Start type of Event.
- GenicamFeature< int64_t > ∗ EventExposureStartTimestamp

  Returns the Timestamp of the Exposure Start Event.
- GenicamFeature< int64_t > ∗ EventExposureStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Exposure Start Event.
- GenicamFeature< int64_t > ∗ EventExposureEnd

  Returns the unique Identifier of the Exposure End type of Event.
- GenicamFeature< int64_t > ∗ EventExposureEndTimestamp

  Returns the Timestamp of the Exposure End Event.
- GenicamFeature< int64_t > ∗ EventExposureEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Exposure End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferStart

  Returns the unique Identifier of the Stream 0 Transfer Start type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferStartTimestamp

  Returns the Timestamp of the Stream 0 Transfer Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferEnd

  Returns the unique Identifier of the Stream 0 Transfer End type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferEndTimestamp

  Returns the Timestamp of the Stream 0 Transfer End Event.

- GenicamFeature< int64_t > ∗ EventStream0TransferEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferPause

  Returns the unique Identifier of the Stream 0 Transfer Pause type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferPauseTimestamp

  Returns the Timestamp of the Stream 0 Transfer Pause Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferPauseFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Pause Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferResume

  Returns the unique Identifier of the Stream 0 Transfer Resume type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferResumeTimestamp

  Returns the Timestamp of the Stream 0 Transfer Resume Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferResumeFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Resume Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockStart

  Returns the unique Identifier of the Stream 0 Transfer Block Start type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockStartTimestamp

  Returns the Timestamp of the Stream 0 Transfer Block Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockEnd

  Returns the unique Identifier of the Stream 0 Transfer Block End type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockEndTimestamp

  Returns the Timestamp of the Stream 0 Transfer Block End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockTrigger

  Returns the unique Identifier of the Stream 0 Transfer Block Trigger type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockTriggerTimestamp

  Returns the Timestamp of the Stream 0 Transfer Block Trigger Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBlockTriggerFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block Trigger Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstStart

  Returns the unique Identifier of the Stream 0 Transfer Burst Start type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstStartTimestamp

  Returns the Timestamp of the Stream 0 Transfer Burst Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstStartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Burst Start Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstEnd

  Returns the unique Identifier of the Stream 0 Transfer Burst End type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstEndTimestamp

  Returns the Timestamp of the Stream 0 Transfer Burst End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferBurstEndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Burst End Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferOverflow

  Returns the unique Identifier of the Stream 0 Transfer Overflow type of Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferOverflowTimestamp

  Returns the Timestamp of the Stream 0 Transfer Overflow Event.
- GenicamFeature< int64_t > ∗ EventStream0TransferOverflowFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Overflow Event.
- GenicamFeature< int64_t > ∗ EventSequencerSetChange

Returns the unique Identifier of the Sequencer Set Change type of Event.
- GenicamFeature< int64_t > ∗ EventSequencerSetChangeTimestamp

  Returns the Timestamp of the Sequencer Set Change Event.
- GenicamFeature< int64_t > ∗ EventSequencerSetChangeFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Sequencer Set Change Event.
- GenicamFeature< int64_t > ∗ EventCounter0Start

  Returns the unique Identifier of the Counter 0 Start type of Event.
- GenicamFeature< int64_t > ∗ EventCounter0StartTimestamp

  Returns the Timestamp of the Counter 0 Start Event.
- GenicamFeature< int64_t > ∗ EventCounter0StartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Counter 0 Start Event.
- GenicamFeature< int64_t > ∗ EventCounter1Start

  Returns the unique Identifier of the Counter 1 Start type of Event.
- GenicamFeature< int64_t > ∗ EventCounter1StartTimestamp

  Returns the Timestamp of the Counter 1 Start Event.
- GenicamFeature< int64_t > ∗ EventCounter1StartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Counter 1 Start Event.
- GenicamFeature< int64_t > ∗ EventCounter0End

  Returns the unique Identifier of the Counter 0 End type of Event.
- GenicamFeature< int64_t > ∗ EventCounter0EndTimestamp

  Returns the Timestamp of the Counter 0 End Event.
- GenicamFeature< int64_t > ∗ EventCounter0EndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Counter 0 End Event.
- GenicamFeature< int64_t > ∗ EventCounter1End

  Returns the unique Identifier of the Counter 1 End type of Event.
- GenicamFeature< int64_t > ∗ EventCounter1EndTimestamp

  Returns the Timestamp of the Counter 1 End Event.
- GenicamFeature< int64_t > ∗ EventCounter1EndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Counter 1 End Event.
- GenicamFeature< int64_t > ∗ EventTimer0Start

  Returns the unique Identifier of the Timer 0 Start type of Event.
- GenicamFeature< int64_t > ∗ EventTimer0StartTimestamp

  Returns the Timestamp of the Timer 0 Start Event.
- GenicamFeature< int64_t > ∗ EventTimer0StartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Timer 0 Start Event.
- GenicamFeature< int64_t > ∗ EventTimer1Start

  Returns the unique Identifier of the Timer 1 Start type of Event.
- GenicamFeature< int64_t > ∗ EventTimer1StartTimestamp

  Returns the Timestamp of the Timer 1 Start Event.
- GenicamFeature< int64_t > ∗ EventTimer1StartFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Timer 1 Start Event.
- GenicamFeature< int64_t > ∗ EventTimer0End

  Returns the unique Identifier of the Timer 0 End type of Event.
- GenicamFeature< int64_t > ∗ EventTimer0EndTimestamp

  Returns the Timestamp of the Timer 0 End Event.
- GenicamFeature< int64_t > ∗ EventTimer0EndFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Timer 0 End Event.
- GenicamFeature< int64_t > ∗ EventTimer1End

  Returns the unique Identifier of the Timer 1 End type of Event.
- GenicamFeature< int64_t > ∗ EventTimer1EndTimestamp

  Returns the Timestamp of the Timer 1 End Event.

- GenicamFeature< int64_t > ∗ EventTimer1EndFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Timer 1 End Event.
- GenicamFeature< int64_t > ∗ EventEncoder0Stopped

    Returns the unique Identifier of the Encoder 0 Stopped type of Event.
- GenicamFeature< int64_t > ∗ EventEncoder0StoppedTimestamp

    Returns the Timestamp of the Encoder 0 Stopped Event.
- GenicamFeature< int64_t > ∗ EventEncoder0StoppedFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Encoder 0 Stopped Event.
- GenicamFeature< int64_t > ∗ EventEncoder1Stopped

    Returns the unique Identifier of the Encoder 1 Stopped type of Event.
- GenicamFeature< int64_t > ∗ EventEncoder1StoppedTimestamp

    Returns the Timestamp of the Encoder 1 Stopped Event.
- GenicamFeature< int64_t > ∗ EventEncoder1StoppedFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Encoder 1 Stopped Event.
- GenicamFeature< int64_t > ∗ EventEncoder0Restarted

    Returns the unique Identifier of the Encoder 0 Restarted type of Event.
- GenicamFeature< int64_t > ∗ EventEncoder0RestartedTimestamp

    Returns the Timestamp of the Encoder 0 Restarted Event.
- GenicamFeature< int64_t > ∗ EventEncoder0RestartedFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Encoder 0 Restarted Event.
- GenicamFeature< int64_t > ∗ EventEncoder1Restarted

    Returns the unique Identifier of the Encoder 1 Restarted type of Event.
- GenicamFeature< int64_t > ∗ EventEncoder1RestartedTimestamp

    Returns the Timestamp of the Encoder 1 Restarted Event.
- GenicamFeature< int64_t > ∗ EventEncoder1RestartedFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Encoder 1 Restarted Event.
- GenicamFeature< int64_t > ∗ EventLine0RisingEdge

    Returns the unique Identifier of the Line 0 Rising Edge type of Event.
- GenicamFeature< int64_t > ∗ EventLine0RisingEdgeTimestamp

    Returns the Timestamp of the Line 0 Rising Edge Event.
- GenicamFeature< int64_t > ∗ EventLine0RisingEdgeFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Line 0 Rising Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1RisingEdge

    Returns the unique Identifier of the Line 1 Rising Edge type of Event.
- GenicamFeature< int64_t > ∗ EventLine1RisingEdgeTimestamp

    Returns the Timestamp of the Line 1 Rising Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1RisingEdgeFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Line 1 Rising Edge Event.
- GenicamFeature< int64_t > ∗ EventLine0FallingEdge

    Returns the unique Identifier of the Line 0 Falling Edge type of Event.
- GenicamFeature< int64_t > ∗ EventLine0FallingEdgeTimestamp

    Returns the Timestamp of the Line 0 Falling Edge Event.
- GenicamFeature< int64_t > ∗ EventLine0FallingEdgeFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Line 0 Falling Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1FallingEdge

    Returns the unique Identifier of the Line 1 Falling Edge type of Event.
- GenicamFeature< int64_t > ∗ EventLine1FallingEdgeTimestamp

    Returns the Timestamp of the Line 1 Falling Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1FallingEdgeFrameID

    Returns the unique Identifier of the Frame (or image) that generated the Line 1 Falling Edge Event.
- GenicamFeature< int64_t > ∗ EventLine0AnyEdge

Returns the unique Identifier of the Line 0 Any Edge type of Event.

- GenicamFeature< int64_t > ∗ EventLine0AnyEdgeTimestamp

  Returns the Timestamp of the Line 0 Any Edge Event.
- GenicamFeature< int64_t > ∗ EventLine0AnyEdgeFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line 0 Any Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1AnyEdge

  Returns the unique Identifier of the Line 1 Any Edge type of Event.
- GenicamFeature< int64_t > ∗ EventLine1AnyEdgeTimestamp

  Returns the Timestamp of the Line 1 Any Edge Event.
- GenicamFeature< int64_t > ∗ EventLine1AnyEdgeFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Line 1 Any Edge Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger0

  Returns the unique Identifier of the Link Trigger 0 type of Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger0Timestamp

  Returns the Timestamp of the Link Trigger 0 Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger0FrameID

  Returns the unique Identifier of the Frame (or image) that generated the Link Trigger 0 Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger1

  Returns the unique Identifier of the Link Trigger 1 type of Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger1Timestamp

  Returns the Timestamp of the Link Trigger 1 Event.
- GenicamFeature< int64_t > ∗ EventLinkTrigger1FrameID

  Returns the unique Identifier of the Frame (or image) that generated the Link Trigger 1 Event.
- GenicamFeature< int64_t > ∗ EventLinkSpeedChange

  Returns the unique Identifier of the Link Speed Change type of Event.
- GenicamFeature< int64_t > ∗ EventLinkSpeedChangeTimestamp

  Returns the Timestamp of the Link Speed Change Event.
- GenicamFeature< int64_t > ∗ EventLinkSpeedChangeFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Link Speed Change Event.
- GenicamFeature< int64_t > ∗ EventActionLate

  Returns the unique Identifier of the Action Late type of Event.
- GenicamFeature< int64_t > ∗ EventActionLateTimestamp

  Returns the Timestamp of the Action Late Event.
- GenicamFeature< int64_t > ∗ EventActionLateFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Action Late Event.
- GenicamFeature< int64_t > ∗ EventPrimaryApplicationSwitch

  Returns the unique Identifier of the Primary Application Switch type of Event.
- GenicamFeature< int64_t > ∗ EventPrimaryApplicationSwitchTimestamp

  Returns the Timestamp of the Primary Application Switch Event.
- GenicamFeature< int64_t > ∗ EventPrimaryApplicationSwitchFrameID

  Returns the unique Identifier of the Frame (or image) that generated the Primary Application Switch Event.
- GenicamFeature< int64_t > ∗ EventError

  Returns the unique identifier of the Error type of Event. It can be used to register a callback function to be notified of the Error event occurrence. Its value uniquely identifies that the event received was an Error.
- GenicamFeature< int64_t > ∗ EventErrorTimestamp

  Returns the Timestamp of the Error Event. It can be used to determine when the event occurred.
- GenicamFeature< int64_t > ∗ EventErrorFrameID

  If applicable, returns the unique Identifier of the Frame (or image) that generated the Error Event.
- GenicamFeature< int64_t > ∗ EventErrorCode

  Returns an error code for the error(s) that happened.
- GenicamFeature< int64_t > ∗ EventTest

Returns the unique identifier of the Event Test type of event generated using the TestEventGenerate command. It can be used to register a callback function to be notified of the EventTest event occurrence. Its value uniquely identifies that the event received was an Event Test.

- GenicamFeature< int64_t > ∗ EventTestTimestamp

  Returns the Timestamp of the Event Test event. It can be used to determine when the event occurred.
- GenicamFeature< FliSfncCameraEnum::UserSetSelectorEnum > ∗ UserSetSelector

  Selects the feature User Set to load, save or configure.
- GenicamFeature ∗ UserSetLoad

  Loads the User Set specified by UserSetSelector to the device and makes it active.
- GenicamFeature ∗ UserSetSave

  Save the User Set specified by UserSetSelector to the non-volatile memory of the device.
- GenicamFeature< FliSfncCameraEnum::UserSetDefaultEnum > ∗ UserSetDefault

  Selects the feature User Set to load and make active by default when the device is reset.
- GenicamFeature< FliSfncCameraEnum::UserSetFeatureSelectorEnum > ∗ UserSetFeatureSelector

  Selects which individual UserSet feature to control.
- GenicamFeature< bool > ∗ UserSetFeatureEnable

  Enables the selected feature and make it active in all the UserSets.
- GenicamFeature< FliSfncCameraEnum::SequencerModeEnum > ∗ SequencerMode

  Controls if the sequencer mechanism is active.
- GenicamFeature< FliSfncCameraEnum::SequencerConfigurationModeEnum > ∗ SequencerConfigurationMode

  Controls if the sequencer configuration mode is active.
- GenicamFeature< FliSfncCameraEnum::SequencerFeatureSelectorEnum > ∗ SequencerFeatureSelector

  Selects which sequencer features to control.
- GenicamFeature< bool > ∗ SequencerFeatureEnable

  Enables the selected feature and make it active in all the sequencer sets.
- GenicamFeature< int64_t > ∗ SequencerSetSelector

  Selects the sequencer set to which further feature settings applies.
- GenicamFeature ∗ SequencerSetSave

  Saves the current device state to the sequencer set selected by the SequencerSetSelector.
- GenicamFeature ∗ SequencerSetLoad

  Loads the sequencer set selected by SequencerSetSelector in the device. Even if SequencerMode is off, this will change the device state to the configuration of the selected set.
- GenicamFeature< int64_t > ∗ SequencerSetActive

  Contains the currently active sequencer set.
- GenicamFeature< int64_t > ∗ SequencerSetStart

  Sets the initial/start sequencer set, which is the first set used within a sequencer.
- GenicamFeature< int64_t > ∗ SequencerPathSelector

  Selects to which branching path further path settings applies.
- GenicamFeature< int64_t > ∗ SequencerSetNext

  Specifies the next sequencer set.
- GenicamFeature< FliSfncCameraEnum::SequencerTriggerSourceEnum > ∗ SequencerTriggerSource

  Specifies the internal signal or physical input line to use as the sequencer trigger source.
- GenicamFeature< FliSfncCameraEnum::SequencerTriggerActivationEnum > ∗ SequencerTriggerActivation

  Specifies the activation mode of the sequencer trigger.
- GenicamFeature< FliSfncCameraEnum::FileSelectorEnum > ∗ FileSelector

  Selects the target file in the device.
- GenicamFeature< FliSfncCameraEnum::FileOperationSelectorEnum > ∗ FileOperationSelector

  Selects the target operation for the selected file in the device. This Operation is executed when the FileOperation↩ Execute feature is called.
- GenicamFeature ∗ FileOperationExecute

  Executes the operation selected by FileOperationSelector on the selected file.

- GenicamFeature< FliSfncCameraEnum::FileOpenModeEnum > ∗ FileOpenMode

    Selects the access mode in which a file is opened in the device.
- GenicamFeature< int64_t > ∗ FileAccessOffset

    Controls the Offset of the mapping between the device file storage and the FileAccessBuffer.
- GenicamFeature< int64_t > ∗ FileAccessLength

    Controls the Length of the mapping between the device file storage and the FileAccessBuffer.
- GenicamFeature< FliSfncCameraEnum::FileOperationStatusEnum > ∗ FileOperationStatus

    Represents the file operation execution status.
- GenicamFeature< int64_t > ∗ FileOperationResult

    Represents the file operation result. For Read or Write operations, the number of successfully read/written bytes is returned.
- GenicamFeature< int64_t > ∗ FileSize

    Represents the size of the selected file in bytes.
- GenicamFeature< int64_t > ∗ SourceCount

    Controls or returns the number of sources supported by the device.
- GenicamFeature< FliSfncCameraEnum::SourceSelectorEnum > ∗ SourceSelector

    Selects the source to control.
- GenicamFeature< int64_t > ∗ SourceIDValue

    Returns a unique Identifier value that correspond to the selected Source.
- GenicamFeature< FliSfncCameraEnum::TransferSelectorEnum > ∗ TransferSelector

    Selects which stream transfers are currently controlled by the selected Transfer features.
- GenicamFeature< FliSfncCameraEnum::TransferControlModeEnum > ∗ TransferControlMode

    Selects the control method for the transfers.
- GenicamFeature< FliSfncCameraEnum::TransferOperationModeEnum > ∗ TransferOperationMode

    Selects the operation mode of the transfer.
- GenicamFeature< int64_t > ∗ TransferBlockCount

    Specifies the number of data Blocks that the device should stream before stopping. This feature is only active if the TransferOperationMode is set to MultiBlock.
- GenicamFeature< int64_t > ∗ TransferBurstCount

    Number of Block(s) to transfer for each TransferBurstStart trigger.
- GenicamFeature< int64_t > ∗ TransferQueueMaxBlockCount

    Controls the maximum number of data blocks that can be stored in the block queue of the selected stream.
- GenicamFeature< int64_t > ∗ TransferQueueCurrentBlockCount

    Returns the number of Block(s) currently in the transfer queue.
- GenicamFeature< FliSfncCameraEnum::TransferQueueModeEnum > ∗ TransferQueueMode

    Specifies the operation mode of the transfer queue.
- GenicamFeature ∗ TransferStart

    Starts the streaming of data blocks out of the device. This feature must be available when the TransferControlMode is set to "UserControlled". If the TransferStart feature is not writable (locked), the application should not start the transfer and should avoid using the feature until it becomes writable again.
- GenicamFeature ∗ TransferStop

    Stops the streaming of data Block(s). The current block transmission will be completed. This feature must be available when the TransferControlMode is set to "UserControlled".
- GenicamFeature ∗ TransferAbort

    Aborts immediately the streaming of data block(s). Aborting the transfer will result in the lost of the data that is present or currently entering in the block queue. However, the next new block received will be stored in the queue and transferred to the host when the streaming is restarted. If implemented, this feature should be available when the TransferControlMode is set to "UserControlled".
- GenicamFeature ∗ TransferPause

    Pauses the streaming of data Block(s). Pausing the streaming will immediately suspend the ongoing data transfer even if a block is partially transfered. The device will resume its transmission at the reception of a TransferResume command.
- GenicamFeature ∗ TransferResume

Resumes a data Blocks streaming that was previously paused by a TransferPause command.
- GenicamFeature< FliSfncCameraEnum::TransferTriggerSelectorEnum > ∗ TransferTriggerSelector

  Selects the type of transfer trigger to configure.
- GenicamFeature< FliSfncCameraEnum::TransferTriggerModeEnum > ∗ TransferTriggerMode

  Controls if the selected trigger is active.
- GenicamFeature< FliSfncCameraEnum::TransferTriggerSourceEnum > ∗ TransferTriggerSource

  Specifies the signal to use as the trigger source for transfers.
- GenicamFeature< FliSfncCameraEnum::TransferTriggerActivationEnum > ∗ TransferTriggerActivation

  Specifies the activation mode of the transfer control trigger.
- GenicamFeature< FliSfncCameraEnum::TransferStatusSelectorEnum > ∗ TransferStatusSelector

  Selects which status of the transfer module to read.
- GenicamFeature< bool > ∗ TransferStatus

  Reads the status of the Transfer module signal selected by TransferStatusSelector.
- GenicamFeature< FliSfncCameraEnum::TransferComponentSelectorEnum > ∗ TransferComponentSelector

  Selects the color component for the control of the TransferStreamChannel feature.
- GenicamFeature< int64_t > ∗ TransferStreamChannel

  Selects the streaming channel that will be used to transfer the selected stream of data. In general, this feature can be omitted and the default streaming channel will be used.
- GenicamFeature< FliSfncCameraEnum::Scan3dExtractionSelectorEnum > ∗ Scan3dExtractionSelector

  Selects the 3DExtraction processing module to control (if multiple ones are present).
- GenicamFeature< FliSfncCameraEnum::Scan3dExtractionSourceEnum > ∗ Scan3dExtractionSource

  Selects the sensor's data source region for 3D Extraction module.
- GenicamFeature< FliSfncCameraEnum::Scan3dExtractionMethodEnum > ∗ Scan3dExtractionMethod

  Selects the method for extracting 3D from the input sensor data.
- GenicamFeature< FliSfncCameraEnum::Scan3dDistanceUnitEnum > ∗ Scan3dDistanceUnit

  Specifies the unit used when delivering (calibrated) distance data.
- GenicamFeature< FliSfncCameraEnum::Scan3dCoordinateSystemEnum > ∗ Scan3dCoordinateSystem

  Specifies the Coordinate system to use for the device.
- GenicamFeature< FliSfncCameraEnum::Scan3dOutputModeEnum > ∗ Scan3dOutputMode

  Controls the Calibration and data organization of the device and the coordinates transmitted.
- GenicamFeature< FliSfncCameraEnum::Scan3dCoordinateSystemReferenceEnum > ∗ Scan3dCoordinateSystemReference

  Defines coordinate system reference location.
- GenicamFeature< FliSfncCameraEnum::Scan3dCoordinateSelectorEnum > ∗ Scan3dCoordinateSelector

  Selects the individual coordinates in the vectors for 3D information/transformation.
- GenicamFeature< double > ∗ Scan3dCoordinateScale

  Scale factor when transforming a pixel from relative coordinates to world coordinates.
- GenicamFeature< double > ∗ Scan3dCoordinateOffset

  Offset when transforming a pixel from relative coordinates to world coordinates.
- GenicamFeature< bool > ∗ Scan3dInvalidDataFlag

  Enables the definition of a non-valid flag value in the data stream. Note that the confidence output is an alternate recommended way to identify non-valid pixels. Using a Scan3dInvalidDataValue may give processing penalties due to special handling.
- GenicamFeature< double > ∗ Scan3dInvalidDataValue

  Value which identifies a non-valid pixel if Scan3dInvalidDataFlag is enabled.
- GenicamFeature< double > ∗ Scan3dAxisMin

  Minimum valid transmitted coordinate value of the selected Axis.
- GenicamFeature< double > ∗ Scan3dAxisMax

  Maximum valid transmitted coordinate value of the selected Axis.
- GenicamFeature< FliSfncCameraEnum::Scan3dCoordinateTransformSelectorEnum > ∗ Scan3dCoordinateTransformSelector

  Sets the index to read/write a coordinate transform value.
- GenicamFeature< double > ∗ Scan3dTransformValue

Specifies the transform value selected. For translations (Scan3dCoordinateTransformSelector = TranslationX/Y/Z) it is expressed in the distance unit of the system, for rotations (Scan3dCoordinateTransformSelector =RotationX/Y/Z) in degrees.

- GenicamFeature< FliSfncCameraEnum::Scan3dCoordinateReferenceSelectorEnum > ∗ Scan3dCoordinateReferenceSelecto

  Sets the index to read a coordinate system reference value defining the transform of a point from the current (Anchor or Transformed) system to the reference system.
- GenicamFeature< double > ∗ Scan3dCoordinateReferenceValue

  Returns the reference value selected. Reads the value of a rotation or translation value for the current (Anchor or Transformed) coordinate system transformation to the Reference system.
- GenicamFeature< double > ∗ Scan3dFocalLength

  Returns the focal length of the camera in pixel. The focal length depends on the selected region. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.
- GenicamFeature< double > ∗ Scan3dBaseline

  Returns the baseline as the physical distance of two cameras in a stereo camera setup. The value of this feature can be used for 3D reconstruction from disparity images. In this case, the unit of the 3D coordinates corresponds to the unit of the baseline.
- GenicamFeature< double > ∗ Scan3dPrincipalPointU

  Returns the value of the horizontal position of the principal point, relative to the region origin, i.e. OffsetX. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.
- GenicamFeature< double > ∗ Scan3dPrincipalPointV

  Returns the value of the vertical position of the principal point, relative to the region origin, i.e. OffsetY. The value of this feature takes into account vertical binning, decimation, or any other function changing the image resolution.
- GenicamFeature< FliSfncCameraEnum::LightControllerSelectorEnum > ∗ LightControllerSelector

  Selects the Light Controller to configure.
- GenicamFeature< FliSfncCameraEnum::LightControllerSourceEnum > ∗ LightControllerSource

  Selects the input source signal of the Light Controller.
- GenicamFeature< double > ∗ LightCurrentRating

  Set the current rating of the lighting output.
- GenicamFeature< double > ∗ LightVoltageRating

  Set the voltage rating of the lighting output.
- GenicamFeature< double > ∗ LightBrightness

  Set the brightness of the lighting output in percent. Can be greater than 100% for short overdrive period.
- GenicamFeature< FliSfncCameraEnum::LightConnectionStatusEnum > ∗ LightConnectionStatus

  Status of a light connected to the controller's output Line.
- GenicamFeature< double > ∗ LightCurrentMeasured

  The measured current applied to the lighting.
- GenicamFeature< double > ∗ LightVoltageMeasured

  The measured voltage applied to the lighting.
- GenicamFeature< bool > ∗ ChunkModeActive

  Activates the inclusion of Chunk data in the transmitted payload.
- GenicamFeature< bool > ∗ ChunkXMLEnable

  Activates the inclusion of the GenICam XML necessary to the chunk parser to decode all the Chunk data included in the transmitted payload.
- GenicamFeature< FliSfncCameraEnum::ChunkSelectorEnum > ∗ ChunkSelector

  Selects which Chunk to enable or control.
- GenicamFeature< bool > ∗ ChunkEnable

  Enables the inclusion of the selected Chunk data in the payload of the image.
- GenicamFeature< FliSfncCameraEnum::ChunkRegionSelectorEnum > ∗ ChunkRegionSelector

  Selects which Region to retrieve data from.
- GenicamFeature< FliSfncCameraEnum::ChunkRegionIDEnum > ∗ ChunkRegionID

  Returns the Identifier of Region that the image comes from.
- GenicamFeature< int64_t > ∗ ChunkRegionIDValue

  Returns the unique integer Identifier value of the Region that the image comes from.

- GenicamFeature< FliSfncCameraEnum::ChunkComponentSelectorEnum > ∗ ChunkComponentSelector

  Selects the Component from which to retrieve data from.
- GenicamFeature< FliSfncCameraEnum::ChunkComponentIDEnum > ∗ ChunkComponentID

  Returns the Identifier of the selected Component. This can be used to identify the image component type of a multi-component payload.
- GenicamFeature< int64_t > ∗ ChunkComponentIDValue

  Returns a unique Identifier value that corresponds to the selected chunk Component.
- GenicamFeature< FliSfncCameraEnum::ChunkGroupSelectorEnum > ∗ ChunkGroupSelector

  Selects the component Group from which to retrieve data from.
- GenicamFeature< FliSfncCameraEnum::ChunkGroupIDEnum > ∗ ChunkGroupID

  Returns a unique Identifier corresponding to the selected Group of components. This can be used to identify the component Group of a multi-group payload.
- GenicamFeature< int64_t > ∗ ChunkGroupIDValue

  Returns a unique Identifier value that corresponds to the Group of Components of the selected chunk Component.
- GenicamFeature< int64_t > ∗ ChunkOffsetX

  Returns the OffsetX of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkOffsetY

  Returns the OffsetY of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkWidth

  Returns the Width of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkHeight

  Returns the Height of the image included in the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkPixelFormatEnum > ∗ ChunkPixelFormat

  Returns the PixelFormat of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkPixelDynamicRangeMin

  Returns the minimum value of dynamic range of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkPixelDynamicRangeMax

  Returns the maximum value of dynamic range of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkBinningHorizontal

  Number of horizontal photo-sensitive cells combined together.
- GenicamFeature< int64_t > ∗ ChunkBinningVertical

  Number of vertical photo-sensitive cells combined together.
- GenicamFeature< int64_t > ∗ ChunkDecimationHorizontal

  Horizontal sub-sampling of the image.
- GenicamFeature< int64_t > ∗ ChunkDecimationVertical

  Vertical sub-sampling of the image.
- GenicamFeature< bool > ∗ ChunkReverseX

  Flip horizontal of the image sent by the device.
- GenicamFeature< bool > ∗ ChunkReverseY

  Flip vertically of the image sent by the device.
- GenicamFeature< int64_t > ∗ ChunkTimestamp

  Returns the Timestamp of the image included in the payload at the time of the FrameStart internal event.
- GenicamFeature< int64_t > ∗ ChunkTimestampLatchValue

  Returns the last Timestamp latched with the TimestampLatch command.
- GenicamFeature< int64_t > ∗ ChunkLineStatusAll

  Returns the status of all the I/O lines at the time of the FrameStart internal event.
- GenicamFeature< FliSfncCameraEnum::ChunkCounterSelectorEnum > ∗ ChunkCounterSelector

  Selects which counter to retrieve data from.
- GenicamFeature< int64_t > ∗ ChunkCounterValue

  Returns the value of the selected Chunk counter at the time of the FrameStart event.
- GenicamFeature< FliSfncCameraEnum::ChunkTimerSelectorEnum > ∗ ChunkTimerSelector

Selects which Timer to retrieve data from.
- GenicamFeature< double > ∗ ChunkTimerValue

  Returns the value of the selected Timer at the time of the FrameStart internal event.
- GenicamFeature< int64_t > ∗ ChunkScanLineSelector

  Index for vector representation of one chunk value per line in an image.
- GenicamFeature< FliSfncCameraEnum::ChunkEncoderSelectorEnum > ∗ ChunkEncoderSelector

  Selects which Encoder to retrieve data from.
- GenicamFeature< int64_t > ∗ ChunkEncoderValue

  Returns the counter's value of the selected Encoder at the time of the FrameStart in area scan mode or the counter's value at the time of the LineStart selected by ChunkScanLineSelector in Linescan mode.
- GenicamFeature< FliSfncCameraEnum::ChunkEncoderStatusEnum > ∗ ChunkEncoderStatus

  Returns the motion status of the selected encoder.
- GenicamFeature< FliSfncCameraEnum::ChunkExposureTimeSelectorEnum > ∗ ChunkExposureTimeSelector

  Selects which exposure time is read by the ChunkExposureTime feature.
- GenicamFeature< double > ∗ ChunkExposureTime

  Returns the exposure time used to capture the image.
- GenicamFeature< FliSfncCameraEnum::ChunkGainSelectorEnum > ∗ ChunkGainSelector

  Selects which Gain to return.
- GenicamFeature< double > ∗ ChunkGain

  Returns the gain used to capture the image.
- GenicamFeature< FliSfncCameraEnum::ChunkBlackLevelSelectorEnum > ∗ ChunkBlackLevelSelector

  Selects which Black Level to return. Possible values are:
- GenicamFeature< double > ∗ ChunkBlackLevel

  Returns the black level used to capture the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkLinePitch

  Returns the LinePitch of the image included in the payload.
- GenicamFeature< int64_t > ∗ ChunkFrameID

  Returns the unique Identifier of the frame (or image) included in the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkSourceSelectorEnum > ∗ ChunkSourceSelector

  Selects which Source to retrieve data from.
- GenicamFeature< FliSfncCameraEnum::ChunkSourceIDEnum > ∗ ChunkSourceID

  Returns the Identifier of Source that the image comes from.
- GenicamFeature< int64_t > ∗ ChunkSourceIDValue

  Returns the unique integer Identifier value of the Source that the image comes from.
- GenicamFeature< int64_t > ∗ ChunkTransferBlockID

  Returns the unique identifier of the transfer block used to transport the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkTransferStreamIDEnum > ∗ ChunkTransferStreamID

  Returns identifier of the stream that generated this block.
- GenicamFeature< int64_t > ∗ ChunkTransferQueueCurrentBlockCount

  Returns the current number of blocks in the transfer queue.
- GenicamFeature< int64_t > ∗ ChunkStreamChannelID

  Returns identifier of the stream channel used to carry the block.
- GenicamFeature< int64_t > ∗ ChunkSequencerSetActive

  Return the index of the active set of the running sequencer included in the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dDistanceUnitEnum > ∗ ChunkScan3dDistanceUnit

  Returns the Distance Unit of the payload image.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dOutputModeEnum > ∗ ChunkScan3dOutputMode

  Returns the Calibrated Mode of the payload image.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dCoordinateSystemEnum > ∗ ChunkScan3dCoordinateSystem

  Returns the Coordinate System of the image included in the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dCoordinateSystemReferenceEnum > ∗ ChunkScan3dCoordinateSyste

Returns the Coordinate System Position of the image included in the payload.

- GenicamFeature< FliSfncCameraEnum::ChunkScan3dCoordinateSelectorEnum > ∗ ChunkScan3dCoordinateSelector

  Selects which Coordinate to retrieve data from.
- GenicamFeature< double > ∗ ChunkScan3dCoordinateScale

  Returns the Scale for the selected coordinate axis of the image included in the payload.
- GenicamFeature< double > ∗ ChunkScan3dCoordinateOffset

  Returns the Offset for the selected coordinate axis of the image included in the payload.
- GenicamFeature< bool > ∗ ChunkScan3dInvalidDataFlag

  Returns if a specific non-valid data flag is used in the data stream.
- GenicamFeature< double > ∗ ChunkScan3dInvalidDataValue

  Returns the Invalid Data Value used for the image included in the payload.
- GenicamFeature< double > ∗ ChunkScan3dAxisMin

  Returns the Minimum Axis value for the selected coordinate axis of the image included in the payload.
- GenicamFeature< double > ∗ ChunkScan3dAxisMax

  Returns the Maximum Axis value for the selected coordinate axis of the image included in the payload.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dCoordinateTransformSelectorEnum > ∗ ChunkScan3dCoordinateTrans

  Selector for transform values.
- GenicamFeature< double > ∗ ChunkScan3dTransformValue

  Returns the transform value.
- GenicamFeature< FliSfncCameraEnum::ChunkScan3dCoordinateReferenceSelectorEnum > ∗ ChunkScan3dCoordinateRefer

  Selector to read a coordinate system reference value defining the transform of a point from one system to the other.
- GenicamFeature< double > ∗ ChunkScan3dCoordinateReferenceValue

  Returns the value of a position or pose coordinate for the anchor or transformed coordinate systems relative to the reference point.
- GenicamFeature< double > ∗ ChunkScan3dFocalLength

  Returns the focal length of the camera in pixel. The focal length depends on the selected region. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.
- GenicamFeature< double > ∗ ChunkScan3dBaseline

  Returns the baseline as the physical distance of two cameras in a stereo camera setup. The value of this feature can be used for 3D reconstruction from disparity images. In this case, the unit of the 3D coordinates corresponds to the unit of the baseline.
- GenicamFeature< double > ∗ ChunkScan3dPrincipalPointU

  Returns the value of this feature gives the horizontal position of the principal point, relative to the region origin, i.e. OffsetX. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.
- GenicamFeature< double > ∗ ChunkScan3dPrincipalPointV

  Returns the value of this feature gives the vertical position of the principal point, relative to the region origin, i.e. OffsetY. The value of this feature takes into account vertical binning, decimation, or any other function changing the image resolution.
- GenicamFeature< int64_t > ∗ TestPendingAck

  Tests the device's pending acknowledge feature. When this feature is written, the device waits a time period corresponding to the value of TestPendingAck before acknowledging the write.
- GenicamFeature ∗ TestEventGenerate

  Generates a Test Event.
- GenicamFeature< FliSfncCameraEnum::TestPayloadFormatModeEnum > ∗ TestPayloadFormatMode

  This feature allows setting a device in test mode and to output a specific payload format for validation of data streaming. This feature is intended solely for test purposes. The data can be real acquired data or any test pattern.
- GenicamFeature< int64_t > ∗ TLParamsLocked

  Used by the Transport Layer to prevent critical features from changing during acquisition.
- GenicamFeature< FliSfncCameraEnum::TLParamsLockedSelectorEnum > ∗ TLParamsLockedSelector

  Selects the type of feature for which the locking behavior will be configured.
- GenicamFeature< bool > ∗ TLParamsLockedState

  Controls if the selected parameters are locked during acquisition.

- GenicamFeature< int64_t > ∗ PayloadSize

  Provides the number of bytes transferred for each data buffer or chunk on the stream channel. This includes any end-of-line, end-of-frame statistics or other stamp data. This is the total size of data payload for a data block.
- GenicamFeature< FliSfncCameraEnum::GenDCStreamingModeEnum > ∗ GenDCStreamingMode

  Controls the device's streaming format.
- GenicamFeature< FliSfncCameraEnum::GenDCStreamingStatusEnum > ∗ GenDCStreamingStatus

  Returns whether the current device data streaming format is GenDC. This value is conditioned by the GenDC←↩ StreamingMode.
- GenicamFeature< FliSfncCameraEnum::DeviceTapGeometryEnum > ∗ DeviceTapGeometry

  This device tap geometry feature describes the geometrical properties characterizing the taps of a camera as presented at the output of the device.
- GenicamFeature< bool > ∗ PtpEnable

  Enables the Precision Time Protocol (PTP).
- GenicamFeature< FliSfncCameraEnum::PtpClockAccuracyEnum > ∗ PtpClockAccuracy

  Indicates the expected accuracy of the device PTP clock when it is the grandmaster, or in the event it becomes the grandmaster.
- GenicamFeature ∗ PtpDataSetLatch

  Latches the current values from the device's PTP clock data set.
- GenicamFeature< FliSfncCameraEnum::PtpStatusEnum > ∗ PtpStatus

  Returns the latched state of the PTP clock.
- GenicamFeature< FliSfncCameraEnum::PtpServoStatusEnum > ∗ PtpServoStatus

  Returns the latched state of the clock servo. When the servo is in a locked state, the value returned is 'Locked'. When the servo is in a non-locked state, a device-specific value can be returned to give specific information. If no device-specific value is available to describe the current state of the clock servo, the value should be 'Unknown'.
- GenicamFeature< int64_t > ∗ PtpOffsetFromMaster

  Returns the latched offset from the PTP master clock in nanoseconds.
- GenicamFeature< int64_t > ∗ PtpClockID

  Returns the latched clock ID of the PTP device.
- GenicamFeature< int64_t > ∗ PtpParentClockID

  Returns the latched parent clock ID of the PTP device. The parent clock ID is the clock ID of the current master clock.
- GenicamFeature< int64_t > ∗ PtpGrandmasterClockID

  Returns the latched grandmaster clock ID of the PTP device. The grandmaster clock ID is the clock ID of the current grandmaster clock.
- GenicamFeature< FliSfncCameraEnum::GevPhysicalLinkConfigurationEnum > ∗ GevPhysicalLinkConfiguration

  Controls the principal physical link configuration to use on next restart/power-up of the device.
- GenicamFeature< FliSfncCameraEnum::GevCurrentPhysicalLinkConfigurationEnum > ∗ GevCurrentPhysicalLinkConfiguratio

  Indicates the current physical link configuration of the device.
- GenicamFeature< int64_t > ∗ GevActiveLinkCount

  Indicates the current number of active logical links.
- GenicamFeature< FliSfncCameraEnum::GevSupportedOptionSelectorEnum > ∗ GevSupportedOptionSelector

  Selects the GEV option to interrogate for existing support.
- GenicamFeature< bool > ∗ GevSupportedOption

  Returns if the selected GEV option is supported.
- GenicamFeature< int64_t > ∗ GevInterfaceSelector

  Selects which logical link to control.
- GenicamFeature< int64_t > ∗ GevMACAddress

  MAC address of the logical link.
- GenicamFeature< bool > ∗ GevPAUSEFrameReception

  Controls whether incoming PAUSE Frames are handled on the given logical link.
- GenicamFeature< bool > ∗ GevPAUSEFrameTransmission

  Controls whether PAUSE Frames can be generated on the given logical link.
- GenicamFeature< bool > ∗ GevCurrentIPConfigurationLLA

Controls whether the Link Local Address IP configuration scheme is activated on the given logical link.

- GenicamFeature< bool > ∗ GevCurrentIPConfigurationDHCP

  Controls whether the DHCP IP configuration scheme is activated on the given logical link.

- GenicamFeature< bool > ∗ GevCurrentIPConfigurationPersistentIP

  Controls whether the PersistentIP configuration scheme is activated on the given logical link.

- GenicamFeature< int64_t > ∗ GevCurrentIPAddress

  Reports the IP address for the given logical link.

- GenicamFeature< int64_t > ∗ GevCurrentSubnetMask

  Reports the subnet mask of the given logical link.

- GenicamFeature< int64_t > ∗ GevCurrentDefaultGateway

  Reports the default gateway IP address of the given logical link.

- GenicamFeature< FliSfncCameraEnum::GevIPConfigurationStatusEnum > ∗ GevIPConfigurationStatus

  Reports the current IP configuration status.

- GenicamFeature< std::string > ∗ GevFirstURL

  Indicates the first URL to the GenICam XML device description file. The First URL is used as the first choice by the application to retrieve the GenICam XML device description file.

- GenicamFeature< std::string > ∗ GevSecondURL

  Indicates the second URL to the GenICam XML device description file. This URL is an alternative if the application was unsuccessful to retrieve the device description file using the first URL.

- GenicamFeature< int64_t > ∗ GevPersistentIPAddress

  Controls the Persistent IP address for this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

- GenicamFeature< int64_t > ∗ GevPersistentSubnetMask

  Controls the Persistent subnet mask associated with the Persistent IP address on this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

- GenicamFeature< int64_t > ∗ GevPersistentDefaultGateway

  Controls the persistent default gateway for this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

- GenicamFeature< int64_t > ∗ GevDiscoveryAckDelay

  Indicates the maximum randomized delay the device will wait to acknowledge a discovery command.

- GenicamFeature< FliSfncCameraEnum::GevGVCPExtendedStatusCodesSelectorEnum > ∗ GevGVCPExtendedStatusCodes

  Selects the GigE Vision version to control extended status codes for.

- GenicamFeature< bool > ∗ GevGVCPExtendedStatusCodes

  Enables the generation of extended status codes.

- GenicamFeature< bool > ∗ GevGVCPPendingAck

  Enables the generation of PENDING_ACK.

- GenicamFeature< int64_t > ∗ GevPrimaryApplicationSwitchoverKey

  Controls the key to use to authenticate primary application switchover requests.

- GenicamFeature< FliSfncCameraEnum::GevGVSPExtendedIDModeEnum > ∗ GevGVSPExtendedIDMode

  Enables the extended IDs mode.

- GenicamFeature< FliSfncCameraEnum::GevCCPEnum > ∗ GevCCP

  Controls the device access privilege of an application.

- GenicamFeature< int64_t > ∗ GevPrimaryApplicationSocket

  Returns the UDP source port of the primary application.

- GenicamFeature< int64_t > ∗ GevPrimaryApplicationIPAddress

  Returns the address of the primary application.

- GenicamFeature< int64_t > ∗ GevMCPHostPort

  Controls the port to which the device must send messages. Setting this value to 0 closes the message channel.

- GenicamFeature< int64_t > ∗ GevMCDA

  Controls the destination IP address for the message channel.

- GenicamFeature< int64_t > ∗ GevMCTT

  Provides the transmission timeout value in milliseconds.

- GenicamFeature< int64_t > ∗ GevMCRC

  Controls the number of retransmissions allowed when a message channel message times out.
- GenicamFeature< int64_t > ∗ GevMCSP

  This feature indicates the source port for the message channel.
- GenicamFeature< int64_t > ∗ GevStreamChannelSelector

  Selects the stream channel to control.
- GenicamFeature< bool > ∗ GevSCCFGPacketResendDestination

  Enables the alternate IP destination for stream packets resent due to a packet resend request. When True, the source IP address provided in the packet resend command packet is used. When False, the value set in the GevSCDA[Gev↩ StreamChannelSelector] feature is used.
- GenicamFeature< bool > ∗ GevSCCFGAllInTransmission

  Enables the selected GVSP transmitter to use the single packet per data block All-in Transmission mode.
- GenicamFeature< bool > ∗ GevSCCFGUnconditionalStreaming

  Enables the camera to continue to stream, for this stream channel, if its control channel is closed or regardless of the reception of any ICMP messages (such as destination unreachable messages).
- GenicamFeature< bool > ∗ GevSCCFGExtendedChunkData

  Enables cameras to use the extended chunk data payload type for this stream channel.
- GenicamFeature< int64_t > ∗ GevSCPInterfaceIndex

  Index of the logical link to use.
- GenicamFeature< int64_t > ∗ GevSCPHostPort

  Controls the port of the selected channel to which a GVSP transmitter must send data stream or the port from which a GVSP receiver may receive data stream. Setting this value to 0 closes the stream channel.
- GenicamFeature< bool > ∗ GevSCPSFireTestPacket

  Sends a test packet. When this feature is set, the device will fire one test packet.
- GenicamFeature< bool > ∗ GevSCPSDoNotFragment

  The state of this feature is copied into the "do not fragment" bit of IP header of each stream packet. It can be used by the application to prevent IP fragmentation of packets on the stream channel.
- GenicamFeature< int64_t > ∗ GevSCPSPacketSize

  This GigE Vision specific feature corresponds to DeviceStreamChannelPacketSize and should be kept in sync with it. It specifies the stream packet size, in bytes, to send on the selected channel for a GVSP transmitter or specifies the maximum packet size supported by a GVSP receiver.
- GenicamFeature< int64_t > ∗ GevSCPD

  Controls the delay (in GEV timestamp counter unit) to insert between each packet for this stream channel. This can be used as a crude flow-control mechanism if the application or the network infrastructure cannot keep up with the packets coming from the device.
- GenicamFeature< int64_t > ∗ GevSCDA

  Controls the destination IP address of the selected stream channel to which a GVSP transmitter must send data stream or the destination IP address from which a GVSP receiver may receive data stream.
- GenicamFeature< int64_t > ∗ GevSCSP

  Indicates the source port of the stream channel.
- GenicamFeature< int64_t > ∗ GevSCZoneCount

  Reports the number of zones per block transmitted on the selected stream channel.
- GenicamFeature< int64_t > ∗ GevSCZoneDirectionAll

  Reports the transmission direction of each zone transmitted on the selected stream channel.
- GenicamFeature< bool > ∗ GevSCZoneConfigurationLock

  Controls whether the selected stream channel multi-zone configuration is locked. When locked, the GVSP transmitter is not allowed to change the number of zones and their direction during block acquisition and transmission.
- GenicamFeature< int64_t > ∗ aPAUSEMACCtrlFramesTransmitted

  Reports the number of transmitted PAUSE frames.
- GenicamFeature< int64_t > ∗ aPAUSEMACCtrlFramesReceived

  Reports the number of received PAUSE frames.
- GenicamFeature< FliSfncCameraEnum::ClConfigurationEnum > ∗ ClConfiguration

This Camera Link specific feature describes the configuration used by the camera. It helps especially when a camera is capable of operation in a non-standard configuration, and when the features PixelSize, SensorDigitizationTaps, and DeviceTapGeometry do not provide enough information for interpretation of the image data provided by the camera.

- GenicamFeature< FliSfncCameraEnum::ClTimeSlotsCountEnum > ∗ ClTimeSlotsCount

  This Camera Link specific feature describes the time multiplexing of the camera link connection to transfer more than the configuration allows, in one single clock.
- GenicamFeature< FliSfncCameraEnum::CxpLinkConfigurationStatusEnum > ∗ CxpLinkConfigurationStatus

  This feature indicates the current and active Link configuration used by the Device.
- GenicamFeature< FliSfncCameraEnum::CxpLinkConfigurationPreferredEnum > ∗ CxpLinkConfigurationPreferred

  Provides the Link configuration that allows the Transmitter Device to operate in its default mode.
- GenicamFeature< FliSfncCameraEnum::CxpLinkConfigurationEnum > ∗ CxpLinkConfiguration

  This feature allows specifying the Link configuration for the communication between the Receiver and Transmitter Device. In most cases this feature does not need to be written because automatic discovery will set configuration correctly to the value returned by CxpLinkConfigurationPreferred. Note that the currently active configuration of the Link can be read using CxpLinkConfigurationStatus.
- GenicamFeature< bool > ∗ CxpLinkSharingEnable

  Enable or disable the link sharing functionality of the device.
- GenicamFeature< int64_t > ∗ CxpLinkSharingSubDeviceSelector

  Index of the sub device used in the Link Sharing.
- GenicamFeature< FliSfncCameraEnum::CxpLinkSharingStatusEnum > ∗ CxpLinkSharingStatus

  This feature provides the data sharing status for the selected sub device.
- GenicamFeature< FliSfncCameraEnum::CxpLinkSharingSubDeviceTypeEnum > ∗ CxpLinkSharingSubDeviceType

  This feature provides the type of sub device.
- GenicamFeature< int64_t > ∗ CxpLinkSharingHorizontalStripeCount

  This feature provides the number of horizontal stripes that the device implements.
- GenicamFeature< int64_t > ∗ CxpLinkSharingVerticalStripeCount

  This feature provides the number of vertical stripes that the device implements.
- GenicamFeature< int64_t > ∗ CxpLinkSharingHorizontalOverlap

  This feature provides the number of pixel overlap in the horizontal stripes that the device implements.
- GenicamFeature< int64_t > ∗ CxpLinkSharingVerticalOverlap

  This feature provides the number of pixel overlap in the vertical stripes that the device implements.
- GenicamFeature< int64_t > ∗ CxpLinkSharingDuplicateStripe

  This feature provides the duplicate count in striped system. A non-zero value sets the number of duplicate images sent to sub-Devices.
- GenicamFeature< int64_t > ∗ CxpConnectionSelector

  Selects the CoaXPress physical connection to control.
- GenicamFeature< FliSfncCameraEnum::CxpConnectionTestModeEnum > ∗ CxpConnectionTestMode

  Enables the test mode for an individual physical connection of the Device.
- GenicamFeature< int64_t > ∗ CxpConnectionTestErrorCount

  Reports the current connection error count for test packets received by the device on the connection selected by CxpConnectionSelector.
- GenicamFeature< FliSfncCameraEnum::CxpSendReceiveSelectorEnum > ∗ CxpSendReceiveSelector

  Selects which one of the send or receive features to control.
- GenicamFeature< int64_t > ∗ CxpConnectionTestPacketCount

  Reports the current count for the test packets on the connection selected by CxpConnectionSelector.
- GenicamFeature< FliSfncCameraEnum::CxpErrorCounterSelectorEnum > ∗ CxpErrorCounterSelector

  Selects which Cxp Error Counter to read or reset.
- GenicamFeature ∗ CxpErrorCounterReset

  Resets the selected Cxp Error Counter on the connection selected by CxpConnectionSelector. The counter starts counting events immediately after the reset.
- GenicamFeature< int64_t > ∗ CxpErrorCounterValue

  Reads the current value of the selected Cxp Error Counter on the connection selected by CxpConnectionSelector.
- GenicamFeature< FliSfncCameraEnum::CxpErrorCounterStatusEnum > ∗ CxpErrorCounterStatus

Returns the current status of the selected Cxp Error Counter on the connection selected by CxpConnectionSelector.

- GenicamFeature ∗ CxpPoCxpAuto

  Activate automatic control of the Power over CoaXPress (PoCXP) for the Link.
- GenicamFeature ∗ CxpPoCxpTurnOff

  Disable Power over CoaXPress (PoCXP) for the Link.
- GenicamFeature ∗ CxpPoCxpTripReset

  Reset the Power over CoaXPress (PoCXP) Link after an over-current trip on the Device connection(s).
- GenicamFeature< FliSfncCameraEnum::CxpPoCxpStatusEnum > ∗ CxpPoCxpStatus

  Returns the Power over CoaXPress (PoCXP) status of the Device.

Additional Inherited Members

6.14.1 Detailed Description

This class defined all the register of an SFNC compliant camera.

Attention

C-BLUE familly cameras do not implement all these registers.

6.14.2 Constructor & Destructor Documentation

6.14.2.1 FliSfncCamera()

```
FliSfncCamera::FliSfncCamera (
            IFrameGrabberGenicam ∗ grabber )  [explicit]
```

6.14.2.2 ∼FliSfncCamera()

```
virtual FliSfncCamera::∼FliSfncCamera ( )  [virtual]
```

6.14.3 Member Data Documentation

6.14.3.1 AcquisitionAbort

```
GenicamFeature∗ FliSfncCamera::AcquisitionAbort
```

Aborts the Acquisition immediately. This will end the capture without completing the current Frame or waiting on a trigger. If no Acquisition is in progress, the command is ignored.

6.14.3.2 AcquisitionArm

```
GenicamFeature* FliSfncCamera::AcquisitionArm
```

Arms the device before an AcquisitionStart command. This optional command validates all the current features for consistency and prepares the device for a fast start of the Acquisition.

6.14.3.3 AcquisitionBurstFrameCount

```
GenicamFeature<int64_t>* FliSfncCamera::AcquisitionBurstFrameCount
```

Number of frames to acquire for each FrameBurstStart trigger.

6.14.3.4 AcquisitionFrameCount

```
GenicamFeature<int64_t>* FliSfncCamera::AcquisitionFrameCount
```

Number of frames to acquire in MultiFrame Acquisition mode.

6.14.3.5 AcquisitionFrameRate

```
GenicamFeature<double>* FliSfncCamera::AcquisitionFrameRate
```

Controls the acquisition rate (in Hertz) at which the frames are captured.

6.14.3.6 AcquisitionFrameRateEnable

```
GenicamFeature<bool>* FliSfncCamera::AcquisitionFrameRateEnable
```

Controls if the AcquisitionFrameRate feature is writable and used to control the acquisition rate. Otherwise, the acquisition rate is implicitly controlled by the combination of other features like ExposureTime, etc...

6.14.3.7 AcquisitionLineRate

```
GenicamFeature<double>* FliSfncCamera::AcquisitionLineRate
```

Controls the rate (in Hertz) at which the Lines in a Frame are captured.

6.14.3.8 AcquisitionLineRateEnable

```
GenicamFeature<bool>* FliSfncCamera::AcquisitionLineRateEnable
```

Controls if the AcquisitionLineRate feature is writable and used to control the acquisition rate. Otherwise, the acquisition rate is implicitly controlled by the combination of other features like ExposureTime, etc...

6.14.3.9 AcquisitionMode

```
GenicamFeature<FliSfncCameraEnum::AcquisitionModeEnum>* FliSfncCamera::AcquisitionMode
```

Sets the acquisition mode of the device. It defines mainly the number of frames to capture during an acquisition and the way the acquisition stops.

6.14.3.10 AcquisitionStart

```
GenicamFeature* FliSfncCamera::AcquisitionStart
```

Starts the Acquisition of the device. The number of frames captured is specified by AcquisitionMode.

6.14.3.11 AcquisitionStatus

```
GenicamFeature<bool>* FliSfncCamera::AcquisitionStatus
```

Reads the state of the internal acquisition signal selected using AcquisitionStatusSelector.

6.14.3.12 AcquisitionStatusSelector

```
GenicamFeature<FliSfncCameraEnum::AcquisitionStatusSelectorEnum>* FliSfncCamera::Acquisition↩
StatusSelector
```

Selects the internal acquisition signal to read using AcquisitionStatus.

6.14.3.13 AcquisitionStop

```
GenicamFeature* FliSfncCamera::AcquisitionStop
```

Stops the Acquisition of the device at the end of the current Frame. It is mainly used when AcquisitionMode is Continuous but can be used in any acquisition mode.

6.14.3.14 AcquisitionStopMode

`GenicamFeature<FliSfncCameraEnum::AcquisitionStopModeEnum>* FliSfncCamera::AcquisitionStopMode`

Controls how the AcquisitionStop command and the acquisition stopped using a trigger (e.g. AcquisitionActive, FrameBurstActive, FrameActive or FrameEnd trigger), ends an ongoing frame. This feature is mainly used in Linescan devices where each line in a frame is acquired sequentially.

6.14.3.15 ActionDeviceKey

`GenicamFeature<int64_t>* FliSfncCamera::ActionDeviceKey`

Provides the device key that allows the device to check the validity of action commands. The device internal assertion of an action signal is only authorized if the ActionDeviceKey and the action device key value in the protocol message are equal.

6.14.3.16 ActionGroupKey

`GenicamFeature<int64_t>* FliSfncCamera::ActionGroupKey`

Provides the key that the device will use to validate the action on reception of the action protocol message.

6.14.3.17 ActionGroupMask

`GenicamFeature<int64_t>* FliSfncCamera::ActionGroupMask`

Provides the mask that the device will use to validate the action on reception of the action protocol message.

6.14.3.18 ActionQueueSize

`GenicamFeature<int64_t>* FliSfncCamera::ActionQueueSize`

Indicates the size of the scheduled action commands queue. This number represents the maximum number of scheduled action commands that can be pending at a given point in time.

6.14.3.19 ActionSelector

`GenicamFeature<int64_t>* FliSfncCamera::ActionSelector`

Selects to which Action Signal further Action settings apply.

6.14.3.20 ActionUnconditionalMode

`GenicamFeature<FliSfncCameraEnum::ActionUnconditionalModeEnum>* FliSfncCamera::ActionUnconditional↩ Mode`

Enables the unconditional action command mode where action commands are processed even when the primary control channel is closed.

6.14.3.21 aPAUSEMACCtrlFramesReceived

`GenicamFeature<int64_t>* FliSfncCamera::aPAUSEMACCtrlFramesReceived`

Reports the number of received PAUSE frames.

6.14.3.22 aPAUSEMACCtrlFramesTransmitted

`GenicamFeature<int64_t>* FliSfncCamera::aPAUSEMACCtrlFramesTransmitted`

Reports the number of transmitted PAUSE frames.

6.14.3.23 BalanceRatio

`GenicamFeature<double>* FliSfncCamera::BalanceRatio`

Controls ratio of the selected color component to a reference color component. It is used for white balancing.

6.14.3.24 BalanceRatioSelector

`GenicamFeature<FliSfncCameraEnum::BalanceRatioSelectorEnum>* FliSfncCamera::BalanceRatio↩ Selector`

Selects which Balance ratio to control.

6.14.3.25 BalanceWhiteAuto

`GenicamFeature<FliSfncCameraEnum::BalanceWhiteAutoEnum>* FliSfncCamera::BalanceWhiteAuto`

Controls the mode for automatic white balancing between the color channels. The white balancing ratios are automatically adjusted.

6.14.3.26 BinningHorizontal

```
GenicamFeature<int64_t>* FliSfncCamera::BinningHorizontal
```

Number of horizontal photo-sensitive cells to combine together. This reduces the horizontal resolution (width) of the image.

6.14.3.27 BinningHorizontalMode

```
GenicamFeature<FliSfncCameraEnum::BinningHorizontalModeEnum>* FliSfncCamera::BinningHorizontal←
Mode
```

Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.

6.14.3.28 BinningSelector

```
GenicamFeature<FliSfncCameraEnum::BinningSelectorEnum>* FliSfncCamera::BinningSelector
```

Selects which binning engine is controlled by the BinningHorizontal and BinningVertical features.

6.14.3.29 BinningVertical

```
GenicamFeature<int64_t>* FliSfncCamera::BinningVertical
```

Number of vertical photo-sensitive cells to combine together. This reduces the vertical resolution (height) of the image.

6.14.3.30 BinningVerticalMode

```
GenicamFeature<FliSfncCameraEnum::BinningVerticalModeEnum>* FliSfncCamera::BinningVerticalMode
```

Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.

6.14.3.31 BlackLevel

```
GenicamFeature<double>* FliSfncCamera::BlackLevel
```

Controls the analog black level as an absolute physical value. This represents a DC offset applied to the video signal.

6.14.3.32 BlackLevelAuto

```
GenicamFeature<FliSfncCameraEnum::BlackLevelAutoEnum>* FliSfncCamera::BlackLevelAuto
```

Controls the mode for automatic black level adjustment. The exact algorithm used to implement this adjustment is device-specific.

6.14.3.33 BlackLevelAutoBalance

```
GenicamFeature<FliSfncCameraEnum::BlackLevelAutoBalanceEnum>* FliSfncCamera::BlackLevelAuto↩
Balance
```

Controls the mode for automatic black level balancing between the sensor color channels or taps. The black level coefficients of each channel are adjusted so they are matched.

6.14.3.34 BlackLevelSelector

```
GenicamFeature<FliSfncCameraEnum::BlackLevelSelectorEnum>* FliSfncCamera::BlackLevelSelector
```

Selects which Black Level is controlled by the various Black Level features.

6.14.3.35 CameraPresence

```
GenicamFeature<bool>* FliSfncCamera::CameraPresence
```

6.14.3.36 ChunkBinningHorizontal

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkBinningHorizontal
```

Number of horizontal photo-sensitive cells combined together.

6.14.3.37 ChunkBinningVertical

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkBinningVertical
```

Number of vertical photo-sensitive cells combined together.

6.14.3.38 ChunkBlackLevel

```
GenicamFeature<double>* FliSfncCamera::ChunkBlackLevel
```

Returns the black level used to capture the image included in the payload.

6.14.3.39 ChunkBlackLevelSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkBlackLevelSelectorEnum>* FliSfncCamera::ChunkBlack←
LevelSelector
```

Selects which Black Level to return. Possible values are:

6.14.3.40 ChunkComponentID

```
GenicamFeature<FliSfncCameraEnum::ChunkComponentIDEnum>* FliSfncCamera::ChunkComponentID
```

Returns the Identifier of the selected Component. This can be used to identify the image component type of a multi-component payload.

6.14.3.41 ChunkComponentIDValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkComponentIDValue
```

Returns a unique Identifier value that corresponds to the selected chunk Component.

6.14.3.42 ChunkComponentSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkComponentSelectorEnum>* FliSfncCamera::ChunkComponent←
Selector
```

Selects the Component from which to retrieve data from.

6.14.3.43 ChunkCounterSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkCounterSelectorEnum>* FliSfncCamera::ChunkCounter←
Selector
```

Selects which counter to retrieve data from.

6.14.3.44 ChunkCounterValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkCounterValue
```

Returns the value of the selected Chunk counter at the time of the FrameStart event.

6.14.3.45 ChunkDecimationHorizontal

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkDecimationHorizontal
```

Horizontal sub-sampling of the image.

6.14.3.46 ChunkDecimationVertical

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkDecimationVertical
```

Vertical sub-sampling of the image.

6.14.3.47 ChunkEnable

```
GenicamFeature<bool>* FliSfncCamera::ChunkEnable
```

Enables the inclusion of the selected Chunk data in the payload of the image.

6.14.3.48 ChunkEncoderSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkEncoderSelectorEnum>* FliSfncCamera::ChunkEncoder←
Selector
```

Selects which Encoder to retrieve data from.

6.14.3.49 ChunkEncoderStatus

```
GenicamFeature<FliSfncCameraEnum::ChunkEncoderStatusEnum>* FliSfncCamera::ChunkEncoderStatus
```

Returns the motion status of the selected encoder.

6.14.3.50 ChunkEncoderValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkEncoderValue
```

Returns the counter's value of the selected Encoder at the time of the FrameStart in area scan mode or the counter's value at the time of the LineStart selected by ChunkScanLineSelector in Linescan mode.

6.14.3.51 ChunkExposureTime

```
GenicamFeature<double>* FliSfncCamera::ChunkExposureTime
```

Returns the exposure time used to capture the image.

6.14.3.52 ChunkExposureTimeSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkExposureTimeSelectorEnum>* FliSfncCamera::ChunkExposure↩
TimeSelector
```

Selects which exposure time is read by the ChunkExposureTime feature.

6.14.3.53 ChunkFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkFrameID
```

Returns the unique Identifier of the frame (or image) included in the payload.

6.14.3.54 ChunkGain

```
GenicamFeature<double>* FliSfncCamera::ChunkGain
```

Returns the gain used to capture the image.

6.14.3.55 ChunkGainSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkGainSelectorEnum>* FliSfncCamera::ChunkGainSelector
```

Selects which Gain to return.

6.14.3.56 ChunkGroupID

```
GenicamFeature<FliSfncCameraEnum::ChunkGroupIDEnum>* FliSfncCamera::ChunkGroupID
```

Returns a unique Identifier corresponding to the selected Group of components. This can be used to identify the component Group of a multi-group payload.

6.14.3.57 ChunkGroupIDValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkGroupIDValue
```

Returns a unique Identifier value that corresponds to the Group of Components of the selected chunk Component.

6.14.3.58 ChunkGroupSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkGroupSelectorEnum>* FliSfncCamera::ChunkGroupSelector
```

Selects the component Group from which to retrieve data from.

6.14.3.59 ChunkHeight

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkHeight
```

Returns the Height of the image included in the payload.

6.14.3.60 ChunkLinePitch

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkLinePitch
```

Returns the LinePitch of the image included in the payload.

6.14.3.61 ChunkLineStatusAll

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkLineStatusAll
```

Returns the status of all the I/O lines at the time of the FrameStart internal event.

6.14.3.62 ChunkModeActive

```
GenicamFeature<bool>* FliSfncCamera::ChunkModeActive
```

Activates the inclusion of Chunk data in the transmitted payload.

6.14.3.63 ChunkOffsetX

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkOffsetX
```

Returns the OffsetX of the image included in the payload.

6.14.3.64 ChunkOffsetY

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkOffsetY
```

Returns the OffsetY of the image included in the payload.

6.14.3.65 ChunkPixelDynamicRangeMax

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkPixelDynamicRangeMax
```

Returns the maximum value of dynamic range of the image included in the payload.

6.14.3.66 ChunkPixelDynamicRangeMin

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkPixelDynamicRangeMin
```

Returns the minimum value of dynamic range of the image included in the payload.

6.14.3.67 ChunkPixelFormat

```
GenicamFeature<FliSfncCameraEnum::ChunkPixelFormatEnum>* FliSfncCamera::ChunkPixelFormat
```

Returns the PixelFormat of the image included in the payload.

6.14.3.68 ChunkRegionID

```
GenicamFeature<FliSfncCameraEnum::ChunkRegionIDEnum>* FliSfncCamera::ChunkRegionID
```

Returns the Identifier of Region that the image comes from.

6.14.3.69 ChunkRegionIDValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkRegionIDValue
```

Returns the unique integer Identifier value of the Region that the image comes from.

6.14.3.70 ChunkRegionSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkRegionSelectorEnum>* FliSfncCamera::ChunkRegionSelector
```

Selects which Region to retrieve data from.

6.14.3.71 ChunkReverseX

```
GenicamFeature<bool>* FliSfncCamera::ChunkReverseX
```

Flip horizontal of the image sent by the device.

6.14.3.72 ChunkReverseY

```
GenicamFeature<bool>* FliSfncCamera::ChunkReverseY
```

Flip vertically of the image sent by the device.

6.14.3.73 ChunkScan3dAxisMax

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dAxisMax
```

Returns the Maximum Axis value for the selected coordinate axis of the image included in the payload.

6.14.3.74 ChunkScan3dAxisMin

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dAxisMin
```

Returns the Minimum Axis value for the selected coordinate axis of the image included in the payload.

6.14.3.75 ChunkScan3dBaseline

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dBaseline
```

Returns the baseline as the physical distance of two cameras in a stereo camera setup. The value of this feature can be used for 3D reconstruction from disparity images. In this case, the unit of the 3D coordinates corresponds to the unit of the baseline.

6.14.3.76 ChunkScan3dCoordinateOffset

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dCoordinateOffset
```

Returns the Offset for the selected coordinate axis of the image included in the payload.

6.14.3.77 ChunkScan3dCoordinateReferenceSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dCoordinateReferenceSelectorEnum>* FliSfncCamera↩
::ChunkScan3dCoordinateReferenceSelector
```

Selector to read a coordinate system reference value defining the transform of a point from one system to the other.

6.14.3.78 ChunkScan3dCoordinateReferenceValue

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dCoordinateReferenceValue
```

Returns the value of a position or pose coordinate for the anchor or transformed coordinate systems relative to the reference point.

6.14.3.79 ChunkScan3dCoordinateScale

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dCoordinateScale
```

Returns the Scale for the selected coordinate axis of the image included in the payload.

6.14.3.80 ChunkScan3dCoordinateSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dCoordinateSelectorEnum>* FliSfncCamera::Chunk↩
Scan3dCoordinateSelector
```

Selects which Coordinate to retrieve data from.

6.14.3.81 ChunkScan3dCoordinateSystem

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dCoordinateSystemEnum>* FliSfncCamera::Chunk↩
Scan3dCoordinateSystem
```

Returns the Coordinate System of the image included in the payload.

6.14.3.82 ChunkScan3dCoordinateSystemReference

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dCoordinateSystemReferenceEnum>* FliSfncCamera::↩
ChunkScan3dCoordinateSystemReference
```

Returns the Coordinate System Position of the image included in the payload.

6.14.3.83 ChunkScan3dCoordinateTransformSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dCoordinateTransformSelectorEnum>* FliSfncCamera↩
::ChunkScan3dCoordinateTransformSelector
```

Selector for transform values.

6.14.3.84 ChunkScan3dDistanceUnit

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dDistanceUnitEnum>* FliSfncCamera::ChunkScan3d↩
DistanceUnit
```

Returns the Distance Unit of the payload image.

6.14.3.85 ChunkScan3dFocalLength

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dFocalLength
```

Returns the focal length of the camera in pixel. The focal length depends on the selected region. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.

6.14.3.86 ChunkScan3dInvalidDataFlag

```
GenicamFeature<bool>* FliSfncCamera::ChunkScan3dInvalidDataFlag
```

Returns if a specific non-valid data flag is used in the data stream.

6.14.3.87 ChunkScan3dInvalidDataValue

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dInvalidDataValue
```

Returns the Invalid Data Value used for the image included in the payload.

6.14.3.88 ChunkScan3dOutputMode

```
GenicamFeature<FliSfncCameraEnum::ChunkScan3dOutputModeEnum>* FliSfncCamera::ChunkScan3d↩
OutputMode
```

Returns the Calibrated Mode of the payload image.

6.14.3.89 ChunkScan3dPrincipalPointU

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dPrincipalPointU
```

Returns the value of this feature gives the horizontal position of the principal point, relative to the region origin, i.e. OffsetX. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.

6.14.3.90 ChunkScan3dPrincipalPointV

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dPrincipalPointV
```

Returns the value of this feature gives the vertical position of the principal point, relative to the region origin, i.e. OffsetY. The value of this feature takes into account vertical binning, decimation, or any other function changing the image resolution.

6.14.3.91 ChunkScan3dTransformValue

```
GenicamFeature<double>* FliSfncCamera::ChunkScan3dTransformValue
```

Returns the transform value.

6.14.3.92 ChunkScanLineSelector

`GenicamFeature<int64_t>* FliSfncCamera::ChunkScanLineSelector`

Index for vector representation of one chunk value per line in an image.

6.14.3.93 ChunkSelector

`GenicamFeature<FliSfncCameraEnum::ChunkSelectorEnum>* FliSfncCamera::ChunkSelector`

Selects which Chunk to enable or control.

6.14.3.94 ChunkSequencerSetActive

`GenicamFeature<int64_t>* FliSfncCamera::ChunkSequencerSetActive`

Return the index of the active set of the running sequencer included in the payload.

6.14.3.95 ChunkSourceID

`GenicamFeature<FliSfncCameraEnum::ChunkSourceIDEnum>* FliSfncCamera::ChunkSourceID`

Returns the Identifier of Source that the image comes from.

6.14.3.96 ChunkSourceIDValue

`GenicamFeature<int64_t>* FliSfncCamera::ChunkSourceIDValue`

Returns the unique integer Identifier value of the Source that the image comes from.

6.14.3.97 ChunkSourceSelector

`GenicamFeature<FliSfncCameraEnum::ChunkSourceSelectorEnum>* FliSfncCamera::ChunkSourceSelector`

Selects which Source to retrieve data from.

6.14.3.98 ChunkStreamChannelID

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkStreamChannelID
```

Returns identifier of the stream channel used to carry the block.

6.14.3.99 ChunkTimerSelector

```
GenicamFeature<FliSfncCameraEnum::ChunkTimerSelectorEnum>* FliSfncCamera::ChunkTimerSelector
```

Selects which Timer to retrieve data from.

6.14.3.100 ChunkTimerValue

```
GenicamFeature<double>* FliSfncCamera::ChunkTimerValue
```

Returns the value of the selected Timer at the time of the FrameStart internal event.

6.14.3.101 ChunkTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkTimestamp
```

Returns the Timestamp of the image included in the payload at the time of the FrameStart internal event.

6.14.3.102 ChunkTimestampLatchValue

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkTimestampLatchValue
```

Returns the last Timestamp latched with the TimestampLatch command.

6.14.3.103 ChunkTransferBlockID

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkTransferBlockID
```

Returns the unique identifier of the transfer block used to transport the payload.

6.14.3.104 ChunkTransferQueueCurrentBlockCount

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkTransferQueueCurrentBlockCount
```

Returns the current number of blocks in the transfer queue.

6.14.3.105 ChunkTransferStreamID

```
GenicamFeature<FliSfncCameraEnum::ChunkTransferStreamIDEnum>* FliSfncCamera::ChunkTransfer↩
StreamID
```

Returns identifier of the stream that generated this block.

6.14.3.106 ChunkWidth

```
GenicamFeature<int64_t>* FliSfncCamera::ChunkWidth
```

Returns the Width of the image included in the payload.

6.14.3.107 ChunkXMLEnable

```
GenicamFeature<bool>* FliSfncCamera::ChunkXMLEnable
```

Activates the inclusion of the GenICam XML necessary to the chunk parser to decode all the Chunk data included in the transmitted payload.

6.14.3.108 ClConfiguration

```
GenicamFeature<FliSfncCameraEnum::ClConfigurationEnum>* FliSfncCamera::ClConfiguration
```

This Camera Link specific feature describes the configuration used by the camera. It helps especially when a camera is capable of operation in a non-standard configuration, and when the features PixelSize, SensorDigitization↩
Taps, and DeviceTapGeometry do not provide enough information for interpretation of the image data provided by the camera.

6.14.3.109 ClTimeSlotsCount

```
GenicamFeature<FliSfncCameraEnum::ClTimeSlotsCountEnum>* FliSfncCamera::ClTimeSlotsCount
```

This Camera Link specific feature describes the time multiplexing of the camera link connection to transfer more than the configuration allows, in one single clock.

6.14.3.110 ColorTransformationEnable

`GenicamFeature<bool>* FliSfncCamera::ColorTransformationEnable`

Activates the selected Color Transformation module.

6.14.3.111 ColorTransformationSelector

```
GenicamFeature<FliSfncCameraEnum::ColorTransformationSelectorEnum>* FliSfncCamera::Color↩
TransformationSelector
```

Selects which Color Transformation module is controlled by the various Color Transformation features.

6.14.3.112 ColorTransformationValue

`GenicamFeature<double>* FliSfncCamera::ColorTransformationValue`

Represents the value of the selected Gain factor or Offset inside the Transformation matrix.

6.14.3.113 ColorTransformationValueSelector

```
GenicamFeature<FliSfncCameraEnum::ColorTransformationValueSelectorEnum>* FliSfncCamera::↩
ColorTransformationValueSelector
```

Selects the Gain factor or Offset of the Transformation matrix to access in the selected Color Transformation module.

6.14.3.114 ComponentEnable

`GenicamFeature<bool>* FliSfncCamera::ComponentEnable`

Controls if the selected component streaming is active.

6.14.3.115 ComponentIDValue

`GenicamFeature<int64_t>* FliSfncCamera::ComponentIDValue`

Returns a unique Identifier value that corresponds to type of the component selected by ComponentSelector.

6.14.3.116 ComponentSelector

```
GenicamFeature<FliSfncCameraEnum::ComponentSelectorEnum>* FliSfncCamera::ComponentSelector
```

Selects a component to activate/deactivate its data streaming.

6.14.3.117 CounterDuration

```
GenicamFeature<int64_t>* FliSfncCamera::CounterDuration
```

Sets the duration (or number of events) before the CounterEnd event is generated.

6.14.3.118 CounterEventActivation

```
GenicamFeature<FliSfncCameraEnum::CounterEventActivationEnum>* FliSfncCamera::CounterEvent↵
Activation
```

Selects the Activation mode Event Source signal.

6.14.3.119 CounterEventSource

```
GenicamFeature<FliSfncCameraEnum::CounterEventSourceEnum>* FliSfncCamera::CounterEventSource
```

Select the events that will be the source to increment the Counter.

6.14.3.120 CounterReset

```
GenicamFeature* FliSfncCamera::CounterReset
```

Does a software reset of the selected Counter and starts it. The counter starts counting events immediately after the reset unless a Counter trigger is active. CounterReset can be used to reset the Counter independently from the CounterResetSource. To disable the counter temporarily, set CounterEventSource to Off.

6.14.3.121 CounterResetActivation

```
GenicamFeature<FliSfncCameraEnum::CounterResetActivationEnum>* FliSfncCamera::CounterReset↵
Activation
```

Selects the Activation mode of the Counter Reset Source signal.

6.14.3.122 CounterResetSource

`GenicamFeature<FliSfncCameraEnum::CounterResetSourceEnum>* FliSfncCamera::CounterResetSource`

Selects the signals that will be the source to reset the Counter.

6.14.3.123 CounterSelector

`GenicamFeature<FliSfncCameraEnum::CounterSelectorEnum>* FliSfncCamera::CounterSelector`

Selects which Counter to configure.

6.14.3.124 CounterStatus

`GenicamFeature<FliSfncCameraEnum::CounterStatusEnum>* FliSfncCamera::CounterStatus`

Returns the current status of the Counter.

6.14.3.125 CounterTriggerActivation

`GenicamFeature<FliSfncCameraEnum::CounterTriggerActivationEnum>* FliSfncCamera::Counter←TriggerActivation`

Selects the activation mode of the trigger to start the Counter.

6.14.3.126 CounterTriggerSource

`GenicamFeature<FliSfncCameraEnum::CounterTriggerSourceEnum>* FliSfncCamera::CounterTrigger←Source`

Selects the source to start the Counter.

6.14.3.127 CounterValue

`GenicamFeature<int64_t>* FliSfncCamera::CounterValue`

Reads or writes the current value of the selected Counter.

6.14.3.128 CounterValueAtReset

```
GenicamFeature<int64_t>* FliSfncCamera::CounterValueAtReset
```

Reads the value of the selected Counter when it was reset by a trigger or by an explicit CounterReset command.

6.14.3.129 CxpConnectionSelector

```
GenicamFeature<int64_t>* FliSfncCamera::CxpConnectionSelector
```

Selects the CoaXPress physical connection to control.

6.14.3.130 CxpConnectionTestErrorCount

```
GenicamFeature<int64_t>* FliSfncCamera::CxpConnectionTestErrorCount
```

Reports the current connection error count for test packets received by the device on the connection selected by CxpConnectionSelector.

6.14.3.131 CxpConnectionTestMode

```
GenicamFeature<FliSfncCameraEnum::CxpConnectionTestModeEnum>* FliSfncCamera::CxpConnection←
TestMode
```

Enables the test mode for an individual physical connection of the Device.

6.14.3.132 CxpConnectionTestPacketCount

```
GenicamFeature<int64_t>* FliSfncCamera::CxpConnectionTestPacketCount
```

Reports the current count for the test packets on the connection selected by CxpConnectionSelector.

6.14.3.133 CxpErrorCounterReset

```
GenicamFeature* FliSfncCamera::CxpErrorCounterReset
```

Resets the selected Cxp Error Counter on the connection selected by CxpConnectionSelector. The counter starts counting events immediately after the reset.

6.14.3.134 CxpErrorCounterSelector

```
GenicamFeature<FliSfncCameraEnum::CxpErrorCounterSelectorEnum>* FliSfncCamera::CxpError↩
CounterSelector
```

Selects which Cxp Error Counter to read or reset.

6.14.3.135 CxpErrorCounterStatus

```
GenicamFeature<FliSfncCameraEnum::CxpErrorCounterStatusEnum>* FliSfncCamera::CxpErrorCounter↩
Status
```

Returns the current status of the selected Cxp Error Counter on the connection selected by CxpConnectionSelector.

6.14.3.136 CxpErrorCounterValue

```
GenicamFeature<int64_t>* FliSfncCamera::CxpErrorCounterValue
```

Reads the current value of the selected Cxp Error Counter on the connection selected by CxpConnectionSelector.

6.14.3.137 CxpFirstLineTriggerWithFrameStart

```
GenicamFeature<bool>* FliSfncCamera::CxpFirstLineTriggerWithFrameStart
```

Specifies if a FrameStart trigger also triggers the first LineStart at the same time.

6.14.3.138 CxpLinkConfiguration

```
GenicamFeature<FliSfncCameraEnum::CxpLinkConfigurationEnum>* FliSfncCamera::CxpLinkConfiguration
```

This feature allows specifying the Link configuration for the communication between the Receiver and Transmitter Device. In most cases this feature does not need to be written because automatic discovery will set configuration correctly to the value returned by CxpLinkConfigurationPreferred. Note that the currently active configuration of the Link can be read using CxpLinkConfigurationStatus.

6.14.3.139 CxpLinkConfigurationPreferred

```
GenicamFeature<FliSfncCameraEnum::CxpLinkConfigurationPreferredEnum>* FliSfncCamera::CxpLink↩
ConfigurationPreferred
```

Provides the Link configuration that allows the Transmitter Device to operate in its default mode.

6.14.3.140 CxpLinkConfigurationStatus

`GenicamFeature<FliSfncCameraEnum::CxpLinkConfigurationStatusEnum>* FliSfncCamera::CxpLink←`
`ConfigurationStatus`

This feature indicates the current and active Link configuration used by the Device.

6.14.3.141 CxpLinkSharingDuplicateStripe

`GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingDuplicateStripe`

This feature provides the duplicate count in striped system. A non-zero value sets the number of duplicate images sent to sub-Devices.

6.14.3.142 CxpLinkSharingEnable

`GenicamFeature<bool>* FliSfncCamera::CxpLinkSharingEnable`

Enable or disable the link sharing functionality of the device.

6.14.3.143 CxpLinkSharingHorizontalOverlap

`GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingHorizontalOverlap`

This feature provides the number of pixel overlap in the horizontal stripes that the device implements.

6.14.3.144 CxpLinkSharingHorizontalStripeCount

`GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingHorizontalStripeCount`

This feature provides the number of horizontal stripes that the device implements.

6.14.3.145 CxpLinkSharingStatus

`GenicamFeature<FliSfncCameraEnum::CxpLinkSharingStatusEnum>* FliSfncCamera::CxpLinkSharing←`
`Status`

This feature provides the data sharing status for the selected sub device.

6.14.3.146 CxpLinkSharingSubDeviceSelector

```
GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingSubDeviceSelector
```

Index of the sub device used in the Link Sharing.

6.14.3.147 CxpLinkSharingSubDeviceType

```
GenicamFeature<FliSfncCameraEnum::CxpLinkSharingSubDeviceTypeEnum>* FliSfncCamera::CxpLink↩
SharingSubDeviceType
```

This feature provides the type of sub device.

6.14.3.148 CxpLinkSharingVerticalOverlap

```
GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingVerticalOverlap
```

This feature provides the number of pixel overlap in the vertical stripes that the device implements.

6.14.3.149 CxpLinkSharingVerticalStripeCount

```
GenicamFeature<int64_t>* FliSfncCamera::CxpLinkSharingVerticalStripeCount
```

This feature provides the number of vertical stripes that the device implements.

6.14.3.150 CxpPoCxpAuto

```
GenicamFeature* FliSfncCamera::CxpPoCxpAuto
```

Activate automatic control of the Power over CoaXPress (PoCXP) for the Link.

6.14.3.151 CxpPoCxpStatus

```
GenicamFeature<FliSfncCameraEnum::CxpPoCxpStatusEnum>* FliSfncCamera::CxpPoCxpStatus
```

Returns the Power over CoaXPress (PoCXP) status of the Device.

6.14.3.152 CxpPoCxpTripReset

```
GenicamFeature* FliSfncCamera::CxpPoCxpTripReset
```

Reset the Power over CoaXPress (PoCXP) Link after an over-current trip on the Device connection(s).

6.14.3.153 CxpPoCxpTurnOff

```
GenicamFeature* FliSfncCamera::CxpPoCxpTurnOff
```

Disable Power over CoaXPress (PoCXP) for the Link.

6.14.3.154 CxpSendReceiveSelector

```
GenicamFeature<FliSfncCameraEnum::CxpSendReceiveSelectorEnum>* FliSfncCamera::CxpSendReceive←
Selector
```

Selects which one of the send or receive features to control.

6.14.3.155 DecimationHorizontal

```
GenicamFeature<int64_t>* FliSfncCamera::DecimationHorizontal
```

Horizontal sub-sampling of the image. This reduces the horizontal resolution (width) of the image by the specified horizontal decimation factor.

6.14.3.156 DecimationHorizontalMode

```
GenicamFeature<FliSfncCameraEnum::DecimationHorizontalModeEnum>* FliSfncCamera::Decimation←
HorizontalMode
```

Sets the mode used to reduce the horizontal resolution when DecimationHorizontal is used.

6.14.3.157 DecimationVertical

```
GenicamFeature<int64_t>* FliSfncCamera::DecimationVertical
```

Vertical sub-sampling of the image. This reduces the vertical resolution (height) of the image by the specified vertical decimation factor.

6.14.3.158 DecimationVerticalMode

```
GenicamFeature<FliSfncCameraEnum::DecimationVerticalModeEnum>* FliSfncCamera::Decimation↩
VerticalMode
```

Sets the mode used to reduce the Vertical resolution when DecimationVertical is used.

6.14.3.159 Deinterlacing

```
GenicamFeature<FliSfncCameraEnum::DeinterlacingEnum>* FliSfncCamera::Deinterlacing
```

Controls how the device performs de-interlacing.

6.14.3.160 DeviceCharacterSet

```
GenicamFeature<FliSfncCameraEnum::DeviceCharacterSetEnum>* FliSfncCamera::DeviceCharacterSet
```

Character set used by the strings of the device.

6.14.3.161 DeviceClockFrequency

```
GenicamFeature<double>* FliSfncCamera::DeviceClockFrequency
```

Returns the frequency of the selected Clock.

6.14.3.162 DeviceClockSelector

```
GenicamFeature<FliSfncCameraEnum::DeviceClockSelectorEnum>* FliSfncCamera::DeviceClockSelector
```

Selects the clock frequency to access from the device.

6.14.3.163 DeviceConnectionSelector

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceConnectionSelector
```

Selects which Connection of the device to control.

6.14.3.164 DeviceConnectionSpeed

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceConnectionSpeed
```

Indicates the speed of transmission of the specified Connection.

6.14.3.165 DeviceConnectionStatus

```
GenicamFeature<FliSfncCameraEnum::DeviceConnectionStatusEnum>* FliSfncCamera::DeviceConnection←
Status
```

Indicates the status of the specified Connection.

6.14.3.166 DeviceEventChannelCount

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceEventChannelCount
```

Indicates the number of event channels supported by the device.

6.14.3.167 DeviceFamilyName

```
GenicamFeature<std::string>* FliSfncCamera::DeviceFamilyName
```

Identifier of the product family of the device.

6.14.3.168 DeviceFeaturePersistenceEnd

```
GenicamFeature* FliSfncCamera::DeviceFeaturePersistenceEnd
```

Indicate to the device the end of feature persistence.

6.14.3.169 DeviceFeaturePersistenceStart

```
GenicamFeature* FliSfncCamera::DeviceFeaturePersistenceStart
```

Indicate to the device and GenICam XML to get ready for persisting of all streamable features.

6.14.3.170 DeviceFirmwareVersion

```
GenicamFeature<std::string>* FliSfncCamera::DeviceFirmwareVersion
```

Version of the firmware in the device.

6.14.3.171 DeviceGenCPVersionMajor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceGenCPVersionMajor
```

Major version of the GenCP protocol supported by the device.

6.14.3.172 DeviceGenCPVersionMinor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceGenCPVersionMinor
```

Minor version of the GenCP protocol supported by the device.

6.14.3.173 DeviceIndicatorMode

```
GenicamFeature<FliSfncCameraEnum::DeviceIndicatorModeEnum>* FliSfncCamera::DeviceIndicatorMode
```

Controls the behavior of the indicators (such as LEDs) showing the status of the Device.

6.14.3.174 DeviceLinkCommandTimeout

```
GenicamFeature<double>* FliSfncCamera::DeviceLinkCommandTimeout
```

Indicates the command timeout of the specified Link. This corresponds to the maximum response time of the device for a command sent on that link.

6.14.3.175 DeviceLinkConnectionCount

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceLinkConnectionCount
```

Returns the number of physical connection of the device used by a particular Link.

6.14.3.176 DeviceLinkHeartbeatMode

`GenicamFeature<FliSfncCameraEnum::DeviceLinkHeartbeatModeEnum>* FliSfncCamera::DeviceLink↩ HeartbeatMode`

Activate or deactivate the Link's heartbeat.

6.14.3.177 DeviceLinkHeartbeatTimeout

`GenicamFeature<double>* FliSfncCamera::DeviceLinkHeartbeatTimeout`

Controls the current heartbeat timeout of the specific Link.

6.14.3.178 DeviceLinkSelector

`GenicamFeature<int64_t>* FliSfncCamera::DeviceLinkSelector`

Selects which Link of the device to control.

6.14.3.179 DeviceLinkSpeed

`GenicamFeature<int64_t>* FliSfncCamera::DeviceLinkSpeed`

Indicates the speed of transmission negotiated on the specified Link.

6.14.3.180 DeviceLinkThroughputLimit

`GenicamFeature<int64_t>* FliSfncCamera::DeviceLinkThroughputLimit`

Limits the maximum bandwidth of the data that will be streamed out by the device on the selected Link. If necessary, delays will be uniformly inserted between transport layer packets in order to control the peak bandwidth.

6.14.3.181 DeviceLinkThroughputLimitMode

`GenicamFeature<FliSfncCameraEnum::DeviceLinkThroughputLimitModeEnum>* FliSfncCamera::Device↩ LinkThroughputLimitMode`

Controls if the DeviceLinkThroughputLimit is active. When disabled, lower level TL specific features are expected to control the throughput. When enabled, DeviceLinkThroughputLimit controls the overall throughput.

6.14.3.182 DeviceManifestEntrySelector

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestEntrySelector
```

Selects the manifest entry to reference.

6.14.3.183 DeviceManifestPrimaryURL

```
GenicamFeature<std::string>* FliSfncCamera::DeviceManifestPrimaryURL
```

Indicates the first URL to the GenICam XML device description file of the selected manifest entry.

6.14.3.184 DeviceManifestSchemaMajorVersion

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestSchemaMajorVersion
```

Indicates the major version number of the schema file of the selected manifest entry.

6.14.3.185 DeviceManifestSchemaMinorVersion

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestSchemaMinorVersion
```

Indicates the minor version number of the schema file of the selected manifest entry.

6.14.3.186 DeviceManifestSecondaryURL

```
GenicamFeature<std::string>* FliSfncCamera::DeviceManifestSecondaryURL
```

Indicates the second URL to the GenICam XML device description file of the selected manifest entry.

6.14.3.187 DeviceManifestXMLMajorVersion

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestXMLMajorVersion
```

Indicates the major version number of the GenICam XML file of the selected manifest entry.

6.14.3.188 DeviceManifestXMLMinorVersion

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestXMLMinorVersion
```

Indicates the minor version number of the GenICam XML file of the selected manifest entry.

6.14.3.189 DeviceManifestXMLSubMinorVersion

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceManifestXMLSubMinorVersion
```

Indicates the subminor version number of the GenICam XML file of the selected manifest entry.

6.14.3.190 DeviceManufacturerInfo

```
GenicamFeature<std::string>* FliSfncCamera::DeviceManufacturerInfo
```

Manufacturer information about the device.

6.14.3.191 DeviceMaxThroughput

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceMaxThroughput
```

Maximum bandwidth of the data that can be streamed out of the device. This can be used to estimate if the physical connection(s) can sustain transfer of free-running images from the camera at its maximum speed.

6.14.3.192 DeviceModelName

```
GenicamFeature<std::string>* FliSfncCamera::DeviceModelName
```

Model of the device.

6.14.3.193 DeviceRegistersCheck

```
GenicamFeature* FliSfncCamera::DeviceRegistersCheck
```

Perform the validation of the current register set for consistency. This will update the DeviceRegistersValid flag.

6.14.3.194 DeviceRegistersEndianness

```
GenicamFeature<FliSfncCameraEnum::DeviceRegistersEndiannessEnum>* FliSfncCamera::Device↩
RegistersEndianness
```

Endianness of the registers of the device.

6.14.3.195 DeviceRegistersStreamingEnd

```
GenicamFeature* FliSfncCamera::DeviceRegistersStreamingEnd
```

Announce the end of registers streaming. This will do a register set validation for consistency and activate it. This will also update the DeviceRegistersValid flag.

6.14.3.196 DeviceRegistersStreamingStart

```
GenicamFeature* FliSfncCamera::DeviceRegistersStreamingStart
```

Prepare the device for registers streaming without checking for consistency.

6.14.3.197 DeviceRegistersValid

```
GenicamFeature<bool>* FliSfncCamera::DeviceRegistersValid
```

Returns if the current register set is valid and consistent.

6.14.3.198 DeviceReset

```
GenicamFeature* FliSfncCamera::DeviceReset
```

Resets the device to its power up state. After reset, the device must be rediscovered.

6.14.3.199 DeviceScanType

```
GenicamFeature<FliSfncCameraEnum::DeviceScanTypeEnum>* FliSfncCamera::DeviceScanType
```

Scan type of the sensor of the device.

6.14.3.200 DeviceSerialNumber

```
GenicamFeature<std::string>* FliSfncCamera::DeviceSerialNumber
```

Device's serial number. This string is a unique identifier of the device.

6.14.3.201 DeviceSerialPortBaudRate

```
GenicamFeature<FliSfncCameraEnum::DeviceSerialPortBaudRateEnum>* FliSfncCamera::DeviceSerial←
PortBaudRate
```

This feature controls the baud rate used by the selected serial port.

6.14.3.202 DeviceSerialPortSelector

```
GenicamFeature<FliSfncCameraEnum::DeviceSerialPortSelectorEnum>* FliSfncCamera::DeviceSerial←
PortSelector
```

Selects which serial port of the device to control.

6.14.3.203 DeviceSFNCVersionMajor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceSFNCVersionMajor
```

Major version of the Standard Features Naming Convention that was used to create the device's GenICam XML.

6.14.3.204 DeviceSFNCVersionMinor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceSFNCVersionMinor
```

Minor version of the Standard Features Naming Convention that was used to create the device's GenICam XML.

6.14.3.205 DeviceSFNCVersionSubMinor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceSFNCVersionSubMinor
```

Sub minor version of Standard Features Naming Convention that was used to create the device's GenICam XML.

6.14.3.206 DeviceStreamChannelCount

`GenicamFeature<int64_t>* FliSfncCamera::DeviceStreamChannelCount`

Indicates the number of streaming channels supported by the device.

6.14.3.207 DeviceStreamChannelEndianness

`GenicamFeature<FliSfncCameraEnum::DeviceStreamChannelEndiannessEnum>* FliSfncCamera::Device←StreamChannelEndianness`

Endianness of multi-byte pixel data for this stream.

6.14.3.208 DeviceStreamChannelLink

`GenicamFeature<int64_t>* FliSfncCamera::DeviceStreamChannelLink`

Index of device's Link to use for streaming the specified stream channel.

6.14.3.209 DeviceStreamChannelPacketSize

`GenicamFeature<int64_t>* FliSfncCamera::DeviceStreamChannelPacketSize`

Specifies the stream packet size, in bytes, to send on the selected channel for a Transmitter or specifies the maximum packet size supported by a receiver.

6.14.3.210 DeviceStreamChannelSelector

`GenicamFeature<int64_t>* FliSfncCamera::DeviceStreamChannelSelector`

Selects the stream channel to control.

6.14.3.211 DeviceStreamChannelType

`GenicamFeature<FliSfncCameraEnum::DeviceStreamChannelTypeEnum>* FliSfncCamera::DeviceStream←ChannelType`

Reports the type of the stream channel.

6.14.3.212 DeviceTapGeometry

```
GenicamFeature<FliSfncCameraEnum::DeviceTapGeometryEnum>* FliSfncCamera::DeviceTapGeometry
```

This device tap geometry feature describes the geometrical properties characterizing the taps of a camera as presented at the output of the device.

6.14.3.213 DeviceTemperature

```
GenicamFeature<double>* FliSfncCamera::DeviceTemperature
```

Device temperature in degrees Celsius (C). It is measured at the location selected by DeviceTemperatureSelector.

6.14.3.214 DeviceTemperatureSelector

```
GenicamFeature<FliSfncCameraEnum::DeviceTemperatureSelectorEnum>* FliSfncCamera::Device←
TemperatureSelector
```

Selects the location within the device, where the temperature will be measured.

6.14.3.215 DeviceTLType

```
GenicamFeature<FliSfncCameraEnum::DeviceTLTypeEnum>* FliSfncCamera::DeviceTLType
```

Transport Layer type of the device.

6.14.3.216 DeviceTLVersionMajor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceTLVersionMajor
```

Major version of the Transport Layer of the device.

6.14.3.217 DeviceTLVersionMinor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceTLVersionMinor
```

Minor version of the Transport Layer of the device.

6.14.3.218 DeviceTLVersionSubMinor

```
GenicamFeature<int64_t>* FliSfncCamera::DeviceTLVersionSubMinor
```

Sub minor version of the Transport Layer of the device.

6.14.3.219 DeviceType

```
GenicamFeature<FliSfncCameraEnum::DeviceTypeEnum>* FliSfncCamera::DeviceType
```

Returns the device type.

6.14.3.220 DeviceUserID

```
GenicamFeature<std::string>* FliSfncCamera::DeviceUserID
```

User-programmable device identifier.

6.14.3.221 DeviceVendorName

```
GenicamFeature<std::string>* FliSfncCamera::DeviceVendorName
```

Name of the manufacturer of the device.

6.14.3.222 DeviceVersion

```
GenicamFeature<std::string>* FliSfncCamera::DeviceVersion
```

Version of the device.

6.14.3.223 EncoderDivider

```
GenicamFeature<int64_t>* FliSfncCamera::EncoderDivider
```

Sets how many Encoder increments/decrements are needed to generate an Encoder output pulse signal.

6.14.3.224 EncoderMode

```
GenicamFeature<FliSfncCameraEnum::EncoderModeEnum>* FliSfncCamera::EncoderMode
```

Selects if the count of encoder uses FourPhase mode with jitter filtering or the HighResolution mode without jitter filtering.

6.14.3.225 EncoderOutputMode

```
GenicamFeature<FliSfncCameraEnum::EncoderOutputModeEnum>* FliSfncCamera::EncoderOutputMode
```

Selects the conditions for the Encoder interface to generate a valid Encoder output signal.

6.14.3.226 EncoderReset

```
GenicamFeature* FliSfncCamera::EncoderReset
```

Does a software reset of the selected Encoder and starts it. The Encoder starts counting events immediately after the reset. EncoderReset can be used to reset the Encoder independently from the EncoderResetSource.

6.14.3.227 EncoderResetActivation

```
GenicamFeature<FliSfncCameraEnum::EncoderResetActivationEnum>* FliSfncCamera::EncoderReset↩
Activation
```

Selects the Activation mode of the Encoder Reset Source signal.

6.14.3.228 EncoderResetSource

```
GenicamFeature<FliSfncCameraEnum::EncoderResetSourceEnum>* FliSfncCamera::EncoderResetSource
```

Selects the signals that will be the source to reset the Encoder.

6.14.3.229 EncoderResolution

```
GenicamFeature<double>* FliSfncCamera::EncoderResolution
```

Defines the resolution of one encoder step.

6.14.3.230 EncoderSelector

```
GenicamFeature<FliSfncCameraEnum::EncoderSelectorEnum>* FliSfncCamera::EncoderSelector
```

Selects which Encoder to configure.

6.14.3.231 EncoderSourceA

```
GenicamFeature<FliSfncCameraEnum::EncoderSourceAEnum>* FliSfncCamera::EncoderSourceA
```

Selects the signal which will be the source of the A input of the Encoder.

6.14.3.232 EncoderSourceB

```
GenicamFeature<FliSfncCameraEnum::EncoderSourceBEnum>* FliSfncCamera::EncoderSourceB
```

Selects the signal which will be the source of the B input of the Encoder.

6.14.3.233 EncoderStatus

```
GenicamFeature<FliSfncCameraEnum::EncoderStatusEnum>* FliSfncCamera::EncoderStatus
```

Returns the motion status of the encoder.

6.14.3.234 EncoderTimeout

```
GenicamFeature<double>* FliSfncCamera::EncoderTimeout
```

Sets the maximum time interval between encoder counter increments before the status turns to static.

6.14.3.235 EncoderValue

```
GenicamFeature<int64_t>* FliSfncCamera::EncoderValue
```

Reads or writes the current value of the position counter of the selected Encoder.

6.14.3.236 EncoderValueAtReset

```
GenicamFeature<int64_t>* FliSfncCamera::EncoderValueAtReset
```

Reads the value of the of the position counter of the selected Encoder when it was reset by a signal or by an explicit EncoderReset command.

6.14.3.237 EventAcquisitionEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionEnd
```

Returns the unique Identifier of the Acquisition End type of Event.

6.14.3.238 EventAcquisitionEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition End Event.

6.14.3.239 EventAcquisitionEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionEndTimestamp
```

Returns the Timestamp of the Acquisition End Event.

6.14.3.240 EventAcquisitionError

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionError
```

Returns the unique Identifier of the Acquisition Error type of Event.

6.14.3.241 EventAcquisitionErrorFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionErrorFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Error Event.

6.14.3.242 EventAcquisitionErrorTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionErrorTimestamp
```

Returns the Timestamp of the Acquisition Error Event.

6.14.3.243 EventAcquisitionStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionStart
```

Returns the unique Identifier of the Acquisition Start type of Event.

6.14.3.244 EventAcquisitionStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Start Event.

6.14.3.245 EventAcquisitionStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionStartTimestamp
```

Returns the Timestamp of the Acquisition Start Event.

6.14.3.246 EventAcquisitionTransferEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferEnd
```

Returns the unique Identifier of the Acquisition Transfer End type of Event.

6.14.3.247 EventAcquisitionTransferEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Transfer End Event.

6.14.3.248 EventAcquisitionTransferEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferEndTimestamp
```

Returns the Timestamp of the Acquisition Transfer End Event.

6.14.3.249 EventAcquisitionTransferStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferStart
```

Returns the unique Identifier of the Acquisition Transfer Start type of Event.

6.14.3.250 EventAcquisitionTransferStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Transfer Start Event.

6.14.3.251 EventAcquisitionTransferStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTransferStartTimestamp
```

Returns the Timestamp of the Acquisition Transfer Start Event.

6.14.3.252 EventAcquisitionTrigger

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTrigger
```

Returns the unique Identifier of the Acquisition Trigger type of Event.

6.14.3.253 EventAcquisitionTriggerFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTriggerFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Trigger Event.

6.14.3.254 EventAcquisitionTriggerMissed

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTriggerMissed
```

Returns the unique Identifier of the Acquisition Trigger Missed type of Event.

6.14.3.255 EventAcquisitionTriggerMissedFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTriggerMissedFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Acquisition Trigger Missed Event.

6.14.3.256 EventAcquisitionTriggerMissedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTriggerMissedTimestamp
```

Returns the Timestamp of the Acquisition Trigger Missed Event.

6.14.3.257 EventAcquisitionTriggerTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventAcquisitionTriggerTimestamp
```

Returns the Timestamp of the Acquisition Trigger Event.

6.14.3.258 EventActionLate

```
GenicamFeature<int64_t>* FliSfncCamera::EventActionLate
```

Returns the unique Identifier of the Action Late type of Event.

6.14.3.259 EventActionLateFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventActionLateFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Action Late Event.

6.14.3.260 EventActionLateTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventActionLateTimestamp
```

Returns the Timestamp of the Action Late Event.

6.14.3.261 EventCounter0End

```
GenicamFeature<int64_t>* FliSfncCamera::EventCounter0End
```

Returns the unique Identifier of the Counter 0 End type of Event.

6.14.3.262 EventCounter0EndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventCounter0EndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Counter 0 End Event.

6.14.3.263 EventCounter0EndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventCounter0EndTimestamp
```

Returns the Timestamp of the Counter 0 End Event.

6.14.3.264 EventCounter0Start

```
GenicamFeature<int64_t>* FliSfncCamera::EventCounter0Start
```

Returns the unique Identifier of the Counter 0 Start type of Event.

6.14.3.265 EventCounter0StartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventCounter0StartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Counter 0 Start Event.

6.14.3.266 EventCounter0StartTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter0StartTimestamp`

Returns the Timestamp of the Counter 0 Start Event.

6.14.3.267 EventCounter1End

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1End`

Returns the unique Identifier of the Counter 1 End type of Event.

6.14.3.268 EventCounter1EndFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1EndFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Counter 1 End Event.

6.14.3.269 EventCounter1EndTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1EndTimestamp`

Returns the Timestamp of the Counter 1 End Event.

6.14.3.270 EventCounter1Start

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1Start`

Returns the unique Identifier of the Counter 1 Start type of Event.

6.14.3.271 EventCounter1StartFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1StartFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Counter 1 Start Event.

6.14.3.272 EventCounter1StartTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventCounter1StartTimestamp`

Returns the Timestamp of the Counter 1 Start Event.

6.14.3.273 EventEncoder0Restarted

`GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0Restarted`

Returns the unique Identifier of the Encoder 0 Restarted type of Event.

6.14.3.274 EventEncoder0RestartedFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0RestartedFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Encoder 0 Restarted Event.

6.14.3.275 EventEncoder0RestartedTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0RestartedTimestamp`

Returns the Timestamp of the Encoder 0 Restarted Event.

6.14.3.276 EventEncoder0Stopped

`GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0Stopped`

Returns the unique Identifier of the Encoder 0 Stopped type of Event.

6.14.3.277 EventEncoder0StoppedFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0StoppedFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Encoder 0 Stopped Event.

6.14.3.278 EventEncoder0StoppedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder0StoppedTimestamp
```

Returns the Timestamp of the Encoder 0 Stopped Event.

6.14.3.279 EventEncoder1Restarted

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1Restarted
```

Returns the unique Identifier of the Encoder 1 Restarted type of Event.

6.14.3.280 EventEncoder1RestartedFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1RestartedFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Encoder 1 Restarted Event.

6.14.3.281 EventEncoder1RestartedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1RestartedTimestamp
```

Returns the Timestamp of the Encoder 1 Restarted Event.

6.14.3.282 EventEncoder1Stopped

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1Stopped
```

Returns the unique Identifier of the Encoder 1 Stopped type of Event.

6.14.3.283 EventEncoder1StoppedFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1StoppedFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Encoder 1 Stopped Event.

6.14.3.284 EventEncoder1StoppedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventEncoder1StoppedTimestamp
```

Returns the Timestamp of the Encoder 1 Stopped Event.

6.14.3.285 EventError

```
GenicamFeature<int64_t>* FliSfncCamera::EventError
```

Returns the unique identifier of the Error type of Event. It can be used to register a callback function to be notified of the Error event occurrence. Its value uniquely identifies that the event received was an Error.

6.14.3.286 EventErrorCode

```
GenicamFeature<int64_t>* FliSfncCamera::EventErrorCode
```

Returns an error code for the error(s) that happened.

6.14.3.287 EventErrorFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventErrorFrameID
```

If applicable, returns the unique Identifier of the Frame (or image) that generated the Error Event.

6.14.3.288 EventErrorTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventErrorTimestamp
```

Returns the Timestamp of the Error Event. It can be used to determine when the event occurred.

6.14.3.289 EventExposureEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureEnd
```

Returns the unique Identifier of the Exposure End type of Event.

6.14.3.290 EventExposureEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Exposure End Event.

6.14.3.291 EventExposureEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureEndTimestamp
```

Returns the Timestamp of the Exposure End Event.

6.14.3.292 EventExposureStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureStart
```

Returns the unique Identifier of the Exposure Start type of Event.

6.14.3.293 EventExposureStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Exposure Start Event.

6.14.3.294 EventExposureStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventExposureStartTimestamp
```

Returns the Timestamp of the Exposure Start Event.

6.14.3.295 EventFrameBurstEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstEnd
```

Returns the unique Identifier of the Frame Burst End type of Event.

6.14.3.296 EventFrameBurstEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Burst End Event.

6.14.3.297 EventFrameBurstEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstEndTimestamp
```

Returns the Timestamp of the Frame Burst End Event.

6.14.3.298 EventFrameBurstStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstStart
```

Returns the unique Identifier of the Frame Burst Start type of Event.

6.14.3.299 EventFrameBurstStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Burst Start Event.

6.14.3.300 EventFrameBurstStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameBurstStartTimestamp
```

Returns the Timestamp of the Frame Burst Start Event.

6.14.3.301 EventFrameEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameEnd
```

Returns the unique Identifier of the Frame End type of Event.

6.14.3.302 EventFrameEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame End Event.

6.14.3.303 EventFrameEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameEndTimestamp
```

Returns the Timestamp of the Frame End Event.

6.14.3.304 EventFrameStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameStart
```

Returns the unique Identifier of the Frame Start type of Event.

6.14.3.305 EventFrameStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Start Event.

6.14.3.306 EventFrameStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameStartTimestamp
```

Returns the Timestamp of the Frame Start Event.

6.14.3.307 EventFrameTransferEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferEnd
```

Returns the unique Identifier of the Frame Transfer End type of Event.

6.14.3.308 EventFrameTransferEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Transfer End Event.

6.14.3.309 EventFrameTransferEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferEndTimestamp
```

Returns the Timestamp of the Frame Transfer End Event.

6.14.3.310 EventFrameTransferStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferStart
```

Returns the unique Identifier of the Frame Transfer Start type of Event.

6.14.3.311 EventFrameTransferStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Transfer Start Event.

6.14.3.312 EventFrameTransferStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTransferStartTimestamp
```

Returns the Timestamp of the Frame Transfer Start Event.

6.14.3.313 EventFrameTrigger

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTrigger
```

Returns the unique Identifier of the Frame Trigger type of Event.

6.14.3.314 EventFrameTriggerFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTriggerFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Trigger Event.

6.14.3.315 EventFrameTriggerMissed

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTriggerMissed
```

Returns the unique Identifier of the Frame Trigger Missed type of Event.

6.14.3.316 EventFrameTriggerMissedFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTriggerMissedFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Frame Trigger Missed Event.

6.14.3.317 EventFrameTriggerMissedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTriggerMissedTimestamp
```

Returns the Timestamp of the Frame Trigger Missed Event.

6.14.3.318 EventFrameTriggerTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventFrameTriggerTimestamp
```

Returns the Timestamp of the Frame Trigger Event.

6.14.3.319 EventLine0AnyEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0AnyEdge
```

Returns the unique Identifier of the Line 0 Any Edge type of Event.

6.14.3.320 EventLine0AnyEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0AnyEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 0 Any Edge Event.

6.14.3.321 EventLine0AnyEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0AnyEdgeTimestamp
```

Returns the Timestamp of the Line 0 Any Edge Event.

6.14.3.322 EventLine0FallingEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0FallingEdge
```

Returns the unique Identifier of the Line 0 Falling Edge type of Event.

6.14.3.323 EventLine0FallingEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0FallingEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 0 Falling Edge Event.

6.14.3.324 EventLine0FallingEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0FallingEdgeTimestamp
```

Returns the Timestamp of the Line 0 Falling Edge Event.

6.14.3.325 EventLine0RisingEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0RisingEdge
```

Returns the unique Identifier of the Line 0 Rising Edge type of Event.

6.14.3.326 EventLine0RisingEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0RisingEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 0 Rising Edge Event.

6.14.3.327 EventLine0RisingEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine0RisingEdgeTimestamp
```

Returns the Timestamp of the Line 0 Rising Edge Event.

6.14.3.328 EventLine1AnyEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1AnyEdge
```

Returns the unique Identifier of the Line 1 Any Edge type of Event.

6.14.3.329 EventLine1AnyEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1AnyEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 1 Any Edge Event.

6.14.3.330 EventLine1AnyEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1AnyEdgeTimestamp
```

Returns the Timestamp of the Line 1 Any Edge Event.

6.14.3.331 EventLine1FallingEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1FallingEdge
```

Returns the unique Identifier of the Line 1 Falling Edge type of Event.

6.14.3.332 EventLine1FallingEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1FallingEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 1 Falling Edge Event.

6.14.3.333 EventLine1FallingEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1FallingEdgeTimestamp
```

Returns the Timestamp of the Line 1 Falling Edge Event.

6.14.3.334 EventLine1RisingEdge

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1RisingEdge
```

Returns the unique Identifier of the Line 1 Rising Edge type of Event.

6.14.3.335 EventLine1RisingEdgeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1RisingEdgeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line 1 Rising Edge Event.

6.14.3.336 EventLine1RisingEdgeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLine1RisingEdgeTimestamp
```

Returns the Timestamp of the Line 1 Rising Edge Event.

6.14.3.337 EventLineEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineEnd
```

Returns the unique Identifier of the Line End type of Event.

6.14.3.338 EventLineEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line End Event.

6.14.3.339 EventLineEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineEndTimestamp
```

Returns the Timestamp of the Line End Event.

6.14.3.340 EventLineStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineStart
```

Returns the unique Identifier of the Line Start type of Event.

6.14.3.341 EventLineStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line Start Event.

6.14.3.342 EventLineStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineStartTimestamp
```

Returns the Timestamp of the Line Start Event.

6.14.3.343 EventLineTrigger

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTrigger
```

Returns the unique Identifier of the Line Trigger type of Event.

6.14.3.344 EventLineTriggerFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTriggerFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line Trigger Event.

6.14.3.345 EventLineTriggerMissed

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTriggerMissed
```

Returns the unique Identifier of the Line Trigger Missed type of Event.

6.14.3.346 EventLineTriggerMissedFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTriggerMissedFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Line Trigger Missed Event.

6.14.3.347 EventLineTriggerMissedTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTriggerMissedTimestamp
```

Returns the Timestamp of the Line Trigger Missed Event.

6.14.3.348 EventLineTriggerTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventLineTriggerTimestamp
```

Returns the Timestamp of the Line Trigger Event.

6.14.3.349 EventLinkSpeedChange

```
GenicamFeature<int64_t>* FliSfncCamera::EventLinkSpeedChange
```

Returns the unique Identifier of the Link Speed Change type of Event.

6.14.3.350 EventLinkSpeedChangeFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkSpeedChangeFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Link Speed Change Event.

6.14.3.351 EventLinkSpeedChangeTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkSpeedChangeTimestamp`

Returns the Timestamp of the Link Speed Change Event.

6.14.3.352 EventLinkTrigger0

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger0`

Returns the unique Identifier of the Link Trigger 0 type of Event.

6.14.3.353 EventLinkTrigger0FrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger0FrameID`

Returns the unique Identifier of the Frame (or image) that generated the Link Trigger 0 Event.

6.14.3.354 EventLinkTrigger0Timestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger0Timestamp`

Returns the Timestamp of the Link Trigger 0 Event.

6.14.3.355 EventLinkTrigger1

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger1`

Returns the unique Identifier of the Link Trigger 1 type of Event.

6.14.3.356 EventLinkTrigger1FrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger1FrameID`

Returns the unique Identifier of the Frame (or image) that generated the Link Trigger 1 Event.

6.14.3.357 EventLinkTrigger1Timestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventLinkTrigger1Timestamp`

Returns the Timestamp of the Link Trigger 1 Event.

6.14.3.358 EventNotification

`GenicamFeature<FliSfncCameraEnum::EventNotificationEnum>* FliSfncCamera::EventNotification`

Activate or deactivate the notification to the host application of the occurrence of the selected Event.

6.14.3.359 EventPrimaryApplicationSwitch

`GenicamFeature<int64_t>* FliSfncCamera::EventPrimaryApplicationSwitch`

Returns the unique Identifier of the Primary Application Switch type of Event.

6.14.3.360 EventPrimaryApplicationSwitchFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventPrimaryApplicationSwitchFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Primary Application Switch Event.

6.14.3.361 EventPrimaryApplicationSwitchTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventPrimaryApplicationSwitchTimestamp`

Returns the Timestamp of the Primary Application Switch Event.

6.14.3.362 EventSelector

`GenicamFeature<FliSfncCameraEnum::EventSelectorEnum>* FliSfncCamera::EventSelector`

Selects which Event to signal to the host application.

6.14.3.363 EventSequencerSetChange

`GenicamFeature<int64_t>* FliSfncCamera::EventSequencerSetChange`

Returns the unique Identifier of the Sequencer Set Change type of Event.

6.14.3.364 EventSequencerSetChangeFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventSequencerSetChangeFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Sequencer Set Change Event.

6.14.3.365 EventSequencerSetChangeTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventSequencerSetChangeTimestamp`

Returns the Timestamp of the Sequencer Set Change Event.

6.14.3.366 EventStream0TransferBlockEnd

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockEnd`

Returns the unique Identifier of the Stream 0 Transfer Block End type of Event.

6.14.3.367 EventStream0TransferBlockEndFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockEndFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block End Event.

6.14.3.368 EventStream0TransferBlockEndTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockEndTimestamp`

Returns the Timestamp of the Stream 0 Transfer Block End Event.

6.14.3.369 EventStream0TransferBlockStart

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockStart`

Returns the unique Identifier of the Stream 0 Transfer Block Start type of Event.

6.14.3.370 EventStream0TransferBlockStartFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockStartFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block Start Event.

6.14.3.371 EventStream0TransferBlockStartTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockStartTimestamp`

Returns the Timestamp of the Stream 0 Transfer Block Start Event.

6.14.3.372 EventStream0TransferBlockTrigger

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockTrigger`

Returns the unique Identifier of the Stream 0 Transfer Block Trigger type of Event.

6.14.3.373 EventStream0TransferBlockTriggerFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockTriggerFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Block Trigger Event.

6.14.3.374 EventStream0TransferBlockTriggerTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBlockTriggerTimestamp`

Returns the Timestamp of the Stream 0 Transfer Block Trigger Event.

6.14.3.375 EventStream0TransferBurstEnd

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstEnd`

Returns the unique Identifier of the Stream 0 Transfer Burst End type of Event.

6.14.3.376 EventStream0TransferBurstEndFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstEndFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Burst End Event.

6.14.3.377 EventStream0TransferBurstEndTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstEndTimestamp`

Returns the Timestamp of the Stream 0 Transfer Burst End Event.

6.14.3.378 EventStream0TransferBurstStart

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstStart`

Returns the unique Identifier of the Stream 0 Transfer Burst Start type of Event.

6.14.3.379 EventStream0TransferBurstStartFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstStartFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Burst Start Event.

6.14.3.380 EventStream0TransferBurstStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferBurstStartTimestamp
```

Returns the Timestamp of the Stream 0 Transfer Burst Start Event.

6.14.3.381 EventStream0TransferEnd

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferEnd
```

Returns the unique Identifier of the Stream 0 Transfer End type of Event.

6.14.3.382 EventStream0TransferEndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferEndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer End Event.

6.14.3.383 EventStream0TransferEndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferEndTimestamp
```

Returns the Timestamp of the Stream 0 Transfer End Event.

6.14.3.384 EventStream0TransferOverflow

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferOverflow
```

Returns the unique Identifier of the Stream 0 Transfer Overflow type of Event.

6.14.3.385 EventStream0TransferOverflowFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferOverflowFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Overflow Event.

6.14.3.386 EventStream0TransferOverflowTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferOverflowTimestamp
```

Returns the Timestamp of the Stream 0 Transfer Overflow Event.

6.14.3.387 EventStream0TransferPause

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferPause
```

Returns the unique Identifier of the Stream 0 Transfer Pause type of Event.

6.14.3.388 EventStream0TransferPauseFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferPauseFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Pause Event.

6.14.3.389 EventStream0TransferPauseTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferPauseTimestamp
```

Returns the Timestamp of the Stream 0 Transfer Pause Event.

6.14.3.390 EventStream0TransferResume

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferResume
```

Returns the unique Identifier of the Stream 0 Transfer Resume type of Event.

6.14.3.391 EventStream0TransferResumeFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferResumeFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Resume Event.

6.14.3.392 EventStream0TransferResumeTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferResumeTimestamp
```

Returns the Timestamp of the Stream 0 Transfer Resume Event.

6.14.3.393 EventStream0TransferStart

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferStart
```

Returns the unique Identifier of the Stream 0 Transfer Start type of Event.

6.14.3.394 EventStream0TransferStartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferStartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Stream 0 Transfer Start Event.

6.14.3.395 EventStream0TransferStartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventStream0TransferStartTimestamp
```

Returns the Timestamp of the Stream 0 Transfer Start Event.

6.14.3.396 EventTest

```
GenicamFeature<int64_t>* FliSfncCamera::EventTest
```

Returns the unique identifier of the Event Test type of event generated using the TestEventGenerate command. It can be used to register a callback function to be notified of the EventTest event occurrence. Its value uniquely identifies that the event received was an Event Test.

6.14.3.397 EventTestTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventTestTimestamp
```

Returns the Timestamp of the Event Test event. It can be used to determine when the event occurred.

6.14.3.398 EventTimer0End

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0End
```

Returns the unique Identifier of the Timer 0 End type of Event.

6.14.3.399 EventTimer0EndFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0EndFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Timer 0 End Event.

6.14.3.400 EventTimer0EndTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0EndTimestamp
```

Returns the Timestamp of the Timer 0 End Event.

6.14.3.401 EventTimer0Start

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0Start
```

Returns the unique Identifier of the Timer 0 Start type of Event.

6.14.3.402 EventTimer0StartFrameID

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0StartFrameID
```

Returns the unique Identifier of the Frame (or image) that generated the Timer 0 Start Event.

6.14.3.403 EventTimer0StartTimestamp

```
GenicamFeature<int64_t>* FliSfncCamera::EventTimer0StartTimestamp
```

Returns the Timestamp of the Timer 0 Start Event.

6.14.3.404 EventTimer1End

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1End`

Returns the unique Identifier of the Timer 1 End type of Event.

6.14.3.405 EventTimer1EndFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1EndFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Timer 1 End Event.

6.14.3.406 EventTimer1EndTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1EndTimestamp`

Returns the Timestamp of the Timer 1 End Event.

6.14.3.407 EventTimer1Start

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1Start`

Returns the unique Identifier of the Timer 1 Start type of Event.

6.14.3.408 EventTimer1StartFrameID

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1StartFrameID`

Returns the unique Identifier of the Frame (or image) that generated the Timer 1 Start Event.

6.14.3.409 EventTimer1StartTimestamp

`GenicamFeature<int64_t>* FliSfncCamera::EventTimer1StartTimestamp`

Returns the Timestamp of the Timer 1 Start Event.

6.14.3.410 ExposureAuto

```
GenicamFeature<FliSfncCameraEnum::ExposureAutoEnum>* FliSfncCamera::ExposureAuto
```

Sets the automatic exposure mode when ExposureMode is Timed. The exact algorithm used to implement this control is device-specific.

6.14.3.411 ExposureMode

```
GenicamFeature<FliSfncCameraEnum::ExposureModeEnum>* FliSfncCamera::ExposureMode
```

Sets the operation mode of the Exposure.

6.14.3.412 ExposureTime

```
GenicamFeature<double>* FliSfncCamera::ExposureTime
```

Sets the Exposure time when ExposureMode is Timed and ExposureAuto is Off. This controls the duration where the photosensitive cells are exposed to light.

6.14.3.413 ExposureTimeMode

```
GenicamFeature<FliSfncCameraEnum::ExposureTimeModeEnum>* FliSfncCamera::ExposureTimeMode
```

Sets the configuration mode of the ExposureTime feature.

6.14.3.414 ExposureTimeSelector

```
GenicamFeature<FliSfncCameraEnum::ExposureTimeSelectorEnum>* FliSfncCamera::ExposureTime↩
Selector
```

Selects which exposure time is controlled by the ExposureTime feature. This allows for independent control over the exposure components.

6.14.3.415 FileAccessLength

```
GenicamFeature<int64_t>* FliSfncCamera::FileAccessLength
```

Controls the Length of the mapping between the device file storage and the FileAccessBuffer.

6.14.3.416 FileAccessOffset

```
GenicamFeature<int64_t>* FliSfncCamera::FileAccessOffset
```

Controls the Offset of the mapping between the device file storage and the FileAccessBuffer.

6.14.3.417 FileOpenMode

```
GenicamFeature<FliSfncCameraEnum::FileOpenModeEnum>* FliSfncCamera::FileOpenMode
```

Selects the access mode in which a file is opened in the device.

6.14.3.418 FileOperationExecute

```
GenicamFeature* FliSfncCamera::FileOperationExecute
```

Executes the operation selected by FileOperationSelector on the selected file.

6.14.3.419 FileOperationResult

```
GenicamFeature<int64_t>* FliSfncCamera::FileOperationResult
```

Represents the file operation result. For Read or Write operations, the number of successfully read/written bytes is returned.

6.14.3.420 FileOperationSelector

```
GenicamFeature<FliSfncCameraEnum::FileOperationSelectorEnum>* FliSfncCamera::FileOperation←
Selector
```

Selects the target operation for the selected file in the device. This Operation is executed when the FileOperation← Execute feature is called.

6.14.3.421 FileOperationStatus

```
GenicamFeature<FliSfncCameraEnum::FileOperationStatusEnum>* FliSfncCamera::FileOperationStatus
```

Represents the file operation execution status.

6.14.3.422 FileSelector

```
GenicamFeature<FliSfncCameraEnum::FileSelectorEnum>* FliSfncCamera::FileSelector
```

Selects the target file in the device.

6.14.3.423 FileSize

```
GenicamFeature<int64_t>* FliSfncCamera::FileSize
```

Represents the size of the selected file in bytes.

6.14.3.424 Gain

```
GenicamFeature<double>* FliSfncCamera::Gain
```

Controls the selected gain as an absolute physical value. This is an amplification factor applied to the video signal.

6.14.3.425 GainAuto

```
GenicamFeature<FliSfncCameraEnum::GainAutoEnum>* FliSfncCamera::GainAuto
```

Sets the automatic gain control (AGC) mode. The exact algorithm used to implement AGC is device-specific.

6.14.3.426 GainAutoBalance

```
GenicamFeature<FliSfncCameraEnum::GainAutoBalanceEnum>* FliSfncCamera::GainAutoBalance
```

Sets the mode for automatic gain balancing between the sensor color channels or taps. The gain coefficients of each channel or tap are adjusted so they are matched.

6.14.3.427 GainSelector

```
GenicamFeature<FliSfncCameraEnum::GainSelectorEnum>* FliSfncCamera::GainSelector
```

Selects which Gain is controlled by the various Gain features.

6.14.3.428 Gamma

```
GenicamFeature<double>* FliSfncCamera::Gamma
```

Controls the gamma correction of pixel intensity. This is typically used to compensate for non-linearity of the display system (such as CRT).

6.14.3.429 GenDCStreamingMode

```
GenicamFeature<FliSfncCameraEnum::GenDCStreamingModeEnum>* FliSfncCamera::GenDCStreamingMode
```

Controls the device's streaming format.

6.14.3.430 GenDCStreamingStatus

```
GenicamFeature<FliSfncCameraEnum::GenDCStreamingStatusEnum>* FliSfncCamera::GenDCStreaming←
Status
```

Returns whether the current device data streaming format is GenDC. This value is conditioned by the GenDC← StreamingMode.

6.14.3.431 GevActiveLinkCount

```
GenicamFeature<int64_t>* FliSfncCamera::GevActiveLinkCount
```

Indicates the current number of active logical links.

6.14.3.432 GevCCP

```
GenicamFeature<FliSfncCameraEnum::GevCCPEnum>* FliSfncCamera::GevCCP
```

Controls the device access privilege of an application.

6.14.3.433 GevCurrentDefaultGateway

```
GenicamFeature<int64_t>* FliSfncCamera::GevCurrentDefaultGateway
```

Reports the default gateway IP address of the given logical link.

6.14.3.434 GevCurrentIPAddress

```
GenicamFeature<int64_t>* FliSfncCamera::GevCurrentIPAddress
```

Reports the IP address for the given logical link.

6.14.3.435 GevCurrentIPConfigurationDHCP

```
GenicamFeature<bool>* FliSfncCamera::GevCurrentIPConfigurationDHCP
```

Controls whether the DHCP IP configuration scheme is activated on the given logical link.

6.14.3.436 GevCurrentIPConfigurationLLA

```
GenicamFeature<bool>* FliSfncCamera::GevCurrentIPConfigurationLLA
```

Controls whether the Link Local Address IP configuration scheme is activated on the given logical link.

6.14.3.437 GevCurrentIPConfigurationPersistentIP

```
GenicamFeature<bool>* FliSfncCamera::GevCurrentIPConfigurationPersistentIP
```

Controls whether the PersistentIP configuration scheme is activated on the given logical link.

6.14.3.438 GevCurrentPhysicalLinkConfiguration

```
GenicamFeature<FliSfncCameraEnum::GevCurrentPhysicalLinkConfigurationEnum>* FliSfncCamera::↩
GevCurrentPhysicalLinkConfiguration
```

Indicates the current physical link configuration of the device.

6.14.3.439 GevCurrentSubnetMask

```
GenicamFeature<int64_t>* FliSfncCamera::GevCurrentSubnetMask
```

Reports the subnet mask of the given logical link.

6.14.3.440 GevDiscoveryAckDelay

```
GenicamFeature<int64_t>* FliSfncCamera::GevDiscoveryAckDelay
```

Indicates the maximum randomized delay the device will wait to acknowledge a discovery command.

6.14.3.441 GevFirstURL

```
GenicamFeature<std::string>* FliSfncCamera::GevFirstURL
```

Indicates the first URL to the GenICam XML device description file. The First URL is used as the first choice by the application to retrieve the GenICam XML device description file.

6.14.3.442 GevGVCPExtendedStatusCodes

```
GenicamFeature<bool>* FliSfncCamera::GevGVCPExtendedStatusCodes
```

Enables the generation of extended status codes.

6.14.3.443 GevGVCPExtendedStatusCodesSelector

```
GenicamFeature<FliSfncCameraEnum::GevGVCPExtendedStatusCodesSelectorEnum>* FliSfncCamera::↩
GevGVCPExtendedStatusCodesSelector
```

Selects the GigE Vision version to control extended status codes for.

6.14.3.444 GevGVCPPendingAck

```
GenicamFeature<bool>* FliSfncCamera::GevGVCPPendingAck
```

Enables the generation of PENDING_ACK.

6.14.3.445 GevGVSPExtendedIDMode

```
GenicamFeature<FliSfncCameraEnum::GevGVSPExtendedIDModeEnum>* FliSfncCamera::GevGVSPExtended↩
IDMode
```

Enables the extended IDs mode.

6.14.3.446 GevInterfaceSelector

```
GenicamFeature<int64_t>* FliSfncCamera::GevInterfaceSelector
```

Selects which logical link to control.

6.14.3.447 GevIPConfigurationStatus

```
GenicamFeature<FliSfncCameraEnum::GevIPConfigurationStatusEnum>* FliSfncCamera::GevIPConfiguration↩
Status
```

Reports the current IP configuration status.

6.14.3.448 GevMACAddress

```
GenicamFeature<int64_t>* FliSfncCamera::GevMACAddress
```

MAC address of the logical link.

6.14.3.449 GevMCDA

```
GenicamFeature<int64_t>* FliSfncCamera::GevMCDA
```

Controls the destination IP address for the message channel.

6.14.3.450 GevMCPHostPort

```
GenicamFeature<int64_t>* FliSfncCamera::GevMCPHostPort
```

Controls the port to which the device must send messages. Setting this value to 0 closes the message channel.

6.14.3.451 GevMCRC

```
GenicamFeature<int64_t>* FliSfncCamera::GevMCRC
```

Controls the number of retransmissions allowed when a message channel message times out.

6.14.3.452 GevMCSP

```
GenicamFeature<int64_t>* FliSfncCamera::GevMCSP
```

This feature indicates the source port for the message channel.

6.14.3.453 GevMCTT

```
GenicamFeature<int64_t>* FliSfncCamera::GevMCTT
```

Provides the transmission timeout value in milliseconds.

6.14.3.454 GevPAUSEFrameReception

```
GenicamFeature<bool>* FliSfncCamera::GevPAUSEFrameReception
```

Controls whether incoming PAUSE Frames are handled on the given logical link.

6.14.3.455 GevPAUSEFrameTransmission

```
GenicamFeature<bool>* FliSfncCamera::GevPAUSEFrameTransmission
```

Controls whether PAUSE Frames can be generated on the given logical link.

6.14.3.456 GevPersistentDefaultGateway

```
GenicamFeature<int64_t>* FliSfncCamera::GevPersistentDefaultGateway
```

Controls the persistent default gateway for this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

6.14.3.457 GevPersistentIPAddress

```
GenicamFeature<int64_t>* FliSfncCamera::GevPersistentIPAddress
```

Controls the Persistent IP address for this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

6.14.3.458 GevPersistentSubnetMask

```
GenicamFeature<int64_t>* FliSfncCamera::GevPersistentSubnetMask
```

Controls the Persistent subnet mask associated with the Persistent IP address on this logical link. It is only used when the device boots with the Persistent IP configuration scheme.

6.14.3.459 GevPhysicalLinkConfiguration

```
GenicamFeature<FliSfncCameraEnum::GevPhysicalLinkConfigurationEnum>* FliSfncCamera::Gev↩
PhysicalLinkConfiguration
```

Controls the principal physical link configuration to use on next restart/power-up of the device.

6.14.3.460 GevPrimaryApplicationIPAddress

```
GenicamFeature<int64_t>* FliSfncCamera::GevPrimaryApplicationIPAddress
```

Returns the address of the primary application.

6.14.3.461 GevPrimaryApplicationSocket

```
GenicamFeature<int64_t>* FliSfncCamera::GevPrimaryApplicationSocket
```

Returns the UDP source port of the primary application.

6.14.3.462 GevPrimaryApplicationSwitchoverKey

```
GenicamFeature<int64_t>* FliSfncCamera::GevPrimaryApplicationSwitchoverKey
```

Controls the key to use to authenticate primary application switchover requests.

6.14.3.463 GevSCCFGAllInTransmission

```
GenicamFeature<bool>* FliSfncCamera::GevSCCFGAllInTransmission
```

Enables the selected GVSP transmitter to use the single packet per data block All-in Transmission mode.

6.14.3.464 GevSCCFGExtendedChunkData

```
GenicamFeature<bool>* FliSfncCamera::GevSCCFGExtendedChunkData
```

Enables cameras to use the extended chunk data payload type for this stream channel.

6.14.3.465 GevSCCFGPacketResendDestination

```
GenicamFeature<bool>* FliSfncCamera::GevSCCFGPacketResendDestination
```

Enables the alternate IP destination for stream packets resent due to a packet resend request. When True, the source IP address provided in the packet resend command packet is used. When False, the value set in the GevSCDA[GevStreamChannelSelector] feature is used.

6.14.3.466 GevSCCFGUnconditionalStreaming

```
GenicamFeature<bool>* FliSfncCamera::GevSCCFGUnconditionalStreaming
```

Enables the camera to continue to stream, for this stream channel, if its control channel is closed or regardless of the reception of any ICMP messages (such as destination unreachable messages).

6.14.3.467 GevSCDA

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCDA
```

Controls the destination IP address of the selected stream channel to which a GVSP transmitter must send data stream or the destination IP address from which a GVSP receiver may receive data stream.

6.14.3.468 GevSCPD

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCPD
```

Controls the delay (in GEV timestamp counter unit) to insert between each packet for this stream channel. This can be used as a crude flow-control mechanism if the application or the network infrastructure cannot keep up with the packets coming from the device.

6.14.3.469 GevSCPHostPort

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCPHostPort
```

Controls the port of the selected channel to which a GVSP transmitter must send data stream or the port from which a GVSP receiver may receive data stream. Setting this value to 0 closes the stream channel.

6.14.3.470 GevSCPInterfaceIndex

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCPInterfaceIndex
```

Index of the logical link to use.

6.14.3.471 GevSCPSDoNotFragment

```
GenicamFeature<bool>* FliSfncCamera::GevSCPSDoNotFragment
```

The state of this feature is copied into the "do not fragment" bit of IP header of each stream packet. It can be used by the application to prevent IP fragmentation of packets on the stream channel.

6.14.3.472 GevSCPSFireTestPacket

```
GenicamFeature<bool>* FliSfncCamera::GevSCPSFireTestPacket
```

Sends a test packet. When this feature is set, the device will fire one test packet.

6.14.3.473 GevSCPSPacketSize

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCPSPacketSize
```

This GigE Vision specific feature corresponds to DeviceStreamChannelPacketSize and should be kept in sync with it. It specifies the stream packet size, in bytes, to send on the selected channel for a GVSP transmitter or specifies the maximum packet size supported by a GVSP receiver.

6.14.3.474 GevSCSP

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCSP
```

Indicates the source port of the stream channel.

6.14.3.475 GevSCZoneConfigurationLock

```
GenicamFeature<bool>* FliSfncCamera::GevSCZoneConfigurationLock
```

Controls whether the selected stream channel multi-zone configuration is locked. When locked, the GVSP transmitter is not allowed to change the number of zones and their direction during block acquisition and transmission.

6.14.3.476 GevSCZoneCount

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCZoneCount
```

Reports the number of zones per block transmitted on the selected stream channel.

6.14.3.477 GevSCZoneDirectionAll

```
GenicamFeature<int64_t>* FliSfncCamera::GevSCZoneDirectionAll
```

Reports the transmission direction of each zone transmitted on the selected stream channel.

6.14.3.478 GevSecondURL

```
GenicamFeature<std::string>* FliSfncCamera::GevSecondURL
```

Indicates the second URL to the GenICam XML device description file. This URL is an alternative if the application was unsuccessful to retrieve the device description file using the first URL.

6.14.3.479 GevStreamChannelSelector

```
GenicamFeature<int64_t>* FliSfncCamera::GevStreamChannelSelector
```

Selects the stream channel to control.

6.14.3.480 GevSupportedOption

```
GenicamFeature<bool>* FliSfncCamera::GevSupportedOption
```

Returns if the selected GEV option is supported.

6.14.3.481 GevSupportedOptionSelector

```
GenicamFeature<FliSfncCameraEnum::GevSupportedOptionSelectorEnum>* FliSfncCamera::GevSupported↩
OptionSelector
```

Selects the GEV option to interrogate for existing support.

6.14.3.482 GroupIDValue

```
GenicamFeature<int64_t>* FliSfncCamera::GroupIDValue
```

Returns a unique Identifier value corresponding to the selected Group of Components. If no grouping is required, this value should be set to 0.

6.14.3.483 GroupSelector

```
GenicamFeature<FliSfncCameraEnum::GroupSelectorEnum>* FliSfncCamera::GroupSelector
```

Selects a Group of component to control or inquire. The GroupSelector determines which components Group will be used for the selected features.

6.14.3.484 Height

```
GenicamFeature<int64_t>* FliSfncCamera::Height
```

Height of the image provided by the device (in pixels).

6.14.3.485 HeightMax

```
GenicamFeature<int64_t>* FliSfncCamera::HeightMax
```

Maximum height of the image (in pixels). This dimension is calculated after vertical binning, decimation or any other function changing the vertical dimension of the image.

6.14.3.486 ImageCompressionBitrate

```
GenicamFeature<double>* FliSfncCamera::ImageCompressionBitrate
```

Control the rate of the produced compressed stream.

6.14.3.487 ImageCompressionJPEGFormatOption

```
GenicamFeature<FliSfncCameraEnum::ImageCompressionJPEGFormatOptionEnum>* FliSfncCamera::↩
ImageCompressionJPEGFormatOption
```

When JPEG is selected as the compression format, a device might optionally offer better control over JPEG-specific options through this feature.

6.14.3.488 ImageCompressionMode

```
GenicamFeature<FliSfncCameraEnum::ImageCompressionModeEnum>* FliSfncCamera::ImageCompression↩
Mode
```

Enable a specific image compression mode as the base mode for image transfer. Optionally, chunk data can be appended to the compressed image (See the REF _Ref397502619 \h chapter).

6.14.3.489 ImageCompressionQuality

```
GenicamFeature<int64_t>* FliSfncCamera::ImageCompressionQuality
```

Control the quality of the produced compressed stream.

6.14.3.490 ImageCompressionRateOption

```
GenicamFeature<FliSfncCameraEnum::ImageCompressionRateOptionEnum>* FliSfncCamera::Image↩
CompressionRateOption
```

Two rate controlling options are offered: fixed bit rate or fixed quality. The exact implementation to achieve one or the other is vendor-specific.

6.14.3.491 LightBrightness

```
GenicamFeature<double>* FliSfncCamera::LightBrightness
```

Set the brightness of the lighting output in percent. Can be greater than 100% for short overdrive period.

6.14.3.492 LightConnectionStatus

```
GenicamFeature<FliSfncCameraEnum::LightConnectionStatusEnum>* FliSfncCamera::LightConnection↩
Status
```

Status of a light connected to the controller's output Line.

6.14.3.493 LightControllerSelector

```
GenicamFeature<FliSfncCameraEnum::LightControllerSelectorEnum>* FliSfncCamera::LightController↩
Selector
```

Selects the Light Controller to configure.

6.14.3.494 LightControllerSource

```
GenicamFeature<FliSfncCameraEnum::LightControllerSourceEnum>* FliSfncCamera::LightController↩
Source
```

Selects the input source signal of the Light Controller.

6.14.3.495 LightCurrentMeasured

```
GenicamFeature<double>* FliSfncCamera::LightCurrentMeasured
```

The measured current applied to the lighting.

6.14.3.496 LightCurrentRating

```
GenicamFeature<double>* FliSfncCamera::LightCurrentRating
```

Set the current rating of the lighting output.

6.14.3.497 LightVoltageMeasured

```
GenicamFeature<double>* FliSfncCamera::LightVoltageMeasured
```

The measured voltage applied to the lighting.

6.14.3.498 LightVoltageRating

```
GenicamFeature<double>* FliSfncCamera::LightVoltageRating
```

Set the voltage rating of the lighting output.

6.14.3.499 LineFormat

```
GenicamFeature<FliSfncCameraEnum::LineFormatEnum>* FliSfncCamera::LineFormat
```

Controls the current electrical format of the selected physical input or output Line.

6.14.3.500 LineInverter

```
GenicamFeature<bool>* FliSfncCamera::LineInverter
```

Controls the inversion of the signal of the selected input or output Line.

6.14.3.501 LineMode

```
GenicamFeature<FliSfncCameraEnum::LineModeEnum>* FliSfncCamera::LineMode
```

Controls if the physical Line is used to Input or Output a signal.

6.14.3.502 LinePitch

```
GenicamFeature<int64_t>* FliSfncCamera::LinePitch
```

Total number of bytes between the starts of 2 consecutive lines. This feature is used to facilitate alignment of image data.

6.14.3.503 LinePitchEnable

```
GenicamFeature<bool>* FliSfncCamera::LinePitchEnable
```

This feature controls whether the LinePitch feature is writable. Otherwise LinePitch is implicitly controlled by the combination of features like Width, PixelFormat, etc...

6.14.3.504 LineSelector

```
GenicamFeature<FliSfncCameraEnum::LineSelectorEnum>* FliSfncCamera::LineSelector
```

Selects the physical line (or pin) of the external device connector or the virtual line of the Transport Layer to configure.

6.14.3.505 LineSource

```
GenicamFeature<FliSfncCameraEnum::LineSourceEnum>* FliSfncCamera::LineSource
```

Selects which internal acquisition or I/O source signal to output on the selected Line. LineMode must be Output.

6.14.3.506 LineStatus

```
GenicamFeature<bool>* FliSfncCamera::LineStatus
```

Returns the current status of the selected input or output Line.

6.14.3.507 LineStatusAll

```
GenicamFeature<int64_t>* FliSfncCamera::LineStatusAll
```

Returns the current status of all available Line signals at time of polling in a single bitfield.

6.14.3.508 LogicBlockFunction

```
GenicamFeature<FliSfncCameraEnum::LogicBlockFunctionEnum>* FliSfncCamera::LogicBlockFunction
```

Selects the combinational logic Function of the Logic Block to configure.

6.14.3.509 LogicBlockInputInverter

```
GenicamFeature<bool>* FliSfncCamera::LogicBlockInputInverter
```

Selects if the selected Logic Block Input source signal is inverted. This feature is not available when the Logic↵ BlockInputSource is set to True or False.

6.14.3.510 LogicBlockInputNumber

```
GenicamFeature<int64_t>* FliSfncCamera::LogicBlockInputNumber
```

Specifies the number of active signal inputs of the Logic Block.

6.14.3.511 LogicBlockInputSelector

```
GenicamFeature<int64_t>* FliSfncCamera::LogicBlockInputSelector
```

Selects the Logic Block's input to configure.

6.14.3.512 LogicBlockInputSource

```
GenicamFeature<FliSfncCameraEnum::LogicBlockInputSourceEnum>* FliSfncCamera::LogicBlockInput↩
Source
```

Selects the source signal for the input into the Logic Block. True or False indicates the input is forced constant.

6.14.3.513 LogicBlockLUTIndex

```
GenicamFeature<int64_t>* FliSfncCamera::LogicBlockLUTIndex
```

Controls the index of the truth table to access in the selected LUT.

6.14.3.514 LogicBlockLUTSelector

```
GenicamFeature<FliSfncCameraEnum::LogicBlockLUTSelectorEnum>* FliSfncCamera::LogicBlockLUT↩
Selector
```

Selects which of the two LUTs to configure when the selected Logic Block is a Latched dual LUTs (i.e: Logical↩ BlockFunction = LatchedLUT).

6.14.3.515 LogicBlockLUTValue

```
GenicamFeature<bool>* FliSfncCamera::LogicBlockLUTValue
```

Read or Write the Value associated with the entry at index LogicBlockLUTIndex of the selected LUT.

6.14.3.516 LogicBlockLUTValueAll

`GenicamFeature<int64_t>* FliSfncCamera::LogicBlockLUTValueAll`

Sets the values of all the output bits of the selected LUT in one access ignoring LogicBlockLUTIndex. LogicBlock↵ LUTValueAll value can be any binary number and each bit correspond to the output value for the corresponding index (i.e. Bit 0 = LUT Index 0 output binary value).

6.14.3.517 LogicBlockSelector

`GenicamFeature<FliSfncCameraEnum::LogicBlockSelectorEnum>* FliSfncCamera::LogicBlockSelector`

Specifies the Logic Block to configure.

6.14.3.518 LUTEnable

`GenicamFeature<bool>* FliSfncCamera::LUTEnable`

Activates the selected LUT.

6.14.3.519 LUTIndex

`GenicamFeature<int64_t>* FliSfncCamera::LUTIndex`

Control the index (offset) of the coefficient to access in the selected LUT.

6.14.3.520 LUTSelector

`GenicamFeature<FliSfncCameraEnum::LUTSelectorEnum>* FliSfncCamera::LUTSelector`

Selects which LUT to control.

6.14.3.521 LUTValue

`GenicamFeature<int64_t>* FliSfncCamera::LUTValue`

Returns the Value at entry LUTIndex of the LUT selected by LUTSelector.

6.14.3.522 MultiSlopeExposureGradient

`GenicamFeature<double>* FliSfncCamera::MultiSlopeExposureGradient`

The gradient of the additional slope that is defined by this knee-point.

6.14.3.523 MultiSlopeExposureLimit

`GenicamFeature<double>* FliSfncCamera::MultiSlopeExposureLimit`

Percent of the ExposureTime at a certain knee-point of multi-slope exposure.

6.14.3.524 MultiSlopeIntensityLimit

`GenicamFeature<double>* FliSfncCamera::MultiSlopeIntensityLimit`

The relative intensity which divides intensities influenced by different exposure slopes.

6.14.3.525 MultiSlopeKneePointCount

`GenicamFeature<int64_t>* FliSfncCamera::MultiSlopeKneePointCount`

The number of knee-points as well as the number of additional exposure slopes used for multi-slope exposure.

6.14.3.526 MultiSlopeKneePointSelector

`GenicamFeature<int64_t>* FliSfncCamera::MultiSlopeKneePointSelector`

Selects the parameters for controlling an additional slope in multi-slope exposure.

6.14.3.527 MultiSlopeMode

`GenicamFeature<FliSfncCameraEnum::MultiSlopeModeEnum>* FliSfncCamera::MultiSlopeMode`

Controls multi-slope exposure state.

6.14.3.528 MultiSlopeSaturationThreshold

```
GenicamFeature<double>* FliSfncCamera::MultiSlopeSaturationThreshold
```

The percentage of the full saturation that is applied at a certain knee-point of a multi-slope exposure.

6.14.3.529 OffsetX

```
GenicamFeature<int64_t>* FliSfncCamera::OffsetX
```

Horizontal offset from the origin to the region of interest (in pixels).

6.14.3.530 OffsetY

```
GenicamFeature<int64_t>* FliSfncCamera::OffsetY
```

Vertical offset from the origin to the region of interest (in pixels).

6.14.3.531 PayloadSize

```
GenicamFeature<int64_t>* FliSfncCamera::PayloadSize
```

Provides the number of bytes transferred for each data buffer or chunk on the stream channel. This includes any end-of-line, end-of-frame statistics or other stamp data. This is the total size of data payload for a data block.

6.14.3.532 PixelColorFilter

```
GenicamFeature<FliSfncCameraEnum::PixelColorFilterEnum>* FliSfncCamera::PixelColorFilter
```

Type of color filter that is applied to the image.

6.14.3.533 PixelDynamicRangeMax

```
GenicamFeature<int64_t>* FliSfncCamera::PixelDynamicRangeMax
```

Maximum value that will be returned during the digitization process. This corresponds to the brightest value of the camera. For color camera, this returns the biggest value that each color component can take.

6.14.3.534 PixelDynamicRangeMin

```
GenicamFeature<int64_t>* FliSfncCamera::PixelDynamicRangeMin
```

Minimum value that can be returned during the digitization process. This corresponds to the darkest value of the camera. For color camera, this returns the smallest value that each color component can take.

6.14.3.535 PixelFormat

```
GenicamFeature<FliSfncCameraEnum::PixelFormatEnum>* FliSfncCamera::PixelFormat
```

Format of the pixels provided by the device. It represents all the information provided by PixelSize, PixelColorFilter combined in a single feature.

6.14.3.536 PixelFormatInfoID

```
GenicamFeature<int64_t>* FliSfncCamera::PixelFormatInfoID
```

Returns the value used by the streaming channels to identify the selected pixel format.

6.14.3.537 PixelFormatInfoSelector

```
GenicamFeature<FliSfncCameraEnum::PixelFormatInfoSelectorEnum>* FliSfncCamera::PixelFormat←
InfoSelector
```

Select the pixel format for which the information will be returned.

6.14.3.538 PixelSize

```
GenicamFeature<FliSfncCameraEnum::PixelSizeEnum>* FliSfncCamera::PixelSize
```

Total size in bits of a pixel of the image.

6.14.3.539 PtpClockAccuracy

```
GenicamFeature<FliSfncCameraEnum::PtpClockAccuracyEnum>* FliSfncCamera::PtpClockAccuracy
```

Indicates the expected accuracy of the device PTP clock when it is the grandmaster, or in the event it becomes the grandmaster.

6.14.3.540 PtpClockID

```
GenicamFeature<int64_t>* FliSfncCamera::PtpClockID
```

Returns the latched clock ID of the PTP device.

6.14.3.541 PtpDataSetLatch

```
GenicamFeature* FliSfncCamera::PtpDataSetLatch
```

Latches the current values from the device's PTP clock data set.

6.14.3.542 PtpEnable

```
GenicamFeature<bool>* FliSfncCamera::PtpEnable
```

Enables the Precision Time Protocol (PTP).

6.14.3.543 PtpGrandmasterClockID

```
GenicamFeature<int64_t>* FliSfncCamera::PtpGrandmasterClockID
```

Returns the latched grandmaster clock ID of the PTP device. The grandmaster clock ID is the clock ID of the current grandmaster clock.

6.14.3.544 PtpOffsetFromMaster

```
GenicamFeature<int64_t>* FliSfncCamera::PtpOffsetFromMaster
```

Returns the latched offset from the PTP master clock in nanoseconds.

6.14.3.545 PtpParentClockID

```
GenicamFeature<int64_t>* FliSfncCamera::PtpParentClockID
```

Returns the latched parent clock ID of the PTP device. The parent clock ID is the clock ID of the current master clock.

6.14.3.546 PtpServoStatus

`GenicamFeature<FliSfncCameraEnum::PtpServoStatusEnum>* FliSfncCamera::PtpServoStatus`

Returns the latched state of the clock servo. When the servo is in a locked state, the value returned is 'Locked'. When the servo is in a non-locked state, a device-specific value can be returned to give specific information. If no device-specific value is available to describe the current state of the clock servo, the value should be 'Unknown'.

6.14.3.547 PtpStatus

`GenicamFeature<FliSfncCameraEnum::PtpStatusEnum>* FliSfncCamera::PtpStatus`

Returns the latched state of the PTP clock.

6.14.3.548 RegionDestination

`GenicamFeature<FliSfncCameraEnum::RegionDestinationEnum>* FliSfncCamera::RegionDestination`

Control the destination of the selected region.

6.14.3.549 RegionIDValue

`GenicamFeature<int64_t>* FliSfncCamera::RegionIDValue`

Returns a unique Identifier value that corresponds to the selected Region.

6.14.3.550 RegionMode

`GenicamFeature<FliSfncCameraEnum::RegionModeEnum>* FliSfncCamera::RegionMode`

Controls if the selected Region of interest is active and streaming.

6.14.3.551 RegionSelector

`GenicamFeature<FliSfncCameraEnum::RegionSelectorEnum>* FliSfncCamera::RegionSelector`

Selects the Region of interest to control. The RegionSelector feature allows devices that are able to extract multiple regions out of an image, to configure the features of those individual regions independently.

6.14.3.552 ReverseX

```
GenicamFeature<bool>* FliSfncCamera::ReverseX
```

Flip horizontally the image sent by the device. The Region of interest is applied after the flipping.

6.14.3.553 ReverseY

```
GenicamFeature<bool>* FliSfncCamera::ReverseY
```

Flip vertically the image sent by the device. The Region of interest is applied after the flipping.

6.14.3.554 Scan3dAxisMax

```
GenicamFeature<double>* FliSfncCamera::Scan3dAxisMax
```

Maximum valid transmitted coordinate value of the selected Axis.

6.14.3.555 Scan3dAxisMin

```
GenicamFeature<double>* FliSfncCamera::Scan3dAxisMin
```

Minimum valid transmitted coordinate value of the selected Axis.

6.14.3.556 Scan3dBaseline

```
GenicamFeature<double>* FliSfncCamera::Scan3dBaseline
```

Returns the baseline as the physical distance of two cameras in a stereo camera setup. The value of this feature can be used for 3D reconstruction from disparity images. In this case, the unit of the 3D coordinates corresponds to the unit of the baseline.

6.14.3.557 Scan3dCoordinateOffset

```
GenicamFeature<double>* FliSfncCamera::Scan3dCoordinateOffset
```

Offset when transforming a pixel from relative coordinates to world coordinates.

6.14.3.558 Scan3dCoordinateReferenceSelector

```
GenicamFeature<FliSfncCameraEnum::Scan3dCoordinateReferenceSelectorEnum>* FliSfncCamera::↩
Scan3dCoordinateReferenceSelector
```

Sets the index to read a coordinate system reference value defining the transform of a point from the current (Anchor or Transformed) system to the reference system.

6.14.3.559 Scan3dCoordinateReferenceValue

```
GenicamFeature<double>* FliSfncCamera::Scan3dCoordinateReferenceValue
```

Returns the reference value selected. Reads the value of a rotation or translation value for the current (Anchor or Transformed) coordinate system transformation to the Reference system.

6.14.3.560 Scan3dCoordinateScale

```
GenicamFeature<double>* FliSfncCamera::Scan3dCoordinateScale
```

Scale factor when transforming a pixel from relative coordinates to world coordinates.

6.14.3.561 Scan3dCoordinateSelector

```
GenicamFeature<FliSfncCameraEnum::Scan3dCoordinateSelectorEnum>* FliSfncCamera::Scan3dCoordinate↩
Selector
```

Selects the individual coordinates in the vectors for 3D information/transformation.

6.14.3.562 Scan3dCoordinateSystem

```
GenicamFeature<FliSfncCameraEnum::Scan3dCoordinateSystemEnum>* FliSfncCamera::Scan3dCoordinate↩
System
```

Specifies the Coordinate system to use for the device.

6.14.3.563 Scan3dCoordinateSystemReference

```
GenicamFeature<FliSfncCameraEnum::Scan3dCoordinateSystemReferenceEnum>* FliSfncCamera::↩
Scan3dCoordinateSystemReference
```

Defines coordinate system reference location.

6.14.3.564 Scan3dCoordinateTransformSelector

```
GenicamFeature<FliSfncCameraEnum::Scan3dCoordinateTransformSelectorEnum>* FliSfncCamera::↩
Scan3dCoordinateTransformSelector
```

Sets the index to read/write a coordinate transform value.

6.14.3.565 Scan3dDistanceUnit

```
GenicamFeature<FliSfncCameraEnum::Scan3dDistanceUnitEnum>* FliSfncCamera::Scan3dDistanceUnit
```

Specifies the unit used when delivering (calibrated) distance data.

6.14.3.566 Scan3dExtractionMethod

```
GenicamFeature<FliSfncCameraEnum::Scan3dExtractionMethodEnum>* FliSfncCamera::Scan3dExtraction↩
Method
```

Selects the method for extracting 3D from the input sensor data.

6.14.3.567 Scan3dExtractionSelector

```
GenicamFeature<FliSfncCameraEnum::Scan3dExtractionSelectorEnum>* FliSfncCamera::Scan3dExtraction↩
Selector
```

Selects the 3DExtraction processing module to control (if multiple ones are present).

6.14.3.568 Scan3dExtractionSource

```
GenicamFeature<FliSfncCameraEnum::Scan3dExtractionSourceEnum>* FliSfncCamera::Scan3dExtraction↩
Source
```

Selects the sensor's data source region for 3D Extraction module.

6.14.3.569 Scan3dFocalLength

```
GenicamFeature<double>* FliSfncCamera::Scan3dFocalLength
```

Returns the focal length of the camera in pixel. The focal length depends on the selected region. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.

6.14.3.570 Scan3dInvalidDataFlag

```
GenicamFeature<bool>* FliSfncCamera::Scan3dInvalidDataFlag
```

Enables the definition of a non-valid flag value in the data stream. Note that the confidence output is an alternate recommended way to identify non-valid pixels. Using a Scan3dInvalidDataValue may give processing penalties due to special handling.

6.14.3.571 Scan3dInvalidDataValue

```
GenicamFeature<double>* FliSfncCamera::Scan3dInvalidDataValue
```

Value which identifies a non-valid pixel if Scan3dInvalidDataFlag is enabled.

6.14.3.572 Scan3dOutputMode

```
GenicamFeature<FliSfncCameraEnum::Scan3dOutputModeEnum>* FliSfncCamera::Scan3dOutputMode
```

Controls the Calibration and data organization of the device and the coordinates transmitted.

6.14.3.573 Scan3dPrincipalPointU

```
GenicamFeature<double>* FliSfncCamera::Scan3dPrincipalPointU
```

Returns the value of the horizontal position of the principal point, relative to the region origin, i.e. OffsetX. The value of this feature takes into account horizontal binning, decimation, or any other function changing the image resolution.

6.14.3.574 Scan3dPrincipalPointV

```
GenicamFeature<double>* FliSfncCamera::Scan3dPrincipalPointV
```

Returns the value of the vertical position of the principal point, relative to the region origin, i.e. OffsetY. The value of this feature takes into account vertical binning, decimation, or any other function changing the image resolution.

6.14.3.575 Scan3dTransformValue

```
GenicamFeature<double>* FliSfncCamera::Scan3dTransformValue
```

Specifies the transform value selected. For translations (Scan3dCoordinateTransformSelector = TranslationX/Y/Z) it is expressed in the distance unit of the system, for rotations (Scan3dCoordinateTransformSelector =RotationX/Y/Z) in degrees.

6.14.3.576 SensorDigitizationTaps

```
GenicamFeature<FliSfncCameraEnum::SensorDigitizationTapsEnum>* FliSfncCamera::SensorDigitization↩
Taps
```

Number of digitized samples outputted simultaneously by the camera A/D conversion stage.

6.14.3.577 SensorHeight

```
GenicamFeature<int64_t>* FliSfncCamera::SensorHeight
```

Effective height of the sensor in pixels.

6.14.3.578 SensorName

```
GenicamFeature<std::string>* FliSfncCamera::SensorName
```

Product name of the imaging Sensor.

6.14.3.579 SensorPixelHeight

```
GenicamFeature<double>* FliSfncCamera::SensorPixelHeight
```

Physical size (pitch) in the y direction of a photo sensitive pixel unit.

6.14.3.580 SensorPixelWidth

```
GenicamFeature<double>* FliSfncCamera::SensorPixelWidth
```

Physical size (pitch) in the x direction of a photo sensitive pixel unit.

6.14.3.581 SensorShutterMode

```
GenicamFeature<FliSfncCameraEnum::SensorShutterModeEnum>* FliSfncCamera::SensorShutterMode
```

Specifies the shutter mode of the device.

6.14.3.582 SensorTaps

```
GenicamFeature<FliSfncCameraEnum::SensorTapsEnum>* FliSfncCamera::SensorTaps
```

Number of taps of the camera sensor.

6.14.3.583 SensorWidth

```
GenicamFeature<int64_t>* FliSfncCamera::SensorWidth
```

Effective width of the sensor in pixels.

6.14.3.584 SequencerConfigurationMode

```
GenicamFeature<FliSfncCameraEnum::SequencerConfigurationModeEnum>* FliSfncCamera::Sequencer←
ConfigurationMode
```

Controls if the sequencer configuration mode is active.

6.14.3.585 SequencerFeatureEnable

```
GenicamFeature<bool>* FliSfncCamera::SequencerFeatureEnable
```

Enables the selected feature and make it active in all the sequencer sets.

6.14.3.586 SequencerFeatureSelector

```
GenicamFeature<FliSfncCameraEnum::SequencerFeatureSelectorEnum>* FliSfncCamera::Sequencer←
FeatureSelector
```

Selects which sequencer features to control.

6.14.3.587 SequencerMode

```
GenicamFeature<FliSfncCameraEnum::SequencerModeEnum>* FliSfncCamera::SequencerMode
```

Controls if the sequencer mechanism is active.

6.14.3.588 SequencerPathSelector

```
GenicamFeature<int64_t>* FliSfncCamera::SequencerPathSelector
```

Selects to which branching path further path settings applies.

6.14.3.589 SequencerSetActive

```
GenicamFeature<int64_t>* FliSfncCamera::SequencerSetActive
```

Contains the currently active sequencer set.

6.14.3.590 SequencerSetLoad

```
GenicamFeature* FliSfncCamera::SequencerSetLoad
```

Loads the sequencer set selected by SequencerSetSelector in the device. Even if SequencerMode is off, this will change the device state to the configuration of the selected set.

6.14.3.591 SequencerSetNext

```
GenicamFeature<int64_t>* FliSfncCamera::SequencerSetNext
```

Specifies the next sequencer set.

6.14.3.592 SequencerSetSave

```
GenicamFeature* FliSfncCamera::SequencerSetSave
```

Saves the current device state to the sequencer set selected by the SequencerSetSelector.

6.14.3.593 SequencerSetSelector

```
GenicamFeature<int64_t>* FliSfncCamera::SequencerSetSelector
```

Selects the sequencer set to which further feature settings applies.

6.14.3.594 SequencerSetStart

```
GenicamFeature<int64_t>* FliSfncCamera::SequencerSetStart
```

Sets the initial/start sequencer set, which is the first set used within a sequencer.

6.14.3.595 SequencerTriggerActivation

```
GenicamFeature<FliSfncCameraEnum::SequencerTriggerActivationEnum>* FliSfncCamera::Sequencer←
TriggerActivation
```

Specifies the activation mode of the sequencer trigger.

6.14.3.596 SequencerTriggerSource

```
GenicamFeature<FliSfncCameraEnum::SequencerTriggerSourceEnum>* FliSfncCamera::Sequencer←
TriggerSource
```

Specifies the internal signal or physical input line to use as the sequencer trigger source.

6.14.3.597 SoftwareSignalPulse

```
GenicamFeature* FliSfncCamera::SoftwareSignalPulse
```

Generates a pulse signal that can be used as a software trigger. This command can be used to trigger other modules that accept a SoftwareSignal as trigger source.

6.14.3.598 SoftwareSignalSelector

```
GenicamFeature<FliSfncCameraEnum::SoftwareSignalSelectorEnum>* FliSfncCamera::SoftwareSignal←
Selector
```

Selects which Software Signal features to control.

6.14.3.599 SourceCount

```
GenicamFeature<int64_t>* FliSfncCamera::SourceCount
```

Controls or returns the number of sources supported by the device.

6.14.3.600 SourceIDValue

```
GenicamFeature<int64_t>* FliSfncCamera::SourceIDValue
```

Returns a unique Identifier value that correspond to the selected Source.

6.14.3.601 SourceSelector

```
GenicamFeature<FliSfncCameraEnum::SourceSelectorEnum>* FliSfncCamera::SourceSelector
```

Selects the source to control.

6.14.3.602 TestEventGenerate

```
GenicamFeature* FliSfncCamera::TestEventGenerate
```

Generates a Test Event.

6.14.3.603 TestPattern

```
GenicamFeature<FliSfncCameraEnum::TestPatternEnum>* FliSfncCamera::TestPattern
```

Selects the type of test pattern that is generated by the device as image source.

6.14.3.604 TestPatternGeneratorSelector

```
GenicamFeature<FliSfncCameraEnum::TestPatternGeneratorSelectorEnum>* FliSfncCamera::Test←
PatternGeneratorSelector
```

Selects which test pattern generator is controlled by the TestPattern feature.

6.14.3.605 TestPayloadFormatMode

```
GenicamFeature<FliSfncCameraEnum::TestPayloadFormatModeEnum>* FliSfncCamera::TestPayload↩
FormatMode
```

This feature allows setting a device in test mode and to output a specific payload format for validation of data streaming. This feature is intended solely for test purposes. The data can be real acquired data or any test pattern.

6.14.3.606 TestPendingAck

```
GenicamFeature<int64_t>* FliSfncCamera::TestPendingAck
```

Tests the device's pending acknowledge feature. When this feature is written, the device waits a time period corresponding to the value of TestPendingAck before acknowledging the write.

6.14.3.607 TimerDelay

```
GenicamFeature<double>* FliSfncCamera::TimerDelay
```

Sets the duration (in microseconds) of the delay to apply at the reception of a trigger before starting the Timer.

6.14.3.608 TimerDuration

```
GenicamFeature<double>* FliSfncCamera::TimerDuration
```

Sets the duration (in microseconds) of the Timer pulse.

6.14.3.609 TimerReset

```
GenicamFeature* FliSfncCamera::TimerReset
```

Does a software reset of the selected timer and starts it. The timer starts immediately after the reset unless a timer trigger is active.

6.14.3.610 TimerSelector

```
GenicamFeature<FliSfncCameraEnum::TimerSelectorEnum>* FliSfncCamera::TimerSelector
```

Selects which Timer to configure.

6.14.3.611 TimerStatus

`GenicamFeature<FliSfncCameraEnum::TimerStatusEnum>* FliSfncCamera::TimerStatus`

Returns the current status of the Timer.

6.14.3.612 TimerTriggerActivation

`GenicamFeature<FliSfncCameraEnum::TimerTriggerActivationEnum>* FliSfncCamera::TimerTrigger↵ Activation`

Selects the activation mode of the trigger to start the Timer.

6.14.3.613 TimerTriggerArmDelay

`GenicamFeature<double>* FliSfncCamera::TimerTriggerArmDelay`

Sets the minimum period between two valid timer triggers.

6.14.3.614 TimerTriggerSource

`GenicamFeature<FliSfncCameraEnum::TimerTriggerSourceEnum>* FliSfncCamera::TimerTriggerSource`

Selects the source of the trigger to start the Timer.

6.14.3.615 TimerValue

`GenicamFeature<double>* FliSfncCamera::TimerValue`

Reads or writes the current value (in microseconds) of the selected Timer.

6.14.3.616 Timestamp

`GenicamFeature<int64_t>* FliSfncCamera::Timestamp`

Reports the current value of the device timestamp counter.

6.14.3.617 TimestampLatch

```
GenicamFeature* FliSfncCamera::TimestampLatch
```

Latches the current timestamp counter into TimestampLatchValue.

6.14.3.618 TimestampLatchValue

```
GenicamFeature<int64_t>* FliSfncCamera::TimestampLatchValue
```

Returns the latched value of the timestamp counter.

6.14.3.619 TimestampReset

```
GenicamFeature* FliSfncCamera::TimestampReset
```

Resets the current value of the device timestamp counter.

6.14.3.620 TLParamsLocked

```
GenicamFeature<int64_t>* FliSfncCamera::TLParamsLocked
```

Used by the Transport Layer to prevent critical features from changing during acquisition.

6.14.3.621 TLParamsLockedSelector

```
GenicamFeature<FliSfncCameraEnum::TLParamsLockedSelectorEnum>* FliSfncCamera::TLParamsLocked↩
Selector
```

Selects the type of feature for which the locking behavior will be configured.

6.14.3.622 TLParamsLockedState

```
GenicamFeature<bool>* FliSfncCamera::TLParamsLockedState
```

Controls if the selected parameters are locked during acquisition.

6.14.3.623 TransferAbort

```
GenicamFeature* FliSfncCamera::TransferAbort
```

Aborts immediately the streaming of data block(s). Aborting the transfer will result in the lost of the data that is present or currently entering in the block queue. However, the next new block received will be stored in the queue and transferred to the host when the streaming is restarted. If implemented, this feature should be available when the TransferControlMode is set to "UserControlled".

6.14.3.624 TransferBlockCount

```
GenicamFeature<int64_t>* FliSfncCamera::TransferBlockCount
```

Specifies the number of data Blocks that the device should stream before stopping. This feature is only active if the TransferOperationMode is set to MultiBlock.

6.14.3.625 TransferBurstCount

```
GenicamFeature<int64_t>* FliSfncCamera::TransferBurstCount
```

Number of Block(s) to transfer for each TransferBurstStart trigger.

6.14.3.626 TransferComponentSelector

```
GenicamFeature<FliSfncCameraEnum::TransferComponentSelectorEnum>* FliSfncCamera::Transfer↩
ComponentSelector
```

Selects the color component for the control of the TransferStreamChannel feature.

6.14.3.627 TransferControlMode

```
GenicamFeature<FliSfncCameraEnum::TransferControlModeEnum>* FliSfncCamera::TransferControlMode
```

Selects the control method for the transfers.

6.14.3.628 TransferOperationMode

```
GenicamFeature<FliSfncCameraEnum::TransferOperationModeEnum>* FliSfncCamera::TransferOperation↩
Mode
```

Selects the operation mode of the transfer.

6.14.3.629 TransferPause

```
GenicamFeature* FliSfncCamera::TransferPause
```

Pauses the streaming of data Block(s). Pausing the streaming will immediately suspend the ongoing data transfer even if a block is partially transfered. The device will resume its transmission at the reception of a TransferResume command.

6.14.3.630 TransferQueueCurrentBlockCount

```
GenicamFeature<int64_t>* FliSfncCamera::TransferQueueCurrentBlockCount
```

Returns the number of Block(s) currently in the transfer queue.

6.14.3.631 TransferQueueMaxBlockCount

```
GenicamFeature<int64_t>* FliSfncCamera::TransferQueueMaxBlockCount
```

Controls the maximum number of data blocks that can be stored in the block queue of the selected stream.

6.14.3.632 TransferQueueMode

```
GenicamFeature<FliSfncCameraEnum::TransferQueueModeEnum>* FliSfncCamera::TransferQueueMode
```

Specifies the operation mode of the transfer queue.

6.14.3.633 TransferResume

```
GenicamFeature* FliSfncCamera::TransferResume
```

Resumes a data Blocks streaming that was previously paused by a TransferPause command.

6.14.3.634 TransferSelector

```
GenicamFeature<FliSfncCameraEnum::TransferSelectorEnum>* FliSfncCamera::TransferSelector
```

Selects which stream transfers are currently controlled by the selected Transfer features.

6.14.3.635 TransferStart

```
GenicamFeature* FliSfncCamera::TransferStart
```

Starts the streaming of data blocks out of the device. This feature must be available when the TransferControlMode is set to "UserControlled". If the TransferStart feature is not writable (locked), the application should not start the transfer and should avoid using the feature until it becomes writable again.

6.14.3.636 TransferStatus

```
GenicamFeature<bool>* FliSfncCamera::TransferStatus
```

Reads the status of the Transfer module signal selected by TransferStatusSelector.

6.14.3.637 TransferStatusSelector

```
GenicamFeature<FliSfncCameraEnum::TransferStatusSelectorEnum>* FliSfncCamera::TransferStatus←
Selector
```

Selects which status of the transfer module to read.

6.14.3.638 TransferStop

```
GenicamFeature* FliSfncCamera::TransferStop
```

Stops the streaming of data Block(s). The current block transmission will be completed. This feature must be available when the TransferControlMode is set to "UserControlled".

6.14.3.639 TransferStreamChannel

```
GenicamFeature<int64_t>* FliSfncCamera::TransferStreamChannel
```

Selects the streaming channel that will be used to transfer the selected stream of data. In general, this feature can be omitted and the default streaming channel will be used.

6.14.3.640 TransferTriggerActivation

```
GenicamFeature<FliSfncCameraEnum::TransferTriggerActivationEnum>* FliSfncCamera::Transfer←
TriggerActivation
```

Specifies the activation mode of the transfer control trigger.

6.14.3.641 TransferTriggerMode

```
GenicamFeature<FliSfncCameraEnum::TransferTriggerModeEnum>* FliSfncCamera::TransferTriggerMode
```

Controls if the selected trigger is active.

6.14.3.642 TransferTriggerSelector

```
GenicamFeature<FliSfncCameraEnum::TransferTriggerSelectorEnum>* FliSfncCamera::Transfer↩
TriggerSelector
```

Selects the type of transfer trigger to configure.

6.14.3.643 TransferTriggerSource

```
GenicamFeature<FliSfncCameraEnum::TransferTriggerSourceEnum>* FliSfncCamera::TransferTrigger↩
Source
```

Specifies the signal to use as the trigger source for transfers.

6.14.3.644 TriggerActivation

```
GenicamFeature<FliSfncCameraEnum::TriggerActivationEnum>* FliSfncCamera::TriggerActivation
```

Specifies the activation mode of the trigger.

6.14.3.645 TriggerDelay

```
GenicamFeature<double>* FliSfncCamera::TriggerDelay
```

Specifies the delay in microseconds (us) to apply after the trigger reception before activating it.

6.14.3.646 TriggerDivider

```
GenicamFeature<int64_t>* FliSfncCamera::TriggerDivider
```

Specifies a division factor for the incoming trigger pulses.

6.14.3.647 TriggerMode

```
GenicamFeature<FliSfncCameraEnum::TriggerModeEnum>* FliSfncCamera::TriggerMode
```

Controls if the selected trigger is active.

6.14.3.648 TriggerMultiplier

```
GenicamFeature<int64_t>* FliSfncCamera::TriggerMultiplier
```

Specifies a multiplication factor for the incoming trigger pulses. It is generally used in conjunction with TriggerDivider to control the ratio of triggers that are accepted.

6.14.3.649 TriggerOverlap

```
GenicamFeature<FliSfncCameraEnum::TriggerOverlapEnum>* FliSfncCamera::TriggerOverlap
```

Specifies the type trigger overlap permitted with the previous frame or line. This defines when a valid trigger will be accepted (or latched) for a new frame or a new line.

6.14.3.650 TriggerSelector

```
GenicamFeature<FliSfncCameraEnum::TriggerSelectorEnum>* FliSfncCamera::TriggerSelector
```

Selects the type of trigger to configure.

6.14.3.651 TriggerSoftware

```
GenicamFeature* FliSfncCamera::TriggerSoftware
```

Generates an internal trigger. TriggerSource must be set to Software.

6.14.3.652 TriggerSource

```
GenicamFeature<FliSfncCameraEnum::TriggerSourceEnum>* FliSfncCamera::TriggerSource
```

Specifies the internal signal or physical input Line to use as the trigger source. The selected trigger must have its TriggerMode set to On.

6.14.3.653 UserOutputSelector

```
GenicamFeature<FliSfncCameraEnum::UserOutputSelectorEnum>* FliSfncCamera::UserOutputSelector
```

Selects which bit of the User Output register will be set by UserOutputValue.

6.14.3.654 UserOutputValue

```
GenicamFeature<bool>* FliSfncCamera::UserOutputValue
```

Sets the value of the bit selected by UserOutputSelector.

6.14.3.655 UserOutputValueAll

```
GenicamFeature<int64_t>* FliSfncCamera::UserOutputValueAll
```

Sets the value of all the bits of the User Output register. It is subject to the UserOutputValueAllMask.

6.14.3.656 UserOutputValueAllMask

```
GenicamFeature<int64_t>* FliSfncCamera::UserOutputValueAllMask
```

Sets the write mask to apply to the value specified by UserOutputValueAll before writing it in the User Output register. If the UserOutputValueAllMask feature is present, setting the user Output register using UserOutputValueAll will only change the bits that have a corresponding bit in the mask set to one.

6.14.3.657 UserSetDefault

```
GenicamFeature<FliSfncCameraEnum::UserSetDefaultEnum>* FliSfncCamera::UserSetDefault
```

Selects the feature User Set to load and make active by default when the device is reset.

6.14.3.658 UserSetDescription

```
GenicamFeature<std::string>* FliSfncCamera::UserSetDescription
```

Description of the selected User Set content.

6.14.3.659 UserSetFeatureEnable

```
GenicamFeature<bool>* FliSfncCamera::UserSetFeatureEnable
```

Enables the selected feature and make it active in all the UserSets.

6.14.3.660 UserSetFeatureSelector

```
GenicamFeature<FliSfncCameraEnum::UserSetFeatureSelectorEnum>* FliSfncCamera::UserSetFeature←↩
Selector
```

Selects which individual UserSet feature to control.

6.14.3.661 UserSetLoad

```
GenicamFeature* FliSfncCamera::UserSetLoad
```

Loads the User Set specified by UserSetSelector to the device and makes it active.

6.14.3.662 UserSetSave

```
GenicamFeature* FliSfncCamera::UserSetSave
```

Save the User Set specified by UserSetSelector to the non-volatile memory of the device.

6.14.3.663 UserSetSelector

```
GenicamFeature<FliSfncCameraEnum::UserSetSelectorEnum>* FliSfncCamera::UserSetSelector
```

Selects the feature User Set to load, save or configure.

6.14.3.664 WhiteClip

```
GenicamFeature<double>* FliSfncCamera::WhiteClip
```

Controls the maximal intensity taken by the video signal before being clipped as an absolute physical value. The video signal will never exceed the white clipping point: it will saturate at that level.

6.14.3.665 WhiteClipSelector

```
GenicamFeature<FliSfncCameraEnum::WhiteClipSelectorEnum>* FliSfncCamera::WhiteClipSelector
```

Selects which White Clip to control.

6.14.3.666 Width

```
GenicamFeature<int64_t>* FliSfncCamera::Width
```

Width of the image provided by the device (in pixels).

6.14.3.667 WidthMax

```
GenicamFeature<int64_t>* FliSfncCamera::WidthMax
```

Maximum width of the image (in pixels). The dimension is calculated after horizontal binning, decimation or any other function changing the horizontal dimension of the image.

6.15 IFliSdkObserver Class Reference

This interface defines an observer to observe some SDK states.

```
#include <IFliSdkObserver.h>
```

Public Member Functions

- virtual void onStartedStateChanged (bool started)
- virtual void onGrabNStateChanged (bool enabled, uint32_t nbFrames)
- virtual void onResetBufferTriggered ()
- virtual void onCameraChanged ()
- virtual void onFowlerProcessingStateChanged (bool enabled)

6.15.1 Detailed Description

This interface defines an observer to observe some SDK states.

6.15.2 Member Function Documentation

6.15.2.1 onCameraChanged()

```
virtual void IFliSdkObserver::onCameraChanged ( )  [inline], [virtual]
```

6.15.2.2 onFowlerProcessingStateChanged()

```
virtual void IFliSdkObserver::onFowlerProcessingStateChanged (
             bool enabled )  [inline], [virtual]
```

6.15.2.3 onGrabNStateChanged()

```
virtual void IFliSdkObserver::onGrabNStateChanged (
             bool enabled,
             uint32_t nbFrames )  [inline], [virtual]
```

6.15.2.4 onResetBufferTriggered()

```
virtual void IFliSdkObserver::onResetBufferTriggered ( )  [inline], [virtual]
```

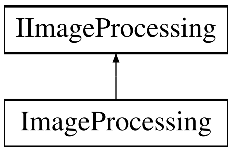
6.15.2.5 onStartedStateChanged()

```
virtual void IFliSdkObserver::onStartedStateChanged (
             bool started )  [inline], [virtual]
```

6.16 IImageProcessing Class Reference

```
#include <IImageProcessing.h>
```

Inheritance diagram for IImageProcessing:



Public Types

- enum ClippingType { LINEAR_CLIPPING, LOG_CLIPPING, GAMMA_CLIPPING }
- enum ThermoUnit { CELSIUS, KELVIN }
- enum BadPixelsAlgo { None, Camera, Soft }

Public Member Functions

- virtual void enableIndependentMode (bool enable)=0
- virtual bool isIndependent ()=0
- virtual void enable8bitsPixel (bool enable)=0
- virtual unsigned char $*$ getProcessedImage (const uint8_t $*$image)=0
- virtual const std::vector$<$ std::string $>$ getColorMapList () const =0
- virtual const std::vector$<$ std::string $>$ getClippingTypeList () const =0
- virtual void setDimension (unsigned int width, unsigned int height)=0
- virtual void setClippingType (std::string type)=0
- virtual void setColorMapping (std::string colorMap)=0
- virtual void setClippingType (ClippingType type)=0
- virtual ClippingType getClippingType ()=0
- virtual void setGamma (double gamma)=0
- virtual double getGamma ()=0
- virtual void setRotationAngle (unsigned int angle)=0
- virtual void setRotationAngleText (unsigned int angle)=0
- virtual void enableDisplayInfos (bool enable)=0
- virtual double getMean16b ()=0
- virtual double getSpatialStdDev16b ()=0
- virtual double getMean8b ()=0
- virtual double getSpatialStdDev8b ()=0
- virtual double getClipBlack ()=0
- virtual void setClipBlack (int32_t val)=0
- virtual double getClipWhite ()=0
- virtual void setClipWhite (int32_t val)=0
- virtual int16_t getMinVal ()=0
- virtual int32_t getMaxVal ()=0
- virtual double getMean16bNoCompute ()=0
- virtual double getSpatialStdDev16bNoCompute ()=0
- virtual const std::vector$<$ uint64_t $>$ & getHistogram16bNoCompute ()=0
- virtual const std::vector$<$ uint64_t $>$ & getHistogram16bNegativeNoCompute ()=0
- virtual void forceCalcMeanStdDevAndHist16b ()=0
- virtual const std::vector$<$ uint64_t $>$ & getHistogram8b ()=0
- virtual const std::vector$<$ uint64_t $>$ & getHistogram16b ()=0
- virtual const std::vector$<$ uint64_t $>$ & getHistogram16bNegative ()=0
- virtual void clip (int x, int y, int width, int height)=0
- virtual void enableAutoClip (bool enable)=0
- virtual bool autoClipEnabled ()=0
- virtual void enableAutoExposure (bool enable)=0
- virtual void updateAutoExposureParam ()=0
- virtual void enableFilters (bool enable)=0
- virtual double getCoeffA ()=0
- virtual double getCoeffB ()=0
- virtual void setPixelSign (bool unsignedPixel)=0
- virtual void setPercentOfMean (uint8_t percent)=0
- virtual uint8_t getPercentOfMean ()=0
- virtual void setClipDepth (uint8_t depth)=0

- virtual void setClipLimit (uint16_t limit)=0
- virtual void setStdDevAndMeanSelection (uint16_t x, uint16_t y, uint16_t width, uint16_t height)=0
- virtual void getStdDevAndMeanSelection (uint16_t &x, uint16_t &y, uint16_t &width, uint16_t &height)=0
- virtual void enableDenoising (bool enable)=0
- virtual void setDenoisingH (float val)=0
- virtual void setDenoisingTemplateWindowSize (int val)=0
- virtual void setDenoisingSearchWindowSize (int val)=0
- virtual void enableSmoothImage (bool enable)=0
- virtual void enableManualClippingCoeff (bool enable)=0
- virtual void setClippingAlpha (double alpha)=0
- virtual void setClippingBeta (double beta)=0
- virtual void enableSharpen (bool enable)=0
- virtual void setSharpenKsize (int width, int height)=0
- virtual void setSharpenSigmaX (double val)=0
- virtual void setSharpenSigmaY (double val)=0
- virtual void setSharpenAlpha (double val)=0
- virtual void setSharpenBeta (double val)=0
- virtual void setSharpenGamma (double val)=0
- virtual void enableClahe (bool enable)=0
- virtual void setClaheCliplimit (double limit)=0
- virtual void setClaheTileGridSize (int width, int height)=0
- virtual void enableImagesAccumulation (bool enable)=0
- virtual void setnbImagesAccumulation (uint8_t val)=0
- virtual void flipVertically ()=0
- virtual void flipHorizontally ()=0
- virtual bool isFlippedHorizontally ()=0
- virtual bool isFlippedVertically ()=0
- virtual void setToneMappingNormal ()=0
- virtual void setToneMappingDrago ()=0
- virtual void setToneMappingReinhard ()=0
- virtual void setToneMappingMantiuk ()=0
- virtual void setDragoGamma (float gamma)=0
- virtual void setDragoSaturation (float saturation)=0
- virtual void setDragoBias (float bias)=0
- virtual void setDragoMultiplicator (uint8_t multiplicator)=0
- virtual void setReinhardGamma (float gamma)=0
- virtual void setReinhardIntensity (float intensity)=0
- virtual void setReinhardLightAdapt (float light)=0
- virtual void setReinhardColorAdapt (float color)=0
- virtual void setMantiukGamma (float gamma)=0
- virtual void setMantiukScale (float scale)=0
- virtual void setMantiukSaturation (float saturation)=0
- virtual void setMantiukMultiplicator (uint8_t multiplicator)=0
- virtual void setBadPixelsCarto (std::vector< bool > carto)=0
- virtual void enableBadPixelsCarto (BadPixelsAlgo algo)=0
- virtual bool badPixelsCartoLoaded ()=0
- virtual uint16_t * getRawThermoImage (int64_t index=-1)=0
- virtual uint16_t * getRawThermoImage (const uint8_t *buffer)=0
- virtual void enableThermo (bool enable)=0
- virtual bool isThermoEnabled ()=0
- virtual void setThermoCalibrationData (Fli::ThermoCalibrationData &data)=0
- virtual Fli::ThermoCalibrationData & getThermoCalibrationData ()=0
- virtual void setThermoUnit (ThermoUnit unit)=0
- virtual ThermoUnit getThermoUnit ()=0
- virtual uint8_t * getColorMapImage (uint16_t width, uint16_t height)=0

- virtual uint8_t getNumThreads ()=0
- virtual uint8_t getNumThreadsMax ()=0
- virtual void setNumThreads (uint8_t num)=0
- virtual void setIsThermoThrRaw (bool isThermoThrRaw)=0
- virtual unsigned int getSize ()=0

Public Attributes

- std::mutex processMutext

6.16.1 Member Enumeration Documentation

6.16.1.1 BadPixelsAlgo

`enum IImageProcessing::BadPixelsAlgo`

Enumerator

None	
Camera	
Soft	

6.16.1.2 ClippingType

`enum IImageProcessing::ClippingType`

Enumerator

LINEAR_CLIPPING	
LOG_CLIPPING	
GAMMA_CLIPPING	

6.16.1.3 ThermoUnit

`enum IImageProcessing::ThermoUnit`

Enumerator

CELSIUS	
KELVIN	

6.16.2 Member Function Documentation

6.16.2.1 autoClipEnabled()

```
virtual bool IImageProcessing::autoClipEnabled ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.2 badPixelsCartoLoaded()

```
virtual bool IImageProcessing::badPixelsCartoLoaded ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.3 clip()

```
virtual void IImageProcessing::clip (
             int x,
             int y,
             int width,
             int height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.4 enable8bitsPixel()

```
virtual void IImageProcessing::enable8bitsPixel (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.5 enableAutoClip()

```
virtual void IImageProcessing::enableAutoClip (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.6 enableAutoExposure()

```
virtual void IImageProcessing::enableAutoExposure (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.7 enableBadPixelsCarto()

```
virtual void IImageProcessing::enableBadPixelsCarto (
             BadPixelsAlgo algo )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.8 enableClahe()

```
virtual void IImageProcessing::enableClahe (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.9 enableDenoising()

```
virtual void IImageProcessing::enableDenoising (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.10 enableDisplayInfos()

```
virtual void IImageProcessing::enableDisplayInfos (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.11 enableFilters()

```
virtual void IImageProcessing::enableFilters (
             bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.12 enableImagesAccumulation()

```
virtual void IImageProcessing::enableImagesAccumulation (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.13 enableIndependentMode()

```
virtual void IImageProcessing::enableIndependentMode (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.14 enableManualClippingCoeff()

```
virtual void IImageProcessing::enableManualClippingCoeff (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.15 enableSharpen()

```
virtual void IImageProcessing::enableSharpen (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.16 enableSmoothImage()

```
virtual void IImageProcessing::enableSmoothImage (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.17 enableThermo()

```
virtual void IImageProcessing::enableThermo (
            bool enable )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.18 flipHorizontally()

```
virtual void IImageProcessing::flipHorizontally ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.19 flipVertically()

```
virtual void IImageProcessing::flipVertically ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.20 forceCalcMeanStdDevAndHist16b()

```
virtual void IImageProcessing::forceCalcMeanStdDevAndHist16b ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.21 getClipBlack()

```
virtual double IImageProcessing::getClipBlack ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.22 getClippingType()

```
virtual ClippingType IImageProcessing::getClippingType ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.23 getClippingTypeList()

```
virtual const std::vector<std::string> IImageProcessing::getClippingTypeList ( ) const  [pure
virtual]
```

Implemented in ImageProcessing.

6.16.2.24 getClipWhite()

```
virtual double IImageProcessing::getClipWhite ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.25 getCoeffA()

```
virtual double IImageProcessing::getCoeffA ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.26 getCoeffB()

```
virtual double IImageProcessing::getCoeffB ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.27 getColorMapImage()

```
virtual uint8_t* IImageProcessing::getColorMapImage (
              uint16_t width,
              uint16_t height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.28 getColorMapList()

```
virtual const std::vector<std::string> IImageProcessing::getColorMapList ( ) const  [pure
virtual]
```

Implemented in ImageProcessing.

6.16.2.29 getGamma()

```
virtual double IImageProcessing::getGamma ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.30 getHistogram16b()

```
virtual const std::vector<uint64_t>& IImageProcessing::getHistogram16b ( ) [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.31 getHistogram16bNegative()

```
virtual const std::vector<uint64_t>& IImageProcessing::getHistogram16bNegative ( ) [pure
virtual]
```

Implemented in ImageProcessing.

6.16.2.32 getHistogram16bNegativeNoCompute()

```
virtual const std::vector<uint64_t>& IImageProcessing::getHistogram16bNegativeNoCompute ( )
[pure virtual]
```

Implemented in ImageProcessing.

6.16.2.33 getHistogram16bNoCompute()

```
virtual const std::vector<uint64_t>& IImageProcessing::getHistogram16bNoCompute ( ) [pure
virtual]
```

Implemented in ImageProcessing.

6.16.2.34 getHistogram8b()

```
virtual const std::vector<uint64_t>& IImageProcessing::getHistogram8b ( ) [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.35 getMaxVal()

```
virtual int32_t IImageProcessing::getMaxVal ( ) [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.36 getMean16b()

```
virtual double IImageProcessing::getMean16b ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.37 getMean16bNoCompute()

```
virtual double IImageProcessing::getMean16bNoCompute ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.38 getMean8b()

```
virtual double IImageProcessing::getMean8b ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.39 getMinVal()

```
virtual int16_t IImageProcessing::getMinVal ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.40 getNumThreads()

```
virtual uint8_t IImageProcessing::getNumThreads ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.41 getNumThreadsMax()

```
virtual uint8_t IImageProcessing::getNumThreadsMax ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.42 getPercentOfMean()

```
virtual uint8_t IImageProcessing::getPercentOfMean ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.43 getProcessedImage()

```
virtual unsigned char* IImageProcessing::getProcessedImage (
             const uint8_t * image )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.44 getRawThermoImage() [1/2]

```
virtual uint16_t* IImageProcessing::getRawThermoImage (
             const uint8_t * buffer )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.45 getRawThermoImage() [2/2]

```
virtual uint16_t* IImageProcessing::getRawThermoImage (
             int64_t index = -1 )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.46 getSize()

```
virtual unsigned int IImageProcessing::getSize ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.47 getSpatialStdDev16b()

```
virtual double IImageProcessing::getSpatialStdDev16b ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.48 getSpatialStdDev16bNoCompute()

```
virtual double IImageProcessing::getSpatialStdDev16bNoCompute ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.49 getSpatialStdDev8b()

```
virtual double IImageProcessing::getSpatialStdDev8b ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.50 getStdDevAndMeanSelection()

```
virtual void IImageProcessing::getStdDevAndMeanSelection (
             uint16_t & x,
             uint16_t & y,
             uint16_t & width,
             uint16_t & height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.51 getThermoCalibrationData()

```
virtual Fli::ThermoCalibrationData& IImageProcessing::getThermoCalibrationData ( )  [pure
virtual]
```

Implemented in ImageProcessing.

6.16.2.52 getThermoUnit()

```
virtual ThermoUnit IImageProcessing::getThermoUnit ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.53 isFlippedHorizontally()

```
virtual bool IImageProcessing::isFlippedHorizontally ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.54 isFlippedVertically()

```
virtual bool IImageProcessing::isFlippedVertically ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.55 isIndependent()

```
virtual bool IImageProcessing::isIndependent ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.56 isThermoEnabled()

```
virtual bool IImageProcessing::isThermoEnabled ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.57 setBadPixelsCarto()

```
virtual void IImageProcessing::setBadPixelsCarto (
             std::vector< bool > carto )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.58 setClaheCliplimit()

```
virtual void IImageProcessing::setClaheCliplimit (
             double limit )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.59 setClaheTileGridSize()

```
virtual void IImageProcessing::setClaheTileGridSize (
             int width,
             int height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.60 setClipBlack()

```
virtual void IImageProcessing::setClipBlack (
             int32_t val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.61 setClipDepth()

```
virtual void IImageProcessing::setClipDepth (
             uint8_t depth )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.62 setClipLimit()

```
virtual void IImageProcessing::setClipLimit (
             uint16_t limit )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.63 setClippingAlpha()

```
virtual void IImageProcessing::setClippingAlpha (
             double alpha )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.64 setClippingBeta()

```
virtual void IImageProcessing::setClippingBeta (
             double beta )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.65 setClippingType() [1/2]

```
virtual void IImageProcessing::setClippingType (
             ClippingType type )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.66 setClippingType() [2/2]

```
virtual void IImageProcessing::setClippingType (
             std::string type )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.67 setClipWhite()

```
virtual void IImageProcessing::setClipWhite (
             int32_t val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.68 setColorMapping()

```
virtual void IImageProcessing::setColorMapping (
             std::string colorMap )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.69 setDenoisingH()

```
virtual void IImageProcessing::setDenoisingH (
             float val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.70 setDenoisingSearchWindowSize()

```
virtual void IImageProcessing::setDenoisingSearchWindowSize (
             int val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.71 setDenoisingTemplateWindowSize()

```
virtual void IImageProcessing::setDenoisingTemplateWindowSize (
             int val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.72 setDimension()

```
virtual void IImageProcessing::setDimension (
            unsigned int width,
            unsigned int height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.73 setDragoBias()

```
virtual void IImageProcessing::setDragoBias (
            float bias )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.74 setDragoGamma()

```
virtual void IImageProcessing::setDragoGamma (
            float gamma )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.75 setDragoMultiplicator()

```
virtual void IImageProcessing::setDragoMultiplicator (
            uint8_t multiplicator )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.76 setDragoSaturation()

```
virtual void IImageProcessing::setDragoSaturation (
            float saturation )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.77 setGamma()

```
virtual void IImageProcessing::setGamma (
             double gamma )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.78 setIsThermoThrRaw()

```
virtual void IImageProcessing::setIsThermoThrRaw (
             bool isThermoThrRaw )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.79 setMantiukGamma()

```
virtual void IImageProcessing::setMantiukGamma (
             float gamma )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.80 setMantiukMultiplicator()

```
virtual void IImageProcessing::setMantiukMultiplicator (
             uint8_t multiplicator )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.81 setMantiukSaturation()

```
virtual void IImageProcessing::setMantiukSaturation (
             float saturation )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.82 setMantiukScale()

```
virtual void IImageProcessing::setMantiukScale (
             float scale )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.83 setnbImagesAccumulation()

```
virtual void IImageProcessing::setnbImagesAccumulation (
            uint8_t val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.84 setNumThreads()

```
virtual void IImageProcessing::setNumThreads (
            uint8_t num )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.85 setPercentOfMean()

```
virtual void IImageProcessing::setPercentOfMean (
            uint8_t percent )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.86 setPixelSign()

```
virtual void IImageProcessing::setPixelSign (
            bool unsignedPixel )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.87 setReinhardColorAdapt()

```
virtual void IImageProcessing::setReinhardColorAdapt (
            float color )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.88 setReinhardGamma()

```
virtual void IImageProcessing::setReinhardGamma (
            float gamma )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.89 setReinhardIntensity()

```
virtual void IImageProcessing::setReinhardIntensity (
             float intensity )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.90 setReinhardLightAdapt()

```
virtual void IImageProcessing::setReinhardLightAdapt (
             float light )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.91 setRotationAngle()

```
virtual void IImageProcessing::setRotationAngle (
             unsigned int angle )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.92 setRotationAngleText()

```
virtual void IImageProcessing::setRotationAngleText (
             unsigned int angle )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.93 setSharpenAlpha()

```
virtual void IImageProcessing::setSharpenAlpha (
             double val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.94 setSharpenBeta()

```
virtual void IImageProcessing::setSharpenBeta (
             double val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.95 setSharpenGamma()

```
virtual void IImageProcessing::setSharpenGamma (
            double val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.96 setSharpenKsize()

```
virtual void IImageProcessing::setSharpenKsize (
            int width,
            int height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.97 setSharpenSigmaX()

```
virtual void IImageProcessing::setSharpenSigmaX (
            double val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.98 setSharpenSigmaY()

```
virtual void IImageProcessing::setSharpenSigmaY (
            double val )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.99 setStdDevAndMeanSelection()

```
virtual void IImageProcessing::setStdDevAndMeanSelection (
            uint16_t x,
            uint16_t y,
            uint16_t width,
            uint16_t height )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.100 setThermoCalibrationData()

```
virtual void IImageProcessing::setThermoCalibrationData (
            Fli::ThermoCalibrationData & data )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.101 setThermoUnit()

```
virtual void IImageProcessing::setThermoUnit (
            ThermoUnit unit )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.102 setToneMappingDrago()

```
virtual void IImageProcessing::setToneMappingDrago ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.103 setToneMappingMantiuk()

```
virtual void IImageProcessing::setToneMappingMantiuk ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.104 setToneMappingNormal()

```
virtual void IImageProcessing::setToneMappingNormal ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.105 setToneMappingReinhard()

```
virtual void IImageProcessing::setToneMappingReinhard ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.2.106 updateAutoExposureParam()

```
virtual void IImageProcessing::updateAutoExposureParam ( )  [pure virtual]
```

Implemented in ImageProcessing.

6.16.3 Member Data Documentation

6.16.3.1 processMutext

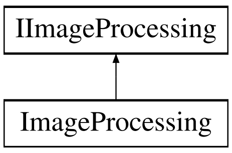
```
std::mutex IImageProcessing::processMutext
```

6.17 ImageProcessing Class Reference

This class manages all the processing of the images such as : statistics (mean stddev), clipping, flipping, sharpen etc...

```
#include <ImageProcessing.h>
```

Inheritance diagram for ImageProcessing:



Public Member Functions

- ImageProcessing (ImageRingBuffer ∗ringBuffer, FliCred ∗camera, unsigned int width, unsigned int height)
- ImageProcessing (ImageRingBuffer ∗ringBuffer, FliSfncCamera ∗camera, unsigned int width, unsigned int height)
- ImageProcessing (ImageRingBuffer ∗ringBuffer)
- virtual ∼ImageProcessing ()
- void setCamera (FliCred ∗camera)
- void setCamera (FliSfncCamera ∗camera)
- void setRingBuffer (ImageRingBuffer ∗ringBuffer)
- unsigned char ∗ getProcessedImage (int64_t index=-1, int16_t burstFilter=-1, uint16_t nbReadWoReset=-1)
- unsigned char ∗ getProcessedImage16b (int64_t index=-1, int16_t burstFilter=-1, uint16_t nbReadWoReset=-1)
- virtual void enable8bitsPixel (bool enable) override
- template<typename T >
  void aduToDegrees (void ∗image, int precision=1)
- template<typename T >
  void aduToDegrees (void ∗image, double ∗dest, int precision=1)
- virtual void setPixelSign (bool unsignedPixel) override

- virtual void enableIndependentMode (bool enable) override
- virtual bool isIndependent () override
- virtual unsigned char ∗ getProcessedImage (const uint8_t ∗image) override
- virtual const std::vector< std::string > getColorMapList () const override
- virtual const std::vector< std::string > getClippingTypeList () const override
- virtual void setDimension (unsigned int width, unsigned int height) override
- virtual void setClippingType (std::string type) override
- virtual void setColorMapping (std::string colorMap) override
- virtual void setClippingType (ClippingType type) override
- virtual ClippingType getClippingType () override
- virtual void setGamma (double gamma) override
- virtual double getGamma () override
- virtual void setRotationAngle (unsigned int angle) override
- virtual void setRotationAngleText (unsigned int angle) override
- virtual void enableDisplayInfos (bool enable) override
- virtual double getMean16b () override
- virtual double getSpatialStdDev16b () override
- virtual double getMean8b () override
- virtual double getSpatialStdDev8b () override
- virtual double getClipBlack () override
- virtual void setClipBlack (int32_t val) override
- virtual double getClipWhite () override
- virtual void setClipWhite (int32_t val) override
- virtual int16_t getMinVal () override
- virtual int32_t getMaxVal () override
- virtual double getMean16bNoCompute () override
- virtual double getSpatialStdDev16bNoCompute () override
- virtual const std::vector< uint64_t > & getHistogram16bNoCompute () override
- virtual const std::vector< uint64_t > & getHistogram16bNegativeNoCompute () override
- virtual void forceCalcMeanStdDevAndHist16b () override
- virtual const std::vector< uint64_t > & getHistogram8b () override
- virtual const std::vector< uint64_t > & getHistogram16b () override
- virtual const std::vector< uint64_t > & getHistogram16bNegative () override
- virtual void clip (int x, int y, int width, int height) override
- virtual void enableAutoClip (bool enable) override
- virtual bool autoClipEnabled () override
- virtual void enableAutoExposure (bool enable) override
- virtual void updateAutoExposureParam () override
- virtual void enableFilters (bool enable) override
- virtual double getCoeffA () override
- virtual double getCoeffB () override
- virtual void setPercentOfMean (uint8_t percent) override
- virtual uint8_t getPercentOfMean () override
- virtual void setClipDepth (uint8_t depth) override
- virtual void setClipLimit (uint16_t limit) override
- virtual void setStdDevAndMeanSelection (uint16_t x, uint16_t y, uint16_t width, uint16_t height) override
- virtual void getStdDevAndMeanSelection (uint16_t &x, uint16_t &y, uint16_t &width, uint16_t &height) override
- virtual void enableDenoising (bool enable) override
- virtual void setDenoisingH (float val) override
- virtual void setDenoisingTemplateWindowSize (int val) override
- virtual void setDenoisingSearchWindowSize (int val) override
- virtual void enableSmoothImage (bool enable) override
- virtual void enableManualClippingCoeff (bool enable) override
- virtual void setClippingAlpha (double alpha) override

- virtual void setClippingBeta (double beta) override
- virtual void enableSharpen (bool enable) override
- virtual void setSharpenKsize (int width, int height) override
- virtual void setSharpenSigmaX (double val) override
- virtual void setSharpenSigmaY (double val) override
- virtual void setSharpenAlpha (double val) override
- virtual void setSharpenBeta (double val) override
- virtual void setSharpenGamma (double val) override
- virtual void enableClahe (bool enable) override
- virtual void setClaheCliplimit (double limit) override
- virtual void setClaheTileGridSize (int width, int height) override
- virtual void enableImagesAccumulation (bool enable) override
- virtual void setnbImagesAccumulation (uint8_t val) override
- virtual void flipVertically () override
- virtual void flipHorizontally () override
- virtual bool isFlippedHorizontally () override
- virtual bool isFlippedVertically () override
- virtual void setToneMappingNormal () override
- virtual void setToneMappingDrago () override
- virtual void setToneMappingReinhard () override
- virtual void setToneMappingMantiuk () override
- virtual void setDragoGamma (float gamma) override
- virtual void setDragoSaturation (float saturation) override
- virtual void setDragoBias (float bias) override
- virtual void setDragoMultiplicator (uint8_t multiplicator) override
- virtual void setReinhardGamma (float gamma) override
- virtual void setReinhardIntensity (float intensity) override
- virtual void setReinhardLightAdapt (float light) override
- virtual void setReinhardColorAdapt (float color) override
- virtual void setMantiukGamma (float gamma) override
- virtual void setMantiukScale (float scale) override
- virtual void setMantiukSaturation (float saturation) override
- virtual void setMantiukMultiplicator (uint8_t multiplicator) override
- virtual uint16_t ∗ getRawThermoImage (int64_t index=-1) override
- virtual uint16_t ∗ getRawThermoImage (const uint8_t ∗buffer) override
- virtual void enableThermo (bool enable) override
- virtual bool isThermoEnabled () override
- virtual void setThermoCalibrationData (Fli::ThermoCalibrationData &data) override
- virtual Fli::ThermoCalibrationData & getThermoCalibrationData () override
- virtual void setThermoUnit (ThermoUnit unit) override
- virtual ThermoUnit getThermoUnit () override
- virtual uint8_t ∗ getColorMapImage (uint16_t width, uint16_t height) override
- virtual uint8_t getNumThreads () override
- virtual uint8_t getNumThreadsMax () override
- virtual void setNumThreads (uint8_t num) override
- virtual void setBadPixelsCarto (std::vector< bool > carto) override
- virtual void enableBadPixelsCarto (IImageProcessing::BadPixelsAlgo algo) override
- virtual bool badPixelsCartoLoaded () override
- virtual void setIsThermoThrRaw (bool isThermoThrRaw) override
- virtual unsigned int getSize () override
- ImageRingBuffer ∗ getRingBuffer () const

Additional Inherited Members

6.17.1 Detailed Description

This class manages all the processing of the images such as : statistics (mean stddev), clipping, flipping, sharpen etc...

6.17.2 Constructor & Destructor Documentation

6.17.2.1 ImageProcessing() [1/3]

```
ImageProcessing::ImageProcessing (
            ImageRingBuffer * ringBuffer,
            FliCred * camera,
            unsigned int width,
            unsigned int height )
```

6.17.2.2 ImageProcessing() [2/3]

```
ImageProcessing::ImageProcessing (
            ImageRingBuffer * ringBuffer,
            FliSfncCamera * camera,
            unsigned int width,
            unsigned int height )
```

6.17.2.3 ImageProcessing() [3/3]

```
ImageProcessing::ImageProcessing (
            ImageRingBuffer * ringBuffer )  [explicit]
```

6.17.2.4 ∼ImageProcessing()

```
virtual ImageProcessing::∼ImageProcessing ( )  [virtual]
```

6.17.3 Member Function Documentation

6.17.3.1 aduToDegrees() [1/2]

```
template<typename T >
void ImageProcessing::aduToDegrees (
            void * image,
            double * dest,
            int precision = 1 )
```

6.17.3.2 aduToDegrees() [2/2]

```
template<typename T >
void ImageProcessing::aduToDegrees (
            void * image,
            int precision = 1 )
```

6.17.3.3 autoClipEnabled()

```
virtual bool ImageProcessing::autoClipEnabled ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.4 badPixelsCartoLoaded()

```
virtual bool ImageProcessing::badPixelsCartoLoaded ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.5 clip()

```
virtual void ImageProcessing::clip (
            int x,
            int y,
            int width,
            int height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.6 enable8bitsPixel()

```
virtual void ImageProcessing::enable8bitsPixel (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.7 enableAutoClip()

```
virtual void ImageProcessing::enableAutoClip (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.8 enableAutoExposure()

```
virtual void ImageProcessing::enableAutoExposure (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.9 enableBadPixelsCarto()

```
virtual void ImageProcessing::enableBadPixelsCarto (
             IImageProcessing::BadPixelsAlgo algo )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.10 enableClahe()

```
virtual void ImageProcessing::enableClahe (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.11 enableDenoising()

```
virtual void ImageProcessing::enableDenoising (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.12 enableDisplayInfos()

```
virtual void ImageProcessing::enableDisplayInfos (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.13 enableFilters()

```
virtual void ImageProcessing::enableFilters (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.14 enableImagesAccumulation()

```
virtual void ImageProcessing::enableImagesAccumulation (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.15 enableIndependentMode()

```
virtual void ImageProcessing::enableIndependentMode (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.16 enableManualClippingCoeff()

```
virtual void ImageProcessing::enableManualClippingCoeff (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.17 enableSharpen()

```
virtual void ImageProcessing::enableSharpen (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.18 enableSmoothImage()

```
virtual void ImageProcessing::enableSmoothImage (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.19 enableThermo()

```
virtual void ImageProcessing::enableThermo (
             bool enable )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.20 flipHorizontally()

```
virtual void ImageProcessing::flipHorizontally ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.21 flipVertically()

```
virtual void ImageProcessing::flipVertically ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.22 forceCalcMeanStdDevAndHist16b()

```
virtual void ImageProcessing::forceCalcMeanStdDevAndHist16b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.23 getClipBlack()

```
virtual double ImageProcessing::getClipBlack ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.24 getClippingType()

```
virtual ClippingType ImageProcessing::getClippingType ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.25 getClippingTypeList()

```
virtual const std::vector<std::string> ImageProcessing::getClippingTypeList ( ) const  [override],
[virtual]
```

Implements IImageProcessing.

6.17.3.26 getClipWhite()

```
virtual double ImageProcessing::getClipWhite ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.27 getCoeffA()

```
virtual double ImageProcessing::getCoeffA ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.28 getCoeffB()

```
virtual double ImageProcessing::getCoeffB ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.29 getColorMapImage()

```
virtual uint8_t* ImageProcessing::getColorMapImage (
            uint16_t width,
            uint16_t height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.30 getColorMapList()

```
virtual const std::vector<std::string> ImageProcessing::getColorMapList ( ) const  [override],
[virtual]
```

Implements IImageProcessing.

6.17.3.31 getGamma()

```
virtual double ImageProcessing::getGamma ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.32 getHistogram16b()

```
virtual const std::vector<uint64_t>& ImageProcessing::getHistogram16b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.33 getHistogram16bNegative()

```
virtual const std::vector<uint64_t>& ImageProcessing::getHistogram16bNegative ( )  [override],
[virtual]
```

Implements IImageProcessing.

6.17.3.34 getHistogram16bNegativeNoCompute()

```
virtual const std::vector<uint64_t>& ImageProcessing::getHistogram16bNegativeNoCompute ( )
[override], [virtual]
```

Implements IImageProcessing.

6.17.3.35 getHistogram16bNoCompute()

```
virtual const std::vector<uint64_t>& ImageProcessing::getHistogram16bNoCompute ( )  [override],
[virtual]
```

Implements IImageProcessing.

6.17.3.36 getHistogram8b()

```
virtual const std::vector<uint64_t>& ImageProcessing::getHistogram8b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.37 getMaxVal()

```
virtual int32_t ImageProcessing::getMaxVal ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.38 getMean16b()

```
virtual double ImageProcessing::getMean16b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.39 getMean16bNoCompute()

```
virtual double ImageProcessing::getMean16bNoCompute ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.40 getMean8b()

```
virtual double ImageProcessing::getMean8b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.41 getMinVal()

```
virtual int16_t ImageProcessing::getMinVal ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.42 getNumThreads()

```
virtual uint8_t ImageProcessing::getNumThreads ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.43 getNumThreadsMax()

```
virtual uint8_t ImageProcessing::getNumThreadsMax ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.44 getPercentOfMean()

```
virtual uint8_t ImageProcessing::getPercentOfMean ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.45 getProcessedImage() [1/2]

```
virtual unsigned char* ImageProcessing::getProcessedImage (
            const uint8_t * image ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.46 getProcessedImage() [2/2]

```
unsigned char* ImageProcessing::getProcessedImage (
            int64_t index = -1,
            int16_t burstFilter = -1,
            uint16_t nbReadWoReset = -1 )
```

6.17.3.47 getProcessedImage16b()

```
unsigned char* ImageProcessing::getProcessedImage16b (
            int64_t index = -1,
            int16_t burstFilter = -1,
            uint16_t nbReadWoReset = -1 )
```

6.17.3.48 getRawThermoImage() [1/2]

```
virtual uint16_t* ImageProcessing::getRawThermoImage (
            const uint8_t * buffer )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.49 getRawThermoImage() [2/2]

```
virtual uint16_t* ImageProcessing::getRawThermoImage (
            int64_t index = -1 )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.50 getRingBuffer()

```
ImageRingBuffer* ImageProcessing::getRingBuffer ( ) const
```

6.17.3.51 getSize()

```
virtual unsigned int ImageProcessing::getSize ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.52 getSpatialStdDev16b()

```
virtual double ImageProcessing::getSpatialStdDev16b ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.53 getSpatialStdDev16bNoCompute()

```
virtual double ImageProcessing::getSpatialStdDev16bNoCompute ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.54 getSpatialStdDev8b()

```
virtual double ImageProcessing::getSpatialStdDev8b ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.55 getStdDevAndMeanSelection()

```
virtual void ImageProcessing::getStdDevAndMeanSelection (
             uint16_t & x,
             uint16_t & y,
             uint16_t & width,
             uint16_t & height ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.56 getThermoCalibrationData()

```
virtual Fli::ThermoCalibrationData& ImageProcessing::getThermoCalibrationData ( ) [override],
[virtual]
```

Implements IImageProcessing.

6.17.3.57 getThermoUnit()

```
virtual ThermoUnit ImageProcessing::getThermoUnit ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.58 isFlippedHorizontally()

```
virtual bool ImageProcessing::isFlippedHorizontally ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.59 isFlippedVertically()

```
virtual bool ImageProcessing::isFlippedVertically ( ) [override], [virtual]
```

Implements IImageProcessing.

6.17.3.60 isIndependent()

```
virtual bool ImageProcessing::isIndependent ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.61 isThermoEnabled()

```
virtual bool ImageProcessing::isThermoEnabled ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.62 setBadPixelsCarto()

```
virtual void ImageProcessing::setBadPixelsCarto (
             std::vector< bool > carto )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.63 setCamera() [1/2]

```
void ImageProcessing::setCamera (
             FliCred * camera )
```

6.17.3.64 setCamera() [2/2]

```
void ImageProcessing::setCamera (
             FliSfncCamera * camera )
```

6.17.3.65 setClaheCliplimit()

```
virtual void ImageProcessing::setClaheCliplimit (
             double limit )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.66 setClaheTileGridSize()

```
virtual void ImageProcessing::setClaheTileGridSize (
             int width,
             int height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.67 setClipBlack()

```
virtual void ImageProcessing::setClipBlack (
             int32_t val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.68 setClipDepth()

```
virtual void ImageProcessing::setClipDepth (
             uint8_t depth )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.69 setClipLimit()

```
virtual void ImageProcessing::setClipLimit (
             uint16_t limit )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.70 setClippingAlpha()

```
virtual void ImageProcessing::setClippingAlpha (
             double alpha )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.71 setClippingBeta()

```
virtual void ImageProcessing::setClippingBeta (
             double beta )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.72 setClippingType() [1/2]

```
virtual void ImageProcessing::setClippingType (
             ClippingType type )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.73 setClippingType() [2/2]

```
virtual void ImageProcessing::setClippingType (
             std::string type )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.74 setClipWhite()

```
virtual void ImageProcessing::setClipWhite (
             int32_t val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.75 setColorMapping()

```
virtual void ImageProcessing::setColorMapping (
             std::string colorMap )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.76 setDenoisingH()

```
virtual void ImageProcessing::setDenoisingH (
             float val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.77 setDenoisingSearchWindowSize()

```
virtual void ImageProcessing::setDenoisingSearchWindowSize (
            int val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.78 setDenoisingTemplateWindowSize()

```
virtual void ImageProcessing::setDenoisingTemplateWindowSize (
            int val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.79 setDimension()

```
virtual void ImageProcessing::setDimension (
            unsigned int width,
            unsigned int height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.80 setDragoBias()

```
virtual void ImageProcessing::setDragoBias (
            float bias )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.81 setDragoGamma()

```
virtual void ImageProcessing::setDragoGamma (
            float gamma )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.82 setDragoMultiplicator()

```
virtual void ImageProcessing::setDragoMultiplicator (
             uint8_t multiplicator )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.83 setDragoSaturation()

```
virtual void ImageProcessing::setDragoSaturation (
             float saturation )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.84 setGamma()

```
virtual void ImageProcessing::setGamma (
             double gamma )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.85 setIsThermoThrRaw()

```
virtual void ImageProcessing::setIsThermoThrRaw (
             bool isThermoThrRaw )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.86 setMantiukGamma()

```
virtual void ImageProcessing::setMantiukGamma (
             float gamma )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.87 setMantiukMultiplicator()

```
virtual void ImageProcessing::setMantiukMultiplicator (
             uint8_t multiplicator )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.88 setMantiukSaturation()

```
virtual void ImageProcessing::setMantiukSaturation (
             float saturation )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.89 setMantiukScale()

```
virtual void ImageProcessing::setMantiukScale (
             float scale )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.90 setnbImagesAccumulation()

```
virtual void ImageProcessing::setnbImagesAccumulation (
             uint8_t val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.91 setNumThreads()

```
virtual void ImageProcessing::setNumThreads (
             uint8_t num )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.92 setPercentOfMean()

```
virtual void ImageProcessing::setPercentOfMean (
             uint8_t percent )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.93 setPixelSign()

```
virtual void ImageProcessing::setPixelSign (
             bool unsignedPixel )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.94 setReinhardColorAdapt()

```
virtual void ImageProcessing::setReinhardColorAdapt (
             float color )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.95 setReinhardGamma()

```
virtual void ImageProcessing::setReinhardGamma (
             float gamma )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.96 setReinhardIntensity()

```
virtual void ImageProcessing::setReinhardIntensity (
             float intensity )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.97 setReinhardLightAdapt()

```
virtual void ImageProcessing::setReinhardLightAdapt (
             float light )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.98 setRingBuffer()

```
void ImageProcessing::setRingBuffer (
             ImageRingBuffer * ringBuffer )
```

6.17.3.99 setRotationAngle()

```
virtual void ImageProcessing::setRotationAngle (
             unsigned int angle )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.100 setRotationAngleText()

```
virtual void ImageProcessing::setRotationAngleText (
             unsigned int angle )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.101 setSharpenAlpha()

```
virtual void ImageProcessing::setSharpenAlpha (
             double val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.102 setSharpenBeta()

```
virtual void ImageProcessing::setSharpenBeta (
             double val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.103 setSharpenGamma()

```
virtual void ImageProcessing::setSharpenGamma (
             double val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.104 setSharpenKsize()

```
virtual void ImageProcessing::setSharpenKsize (
             int width,
             int height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.105 setSharpenSigmaX()

```
virtual void ImageProcessing::setSharpenSigmaX (
            double val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.106 setSharpenSigmaY()

```
virtual void ImageProcessing::setSharpenSigmaY (
            double val )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.107 setStdDevAndMeanSelection()

```
virtual void ImageProcessing::setStdDevAndMeanSelection (
            uint16_t x,
            uint16_t y,
            uint16_t width,
            uint16_t height )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.108 setThermoCalibrationData()

```
virtual void ImageProcessing::setThermoCalibrationData (
            Fli::ThermoCalibrationData & data )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.109 setThermoUnit()

```
virtual void ImageProcessing::setThermoUnit (
            ThermoUnit unit )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.110 setToneMappingDrago()

```
virtual void ImageProcessing::setToneMappingDrago ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.111 setToneMappingMantiuk()

```
virtual void ImageProcessing::setToneMappingMantiuk ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.112 setToneMappingNormal()

```
virtual void ImageProcessing::setToneMappingNormal ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.113 setToneMappingReinhard()

```
virtual void ImageProcessing::setToneMappingReinhard ( )  [override], [virtual]
```

Implements IImageProcessing.

6.17.3.114 updateAutoExposureParam()

```
virtual void ImageProcessing::updateAutoExposureParam ( )  [override], [virtual]
```

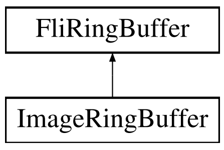
Implements IImageProcessing.

6.18 ImageRingBuffer Class Reference

This class derive from pure virtual FliRingBuffer and manages the images inside a ring buffer with some put methods to add one or several images or nro or iota buffers into the ring buffer.

```
#include <ImageRingBuffer.h>
```

Inheritance diagram for ImageRingBuffer:



Public Member Functions

- ImageRingBuffer ()
- ∼ImageRingBuffer ()
- virtual uint32_t getFilling () const override

    Get buffer filling.
- virtual uint16_t getSizeInMo () override

    Get current buffer size.
- virtual uint32_t getSizeInFrames () override

    Give the images capacity of the buffer.
- virtual uint32_t getNumberOfWrap () override

    Get the number of times that the buffer had been full since reset.
- virtual uint64_t getNbCountError () override

    Get the number of frame count error.
- virtual int64_t getLastImageIndex () const override

    Get the last image acquired index.
- double getFps () const
- void getImageDimension (uint16_t &width, uint16_t &height)
- unsigned int getOcamFrameNumber (int64_t index=-1)
- const uint8_t ∗ getImage (int64_t index=-1)
- virtual uint16_t nbFramesInAccumulation () override
- virtual void setSizeInMo (uint16_t sizeMo) override

    Change the buffer capacity in Mo.
- virtual void setSizeInFrames (uint32_t nbFrames) override

    Change the buffer capacity in number of images.
- virtual void setSizeInFramesThermo (uint32_t nbFrames) override

    Change the buffer capacity in number of images for a thermographic analysis (∗.thr.raw files)
- virtual void setFowlerOffset (uint16_t offset) override
- void setImageDimension (uint16_t width, uint16_t height)

    setImageDimension define the image size and capacity from the width and height
- void setImageDimensionThermo (uint16_t width, uint16_t height)

    setImageDimension define the thermographic image size and capacity from the width and height
- void setImageTagState (bool enabled)
- void resetCountError ()
- void resetGrabN ()
- void setNbReadImro (uint32_t nbRead)
- void resetNbSecondsFps ()
- void setCameraModel (Fli::CameraModel model)
- void setOcamFrameNumberOffset (uint8_t offset)
- void setDefaultCapacity ()
- void setObserverList (std::list< IFliSdkObserver ∗ > ∗obs)
- virtual void reset () override

    Reset the buffer.
- virtual void resetAccumulation () override
- virtual bool isEnabled () override

    Return true if the buffer is enabled else false.
- virtual void enableGrabN (uint32_t nbFrames) override

    Enable grab N mode, the buffer will stop copy images when nbFrames images is hit.
- virtual void disableGrabN () override

    Disable grab N mode.
- virtual bool isGrabNFinished () const override

    State of the grab N.

- virtual bool isGrabNEnabled () const override

    State of the grab N mode.
- virtual void enableSubstractMode (bool enable) override

    Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.
- virtual void enableAccumulationMode (bool enable) override
- virtual void enable (bool enable) override

    Enable or disable internal ring buffer of the SDK.
- void enableModeImro (bool enable)
- void enableFollowUpTheRamp (bool enable)
- void enableObserversNotif (bool enable)
- void enable8BitsPixel (bool enable)
- void enable8BitsPixelThermo ()
- void put (const uint8_t ∗image, bool bypassGrabN=false)

    put an image into the main buffer
- void put (const uint8_t ∗data, uint64_t size)

    put one or several images to the main buffer
- void putFollowUpTheRamp (const uint16_t ∗image)

    putFollowUpTheRamp add an image to the pixels sum of the follow up
- void setNbRead (uint16_t nbRead)
- void setNbLoop (uint16_t nbLoop)
- void setNbSampPix (uint16_t nbSamp)
- void putNro (const uint16_t ∗images)

    putNro (only for C-RED 1) put an image from a nro buffer of images into the main buffer
- void putIota (const uint16_t ∗images)

    putIota (only for C-RED 1) put an image from a iota buffer of images into the main buffer
- void putFowler (const uint16_t ∗image)

    putFowler (only for C-RED 1) add if image number < number of image to read or else substract an image in a fowler image

6.18.1 Detailed Description

This class derive from pure virtual FliRingBuffer and manages the images inside a ring buffer with some put methods to add one or several images or nro or iota buffers into the ring buffer.

6.18.2 Constructor & Destructor Documentation

6.18.2.1 ImageRingBuffer()

```
ImageRingBuffer::ImageRingBuffer ( )  [explicit]
```

6.18.2.2 ∼ImageRingBuffer()

```
ImageRingBuffer::∼ImageRingBuffer ( )
```

6.18.3 Member Function Documentation

6.18.3.1 disableGrabN()

```
virtual void ImageRingBuffer::disableGrabN ( )  [override], [virtual]
```

Disable grab N mode.

Implements FliRingBuffer.

6.18.3.2 enable()

```
virtual void ImageRingBuffer::enable (
             bool enable )  [override], [virtual]
```

Enable or disable internal ring buffer of the SDK.

Attention

If ring buffer is disabled loadBuffer, saveBuffer, getRawImage, getImage and getImage16b will be disabled. grabN and error count will be disable too.

Implements FliRingBuffer.

6.18.3.3 enable8BitsPixel()

```
void ImageRingBuffer::enable8BitsPixel (
             bool enable )
```

6.18.3.4 enable8BitsPixelThermo()

```
void ImageRingBuffer::enable8BitsPixelThermo ( )
```

6.18.3.5 enableAccumulationMode()

```
virtual void ImageRingBuffer::enableAccumulationMode (
             bool enable )  [override], [virtual]
```

Implements FliRingBuffer.

6.18.3.6 enableFollowUpTheRamp()

```
void ImageRingBuffer::enableFollowUpTheRamp (
            bool enable )
```

6.18.3.7 enableGrabN()

```
virtual void ImageRingBuffer::enableGrabN (
            uint32_t nbFrames )  [override], [virtual]
```

Enable grab N mode, the buffer will stop copy images when nbFrames images is hit.

Parameters

nbFrames	: number of frames to grab.

Implements FliRingBuffer.

6.18.3.8 enableModeImro()

```
void ImageRingBuffer::enableModeImro (
            bool enable )
```

6.18.3.9 enableObserversNotif()

```
void ImageRingBuffer::enableObserversNotif (
            bool enable )
```

6.18.3.10 enableSubstractMode()

```
virtual void ImageRingBuffer::enableSubstractMode (
            bool enable )  [override], [virtual]
```

Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.

Parameters

enable	enable/disable the mode

Implements FliRingBuffer.

6.18.3.11 getFilling()

```
virtual uint32_t ImageRingBuffer::getFilling ( ) const  [override], [virtual]
```

Get buffer filling.

Returns

a number representing the filling

Implements FliRingBuffer.

6.18.3.12 getFps()

```
double ImageRingBuffer::getFps ( ) const
```

6.18.3.13 getImage()

```
const uint8_t* ImageRingBuffer::getImage (
            int64_t index = -1 )
```

6.18.3.14 getImageDimension()

```
void ImageRingBuffer::getImageDimension (
            uint16_t & width,
            uint16_t & height )
```

6.18.3.15 getLastImageIndex()

```
virtual int64_t ImageRingBuffer::getLastImageIndex ( ) const  [override], [virtual]
```

Get the last image acquired index.

Returns

the index or -1 if no image in buffer

Implements FliRingBuffer.

6.18.3.16 getNbCountError()

```
virtual uint64_t ImageRingBuffer::getNbCountError ( )  [override], [virtual]
```

Get the number of frame count error.

Returns

the number of count error

Implements FliRingBuffer.

6.18.3.17 getNumberOfWrap()

```
virtual uint32_t ImageRingBuffer::getNumberOfWrap ( )  [override], [virtual]
```

Get the number of times that the buffer had been full since reset.

Returns

the number of wrap

Implements FliRingBuffer.

6.18.3.18 getOcamFrameNumber()

```
unsigned int ImageRingBuffer::getOcamFrameNumber (
             int64_t index = -1 )
```

6.18.3.19 getSizeInFrames()

```
virtual uint32_t ImageRingBuffer::getSizeInFrames ( )  [override], [virtual]
```

Give the images capacity of the buffer.

Returns

FliSdkError

Implements FliRingBuffer.

6.18.3.20 getSizeInMo()

```
virtual uint16_t ImageRingBuffer::getSizeInMo ( )  [override], [virtual]
```

Get current buffer size.

Returns

the buffer size in Mo

Implements FliRingBuffer.

6.18.3.21 isEnabled()

```
virtual bool ImageRingBuffer::isEnabled ( )  [override], [virtual]
```

Return true if the buffer is enabled else false.

Implements FliRingBuffer.

6.18.3.22 isGrabNEnabled()

```
virtual bool ImageRingBuffer::isGrabNEnabled ( ) const  [override], [virtual]
```

State of the grab N mode.

Returns

true if grab N mode activated else false

Implements FliRingBuffer.

6.18.3.23 isGrabNFinished()

```
virtual bool ImageRingBuffer::isGrabNFinished ( ) const  [override], [virtual]
```

State of the grab N.

Returns

true if the grab is over else false

Implements FliRingBuffer.

6.18.3.24 nbFramesInAccumulation()

```
virtual uint16_t ImageRingBuffer::nbFramesInAccumulation ( )  [override], [virtual]
```

Implements FliRingBuffer.

6.18.3.25 put() [1/2]

```
void ImageRingBuffer::put (
             const uint8_t * data,
             uint64_t size )
```

put one or several images to the main buffer

Parameters

data	a pointer to a buffer containing one or several image
size	the size of the buffer : number of images x one image size

6.18.3.26 put() [2/2]

```
void ImageRingBuffer::put (
            const uint8_t * image,
            bool bypassGrabN = false )
```

put an image into the main buffer

Parameters

image	the image to put
bypassGrabN	true will bypass the grabN mechanism

6.18.3.27 putFollowUpTheRamp()

```
void ImageRingBuffer::putFollowUpTheRamp (
            const uint16_t * image )
```

putFollowUpTheRamp add an image to the pixels sum of the follow up

Parameters

image	the image to add

6.18.3.28 putFowler()

```
void ImageRingBuffer::putFowler (
            const uint16_t * image )
```

putFowler (only for C-RED 1) add if image number $<$ number of image to read or else substract an image in a fowler image

Parameters

image	the image to add or substract

6.18.3.29 putIota()

```
void ImageRingBuffer::putIota (
            const uint16_t * images )
```

putIota (only for C-RED 1) put an image from a iota buffer of images into the main buffer

Parameters

images	a iota buffer of images

6.18.3.30 putNro()

```
void ImageRingBuffer::putNro (
            const uint16_t * images )
```

putNro (only for C-RED 1) put an image from a nro buffer of images into the main buffer

Parameters

images	a nro buffer of images

6.18.3.31 reset()

```
virtual void ImageRingBuffer::reset ( )  [override], [virtual]
```

Reset the buffer.

Implements FliRingBuffer.

6.18.3.32 resetAccumulation()

```
virtual void ImageRingBuffer::resetAccumulation ( )  [override], [virtual]
```

Implements FliRingBuffer.

6.18.3.33 resetCountError()

```
void ImageRingBuffer::resetCountError ( )
```

6.18.3.34 resetGrabN()

```
void ImageRingBuffer::resetGrabN ( )
```

6.18.3.35 resetNbSecondsFps()

```
void ImageRingBuffer::resetNbSecondsFps ( )
```

6.18.3.36 setCameraModel()

```
void ImageRingBuffer::setCameraModel (
             Fli::CameraModel model )
```

6.18.3.37 setDefaultCapacity()

```
void ImageRingBuffer::setDefaultCapacity ( )
```

6.18.3.38 setFowlerOffset()

```
virtual void ImageRingBuffer::setFowlerOffset (
             uint16_t offset )  [override], [virtual]
```

Implements FliRingBuffer.

6.18.3.39 setImageDimension()

```
void ImageRingBuffer::setImageDimension (
             uint16_t width,
             uint16_t height )
```

setImageDimension define the image size and capacity from the width and height

Parameters

width	of the image in pixel
height	of the image in pixel

6.18.3.40 setImageDimensionThermo()

```
void ImageRingBuffer::setImageDimensionThermo (
            uint16_t width,
            uint16_t height )
```

setImageDimension define the thermographic image size and capacity from the width and height

Parameters

width	of the image in pixel
height	of the image in pixel

6.18.3.41 setImageTagState()

```
void ImageRingBuffer::setImageTagState (
            bool enabled )
```

6.18.3.42 setNbLoop()

```
void ImageRingBuffer::setNbLoop (
            uint16_t nbLoop )
```

6.18.3.43 setNbRead()

```
void ImageRingBuffer::setNbRead (
            uint16_t nbRead )
```

6.18.3.44 setNbReadImro()

```
void ImageRingBuffer::setNbReadImro (
            uint32_t nbRead )
```

6.18.3.45 setNbSampPix()

```
void ImageRingBuffer::setNbSampPix (
            uint16_t nbSamp )
```

6.18.3.46 setObserverList()

```
void ImageRingBuffer::setObserverList (
            std::list< IFliSdkObserver * > * obs )
```

6.18.3.47 setOcamFrameNumberOffset()

```
void ImageRingBuffer::setOcamFrameNumberOffset (
            uint8_t offset )
```

6.18.3.48 setSizeInFrames()

```
virtual void ImageRingBuffer::setSizeInFrames (
            uint32_t nbFrames )  [override], [virtual]
```

Change the buffer capacity in number of images.

Parameters

nbFrames	: capacity of the ring buffer in nb images

Implements FliRingBuffer.

6.18.3.49 setSizeInFramesThermo()

```
virtual void ImageRingBuffer::setSizeInFramesThermo (
            uint32_t nbFrames )  [override], [virtual]
```

Change the buffer capacity in number of images for a thermographic analysis (∗.thr.raw files)

Parameters

nbFrames	: capacity of the ring buffer in nb images

Implements FliRingBuffer.

6.18.3.50 setSizeInMo()

```
virtual void ImageRingBuffer::setSizeInMo (
            uint16_t sizeMo )  [override], [virtual]
```

Change the buffer capacity in Mo.

Parameters

sizeMo	: capacity of the ring buffer in Mo

Implements FliRingBuffer.

6.19 IRawImageReceivedObserver Class Reference

This can be herited to be an observer of the reception of a raw image.

`#include <FliSdk.h>`

Public Member Functions

- virtual void imageReceived (const uint8_t ∗image)

  This function is called when a new image is received (this function is deprecated, please use imageReceivedBefore↩ Buffer or imageReceivedAfterBuffer) Use addRawImageReceivedObserver with beforeCopy to true to be notified before the copy in the ringBuffer, so the image come directly from the grabber Use addRawImageReceivedObserver with beforeCopy to false to be notified after the copy in the ringBuffer, so the image comes from the ringBuffer.
- virtual void imageReceivedBeforeBuffer (const uint8_t ∗image, uint16_t nbImages, bool &copyInBuffer)

  This function is called when a new image is received and the observer is register before the ring buffer Use add↩ RawImageReceivedObserver with beforeCopy to true to be notified before the copy in the ringBuffer, so the image come directly from the grabber The function "useDeprecatedFunction" must return false to use this function.
- virtual void imageReceivedAfterBuffer (const uint8_t ∗image, uint16_t nbImages)

  This function is called when a new image is received and the observer is register after the ring buffer Use addRaw↩ ImageReceivedObserver with beforeCopy to false to be notified after the copy in the ringBuffer, so the image comes from the ringBuffer The function "useDeprecatedFunction" must return false to use this function.
- virtual uint16_t fpsTrigger ()

  This function is called to know at which fps does the observer want to receive images.
- virtual bool useDeprecatedFunction ()

  If return true then "imageReceived" is called, else "imageReceivedBeforeBuffer" or "imageReceivedAfterBuffer" is called.

6.19.1 Detailed Description

This can be herited to be an observer of the reception of a raw image.

6.19.2 Member Function Documentation

6.19.2.1 fpsTrigger()

```
virtual uint16_t IRawImageReceivedObserver::fpsTrigger ( )  [inline], [virtual]
```

This function is called to know at which fps does the observer want to receive images.

Returns

fps value, if 0 then observer is notified at full speed.

6.19.2.2 imageReceived()

```
virtual void IRawImageReceivedObserver::imageReceived (
             const uint8_t * image )  [inline], [virtual]
```

This function is called when a new image is received (this function is deprecated, please use imageReceived←BeforeBuffer or imageReceivedAfterBuffer) Use addRawImageReceivedObserver with beforeCopy to true to be notified before the copy in the ringBuffer, so the image come directly from the grabber Use addRawImageReceived←Observer with beforeCopy to false to be notified after the copy in the ringBuffer, so the image comes from the ringBuffer.

Parameters

image	pointer to the buffer of image

Attention

This function is called by a thread, you need to resynchronize it and not call a sdk function because it's not thread safe.

6.19.2.3 imageReceivedAfterBuffer()

```
virtual void IRawImageReceivedObserver::imageReceivedAfterBuffer (
             const uint8_t * image,
             uint16_t nbImages )  [inline], [virtual]
```

This function is called when a new image is received and the observer is register after the ring buffer Use add←RawImageReceivedObserver with beforeCopy to false to be notified after the copy in the ringBuffer, so the image comes from the ringBuffer The function "useDeprecatedFunction" must return false to use this function.

Parameters

image	pointer to the buffer of image
nbImages	number of images in the buffer

Attention

This function is called by a thread, you need to resynchronize it and not call a sdk function because it's not thread safe.

6.19.2.4 imageReceivedBeforeBuffer()

```
virtual void IRawImageReceivedObserver::imageReceivedBeforeBuffer (
             const uint8_t * image,
             uint16_t nbImages,
             bool & copyInBuffer ) [inline], [virtual]
```

This function is called when a new image is received and the observer is register before the ring buffer Use add↵ RawImageReceivedObserver with beforeCopy to true to be notified before the copy in the ringBuffer, so the image come directly from the grabber The function "useDeprecatedFunction" must return false to use this function.

Parameters

image	pointer to the buffer of image(s)
nbImages	number of images in the buffer
copyInBuffer	if true the images are copied in the ring buffer of the SDK (if the ring buffer is enabled)

Attention

This function is called by a thread, you need to resynchronize it and not call a sdk function because it's not thread safe.

6.19.2.5 useDeprecatedFunction()

```
virtual bool IRawImageReceivedObserver::useDeprecatedFunction ( ) [inline], [virtual]
```

If return true then "imageReceived" is called, else "imageReceivedBeforeBuffer" or "imageReceivedAfterBuffer" is called.

6.20 Ocam2Conf Struct Reference

```
#include <FliOcam2K.h>
```

Public Attributes

- Ocam2Mode wmode
- std::string configFile
- uint16_t width
- uint16_t height
- uint16_t nbPixels
- uint16_t rawWidth
- uint16_t rawHeight
- uint16_t rawNbPixels
- uint16_t binningOffset
- uint16_t nbIdenticPixels
- uint16_t fpsMax

6.20.1 Member Data Documentation

6.20.1.1 binningOffset

```
uint16_t Ocam2Conf::binningOffset
```

6.20.1.2 configFile

```
std::string Ocam2Conf::configFile
```

6.20.1.3 fpsMax

```
uint16_t Ocam2Conf::fpsMax
```

6.20.1.4 height

```
uint16_t Ocam2Conf::height
```

6.20.1.5 nbIdenticPixels

```
uint16_t Ocam2Conf::nbIdenticPixels
```

6.20.1.6 nbPixels

```
uint16_t Ocam2Conf::nbPixels
```

6.20.1.7 rawHeight

```
uint16_t Ocam2Conf::rawHeight
```

6.20.1.8 rawNbPixels

```
uint16_t Ocam2Conf::rawNbPixels
```

6.20.1.9 rawWidth

```
uint16_t Ocam2Conf::rawWidth
```

6.20.1.10 width

```
uint16_t Ocam2Conf::width
```

6.20.1.11 wmode

```
Ocam2Mode Ocam2Conf::wmode
```

Chapter 7

File Documentation

7.1 FliCblueOne.h File Reference

Classes

- class FliCblueOne

7.2 FliCblueOneEnum.h File Reference

Namespaces

- FliCblueOneEnum

Enumerations

- enum FliCblueOneEnum::DeviceTemperatureSelectorEnum : int64_t {
  FliCblueOneEnum::DeviceTemperatureSelectorEnum::Sensor = 0, FliCblueOneEnum::DeviceTemperatureSelectorEnum::CPU
  = 1, FliCblueOneEnum::DeviceTemperatureSelectorEnum::Power = 2, FliCblueOneEnum::DeviceTemperatureSelectorEnum::Fr
  = 3,
  FliCblueOneEnum::DeviceTemperatureSelectorEnum::Heatsink = 4, FliCblueOneEnum::DeviceTemperatureSelectorEnum::Cas
  = 5 }
- enum FliCblueOneEnum::DeviceTecSelectorEnum : int64_t { FliCblueOneEnum::DeviceTecSelectorEnum::TEC1
  = 0 }
- enum FliCblueOneEnum::DeviceFanModeEnum : int64_t { FliCblueOneEnum::DeviceFanModeEnum::Automatic
  = 0, FliCblueOneEnum::DeviceFanModeEnum::Manual = 1 }
- enum FliCblueOneEnum::FirmwareUpdateStatusEnum : int64_t { FliCblueOneEnum::FirmwareUpdateStatusEnum::Idle
  = 0, FliCblueOneEnum::FirmwareUpdateStatusEnum::InProgress = 1, FliCblueOneEnum::FirmwareUpdateStatusEnum::Done
  = 2, FliCblueOneEnum::FirmwareUpdateStatusEnum::Failed = 3 }
- enum FliCblueOneEnum::LogCollectStatusEnum : int64_t { FliCblueOneEnum::LogCollectStatusEnum::Idle
  = 0, FliCblueOneEnum::LogCollectStatusEnum::InProgress = 1, FliCblueOneEnum::LogCollectStatusEnum::Done
  = 2, FliCblueOneEnum::LogCollectStatusEnum::Failed = 3 }
- enum FliCblueOneEnum::IPModeEnum : int64_t { FliCblueOneEnum::IPModeEnum::Automatic = 0,
  FliCblueOneEnum::IPModeEnum::Manual = 1 }

- enum FliCblueOneEnum::SparseSelectorEnum : int64_t {
  FliCblueOneEnum::SparseSelectorEnum::Region0 = 0, FliCblueOneEnum::SparseSelectorEnum::Region1 = 1, FliCblueOneEnum::SparseSelectorEnum::Region2 = 2, FliCblueOneEnum::SparseSelectorEnum::Region3 = 3,
  FliCblueOneEnum::SparseSelectorEnum::Region4 = 4, FliCblueOneEnum::SparseSelectorEnum::Region5 = 5, FliCblueOneEnum::SparseSelectorEnum::Region6 = 6, FliCblueOneEnum::SparseSelectorEnum::Region7 = 7 }
- enum FliCblueOneEnum::SparseModeEnum : int64_t { FliCblueOneEnum::SparseModeEnum::Off = 0, FliCblueOneEnum::SparseModeEnum::On = 1 }
- enum FliCblueOneEnum::TestPatternGeneratorSelectorEnum : int64_t { FliCblueOneEnum::TestPatternGeneratorSelectorEnur
  = 0, FliCblueOneEnum::TestPatternGeneratorSelectorEnum::Simulator = 1 }
- enum FliCblueOneEnum::TestPatternEnum : int64_t {
  FliCblueOneEnum::TestPatternEnum::Off = 0, FliCblueOneEnum::TestPatternEnum::Black = 1, FliCblueOneEnum::TestPatternE
  = 2, FliCblueOneEnum::TestPatternEnum::GreyHorizontalRamp = 3,
  FliCblueOneEnum::TestPatternEnum::SimulatorGreyHorizontalRamp = 10, FliCblueOneEnum::TestPatternEnum::SimulatorGre
  = 11 }
- enum FliCblueOneEnum::GlowReductionEnum : int64_t { FliCblueOneEnum::GlowReductionEnum::Off = 0, FliCblueOneEnum::GlowReductionEnum::On = 1 }
- enum FliCblueOneEnum::ConversionEfficiencyEnum : int64_t { FliCblueOneEnum::ConversionEfficiencyEnum::Low = 0, FliCblueOneEnum::ConversionEfficiencyEnum::High = 1 }
- enum FliCblueOneEnum::UserSetSelectorEnum : int64_t {
  FliCblueOneEnum::UserSetSelectorEnum::Default8bits = 30, FliCblueOneEnum::UserSetSelectorEnum::Default12bits
  = 32, FliCblueOneEnum::UserSetSelectorEnum::HighSensitivity8bits = 40, FliCblueOneEnum::UserSetSelectorEnum::HighSen
  = 42,
  FliCblueOneEnum::UserSetSelectorEnum::UserSet0 = 0, FliCblueOneEnum::UserSetSelectorEnum::UserSet1 = 1, FliCblueOneEnum::UserSetSelectorEnum::UserSet2 = 2, FliCblueOneEnum::UserSetSelectorEnum::UserSet3 = 3,
  FliCblueOneEnum::UserSetSelectorEnum::UserSet4 = 4, FliCblueOneEnum::UserSetSelectorEnum::UserSet5 = 5, FliCblueOneEnum::UserSetSelectorEnum::UserSet6 = 6, FliCblueOneEnum::UserSetSelectorEnum::UserSet7 = 7,
  FliCblueOneEnum::UserSetSelectorEnum::UserSet8 = 8, FliCblueOneEnum::UserSetSelectorEnum::UserSet9 = 9 }
- enum FliCblueOneEnum::UserSetDefaultEnum : int64_t {
  FliCblueOneEnum::UserSetDefaultEnum::Default8bits = 30, FliCblueOneEnum::UserSetDefaultEnum::Default12bits
  = 32, FliCblueOneEnum::UserSetDefaultEnum::HighSensitivity8bits = 40, FliCblueOneEnum::UserSetDefaultEnum::HighSensit
  = 42,
  FliCblueOneEnum::UserSetDefaultEnum::UserSet0 = 0, FliCblueOneEnum::UserSetDefaultEnum::UserSet1 = 1, FliCblueOneEnum::UserSetDefaultEnum::UserSet2 = 2, FliCblueOneEnum::UserSetDefaultEnum::UserSet3 = 3,
  FliCblueOneEnum::UserSetDefaultEnum::UserSet4 = 4, FliCblueOneEnum::UserSetDefaultEnum::UserSet5 = 5, FliCblueOneEnum::UserSetDefaultEnum::UserSet6 = 6, FliCblueOneEnum::UserSetDefaultEnum::UserSet7 = 7,
  FliCblueOneEnum::UserSetDefaultEnum::UserSet8 = 8, FliCblueOneEnum::UserSetDefaultEnum::UserSet9 = 9 }

Variables

- const std::map< std::string, int64_t > FliCblueOneEnum::DeviceTemperatureSelectorStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::DeviceTecSelectorStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::DeviceFanModeStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::FirmwareUpdateStatusStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::LogCollectStatusStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::IPModeStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::SparseSelectorStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::SparseModeStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::TestPatternGeneratorSelectorStringToValue

- const std::map< std::string, int64_t > FliCblueOneEnum::TestPatternStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::GlowReductionStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::ConversionEfficiencyStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::UserSetSelectorStringToValue
- const std::map< std::string, int64_t > FliCblueOneEnum::UserSetDefaultStringToValue

7.3 FliCblueSfncEnum.h File Reference

Namespaces

- FliCblueSfncEnum

Enumerations

- enum FliCblueSfncEnum::DeviceScanTypeEnum : int64_t { FliCblueSfncEnum::DeviceScanTypeEnum::Areascan = 0 }
- enum FliCblueSfncEnum::DeviceIndicatorModeEnum : int64_t { FliCblueSfncEnum::DeviceIndicatorModeEnum::Inactive = 0, FliCblueSfncEnum::DeviceIndicatorModeEnum::Active = 1, FliCblueSfncEnum::DeviceIndicatorModeEnum::ErrorStatus = 2 }
- enum FliCblueSfncEnum::SensorShutterModeEnum : int64_t { FliCblueSfncEnum::SensorShutterModeEnum::Global = 0, FliCblueSfncEnum::SensorShutterModeEnum::Rolling = 1, FliCblueSfncEnum::SensorShutterModeEnum::GlobalReset = 2 }
- enum FliCblueSfncEnum::RegionSelectorEnum : int64_t { FliCblueSfncEnum::RegionSelectorEnum::Region0 = 0 }
- enum FliCblueSfncEnum::RegionModeEnum : int64_t { FliCblueSfncEnum::RegionModeEnum::Off = 0, FliCblueSfncEnum::RegionModeEnum::On = 1 }
- enum FliCblueSfncEnum::RegionDestinationEnum : int64_t { FliCblueSfncEnum::RegionDestinationEnum::Stream0 = 0 }
- enum FliCblueSfncEnum::PixelFormatEnum : int64_t { FliCblueSfncEnum::PixelFormatEnum::Mono8 = 0, FliCblueSfncEnum::PixelFormatEnum::Mono10 = 1, FliCblueSfncEnum::PixelFormatEnum::Mono12 = 2 }
- enum FliCblueSfncEnum::AcquisitionModeEnum : int64_t { FliCblueSfncEnum::AcquisitionModeEnum::Continuous = 0 }
- enum FliCblueSfncEnum::ExposureModeEnum : int64_t { FliCblueSfncEnum::ExposureModeEnum::Timed = 0 }
- enum FliCblueSfncEnum::GainSelectorEnum : int64_t { FliCblueSfncEnum::GainSelectorEnum::AnalogAll = 0, FliCblueSfncEnum::GainSelectorEnum::DigitalAll = 1 }
- enum FliCblueSfncEnum::BlackLevelSelectorEnum : int64_t { FliCblueSfncEnum::BlackLevelSelectorEnum::All = 0 }
- enum FliCblueSfncEnum::BlackLevelAutoEnum : int64_t { FliCblueSfncEnum::BlackLevelAutoEnum::Off = 0, FliCblueSfncEnum::BlackLevelAutoEnum::Continuous = 1 }
- enum FliCblueSfncEnum::CxpLinkConfigurationStatusEnum : int64_t {
  FliCblueSfncEnum::CxpLinkConfigurationStatusEnum::CXP1_X1 = 0, FliCblueSfncEnum::CxpLinkConfigurationStatusEnum::C
  = 1, FliCblueSfncEnum::CxpLinkConfigurationStatusEnum::CXP1_X2 = 2, FliCblueSfncEnum::CxpLinkConfigurationStatusEnu
  = 3,
  FliCblueSfncEnum::CxpLinkConfigurationStatusEnum::CXP10_X2 = 4, FliCblueSfncEnum::CxpLinkConfigurationStatusEnum::
  = 5 }
- enum FliCblueSfncEnum::CxpLinkConfigurationPreferredEnum : int64_t { FliCblueSfncEnum::CxpLinkConfigurationPreferredEr
  = 0, FliCblueSfncEnum::CxpLinkConfigurationPreferredEnum::CXP6_X2 = 1, FliCblueSfncEnum::CxpLinkConfigurationPreferre
  = 2, FliCblueSfncEnum::CxpLinkConfigurationPreferredEnum::CXP12_X2 = 3 }
- enum FliCblueSfncEnum::CxpLinkConfigurationEnum : int64_t { FliCblueSfncEnum::CxpLinkConfigurationEnum::CXP10_X2 = 0 }
- enum FliCblueSfncEnum::CxpConnectionTestModeEnum : int64_t { FliCblueSfncEnum::CxpConnectionTestModeEnum::Off = 0, FliCblueSfncEnum::CxpConnectionTestModeEnum::Mode1 = 1 }

- enum FliCblueSfncEnum::CxpSendReceiveSelectorEnum : int64_t { FliCblueSfncEnum::CxpSendReceiveSelectorEnum::Send = 0, FliCblueSfncEnum::CxpSendReceiveSelectorEnum::Receive = 1 }
- enum FliCblueSfncEnum::CxpErrorCounterSelectorEnum : int64_t { FliCblueSfncEnum::CxpErrorCounterSelectorEnum::ConnectionLockLoss = 0, FliCblueSfncEnum::CxpErrorCounterSelectorEn = 1, FliCblueSfncEnum::CxpErrorCounterSelectorEnum::StreamDataPacketCrc = 2, FliCblueSfncEnum::CxpErrorCounterSelec = 3, FliCblueSfncEnum::CxpErrorCounterSelectorEnum::EventPacketCrc = 4, FliCblueSfncEnum::CxpErrorCounterSelectorEnum::I = 5, FliCblueSfncEnum::CxpErrorCounterSelectorEnum::DuplicatedCharactersUncorrected = 6 }
- enum FliCblueSfncEnum::CxpErrorCounterStatusEnum : int64_t { FliCblueSfncEnum::CxpErrorCounterStatusEnum::CounterA = 0, FliCblueSfncEnum::CxpErrorCounterStatusEnum::CounterOverflow = 1 }

Variables

- const std::vector< std::string > FliCblueSfncEnum::DeviceScanTypeString
- const std::vector< std::string > FliCblueSfncEnum::DeviceIndicatorModeString
- const std::vector< std::string > FliCblueSfncEnum::SensorShutterModeString
- const std::vector< std::string > FliCblueSfncEnum::RegionSelectorString
- const std::vector< std::string > FliCblueSfncEnum::RegionModeString
- const std::vector< std::string > FliCblueSfncEnum::RegionDestinationString
- const std::vector< std::string > FliCblueSfncEnum::PixelFormatString
- const std::vector< std::string > FliCblueSfncEnum::AcquisitionModeString
- const std::vector< std::string > FliCblueSfncEnum::ExposureModeString
- const std::vector< std::string > FliCblueSfncEnum::GainSelectorString
- const std::vector< std::string > FliCblueSfncEnum::BlackLevelSelectorString
- const std::vector< std::string > FliCblueSfncEnum::BlackLevelAutoString
- const std::vector< std::string > FliCblueSfncEnum::CxpLinkConfigurationStatusString
- const std::vector< std::string > FliCblueSfncEnum::CxpLinkConfigurationPreferredString
- const std::vector< std::string > FliCblueSfncEnum::CxpLinkConfigurationString
- const std::vector< std::string > FliCblueSfncEnum::CxpConnectionTestModeString
- const std::vector< std::string > FliCblueSfncEnum::CxpSendReceiveSelectorString
- const std::vector< std::string > FliCblueSfncEnum::CxpErrorCounterSelectorString
- const std::vector< std::string > FliCblueSfncEnum::CxpErrorCounterStatusString
- const std::vector< std::string > FliCblueSfncEnum::featuresListString

7.4 FliCblueTwo.h File Reference

Classes

- class FliCblueTwo

7.5 FliCblueTwoEnum.h File Reference

Namespaces

- FliCblueTwoEnum

Enumerations

- enum FliCblueTwoEnum::BinningSelectorEnum : int64_t { FliCblueTwoEnum::BinningSelectorEnum::Sensor = 0 }

  Selects which binning engine is controlled by the BinningHorizontal and BinningVertical features.
- enum FliCblueTwoEnum::BinningHorizontalModeEnum : int64_t { FliCblueTwoEnum::BinningHorizontalModeEnum::Sum = 0, FliCblueTwoEnum::BinningHorizontalModeEnum::Average = 1 }

  Sets the mode to use to combine horizontal photo-sensitive cells together when BinningHorizontal is used.
- enum FliCblueTwoEnum::BinningVerticalModeEnum : int64_t { FliCblueTwoEnum::BinningVerticalModeEnum::Sum = 0, FliCblueTwoEnum::BinningVerticalModeEnum::Average = 1 }

  Sets the mode to use to combine vertical photo-sensitive cells together when BinningVertical is used.
- enum FliCblueTwoEnum::FirmwareUpdateStatusEnum : int64_t { FliCblueTwoEnum::FirmwareUpdateStatusEnum::Idle = 0, FliCblueTwoEnum::FirmwareUpdateStatusEnum::InProgress = 1, FliCblueTwoEnum::FirmwareUpdateStatusEnum::Done = 2, FliCblueTwoEnum::FirmwareUpdateStatusEnum::Failed = 3 }

Variables

- const std::map< std::string, int64_t > FliCblueTwoEnum::BinningSelectorStringToValue
- const std::map< std::string, int64_t > FliCblueTwoEnum::BinningHorizontalModeStringToValue
- const std::map< std::string, int64_t > FliCblueTwoEnum::BinningVerticalModeStringToValue
- const std::map< std::string, int64_t > FliCblueTwoEnum::FirmwareUpdateStatusStringToValue

7.6 FliCred.h File Reference

Classes

- class FliCred

  This class manages the methods common to all the C-RED camera (C-RED One, C-RED 2, C-RED 2 Lite, C-RED 2 ER, C-RED 3)

Typedefs

- typedef FliCred FliCamera

7.6.1 Typedef Documentation

7.6.1.1 FliCamera

```
typedef FliCred FliCamera
```

7.7 FliCredOne.h File Reference

Classes

- class FliCredOne

  This class manages the methods specific to the C-RED One camera.

7.8 FliCredThree.h File Reference

Classes

- class FliCredThree

  This class manages the methods specific to the C-RED 3 camera.

7.9 FliCredTwo.h File Reference

Classes

- class FliCredTwo

  This class manages the methods specific to the C-RED 2 and C-RED 2 ER cameras.

7.10 FliCredTwoLite.h File Reference

Classes

- class FliCredTwoLite

  This class manages the methods specific to the C-RED 2 Lite camera.

7.11 FliGenicamCamera.h File Reference

Classes

- class FliGenicamCamera

  This is the base class of all genicam camera (C-BLUE)

7.12 FliOcam2K.h File Reference

Classes

- struct Ocam2Conf
- class FliOcam2K

  This class manages the methods specific to the OCAM2K camera.

Enumerations

- enum Ocam2Mode {
  Ocam2Mode::OCAM2_UNKNOWN = 0, Ocam2Mode::OCAM2_NORMAL = 1, Ocam2Mode::OCAM2_CROPPING240x120 = 2, Ocam2Mode::OCAM2_BINNING2x2 = 3,
  Ocam2Mode::OCAM2_BINNING3x3 = 4, Ocam2Mode::OCAM2_BINNING4x4 = 5, Ocam2Mode::OCAM2_BINNING = OCAM2_BINNING2x2, Ocam2Mode::OCAM2_CROPPING240x128 = 6,
  Ocam2Mode::OCAM2_2_TRACK = 7, Ocam2Mode::OCAM2_4_TRACK = 8, Ocam2Mode::OCAM2_BINNING1x3 = 9, Ocam2Mode::OCAM2_BINNING1x4 = 10 }
- enum Ocam2CoolingState { Ocam2CoolingState::on, Ocam2CoolingState::off, Ocam2CoolingState::alarm }

7.12.1 Enumeration Type Documentation

7.12.1.1 Ocam2CoolingState

```
enum Ocam2CoolingState  [strong]
```

Enumerator

on	
off	
alarm	

7.12.1.2 Ocam2Mode

```
enum Ocam2Mode  [strong]
```

Enumerator

OCAM2_UNKNOWN	Invalid.
OCAM2_NORMAL	Default mode.
OCAM2_CROPPING240x120	Cropping 120.
OCAM2_BINNING2x2	Binning 2x2.
OCAM2_BINNING3x3	Binning 3x3.
OCAM2_BINNING4x4	Binning 4x4.
OCAM2_BINNING	For compatibility(= Binning 2x2)
OCAM2_CROPPING240x128	Cropping 128.
OCAM2_2_TRACK	Binning 2 lignes.
OCAM2_4_TRACK	Binning 4 lignes.
OCAM2_BINNING1x3	Binning 1x3.
OCAM2_BINNING1x4	Binning 1x4.

7.13 FliOcam2S.h File Reference

Classes

- class FliOcam2S

  This class manages the methods specific to the OCAM2S camera.

7.14 FliRingBuffer.h File Reference

Classes

- class FliRingBuffer

7.15 FliSdk.h File Reference

Classes

- class IRawImageReceivedObserver

  This can be herited to be an observer of the reception of a raw image.
- class FliSdk

  This class manages the interface with the camera and the grabber.

7.16 FliSdk_C_V2.h File Reference

Typedefs

- typedef void(∗ newImageAvailableCallBack) (const uint8_t ∗image, void ∗ctx)
- typedef bool(∗ saveBufferProgressionCallback) (int progress)
- typedef void ∗ callbackHandler

Functions

- EXPORTED FliContext FliSdk_init_V2 ()

  Create a SDK context.
- EXPORTED void FliSdk_exit_V2 (FliContext context)

  Delete the SDK context.
- EXPORTED void FliSdk_detectGrabbers_V2 (FliContext context, char ∗listOfGrabbers, size_t size)

  Start the grabbers detection and return a list with the names of detected grabbers separated by ";".
- EXPORTED void FliSdk_getDetectedGrabbers_V2 (FliContext context, char ∗listOfGrabbers, size_t size)

  Get the list with the names of detected grabbers separated by ";".
- EXPORTED void FliSdk_detectCameras_V2 (FliContext context, char ∗listOfCameras, size_t size)

  Start the cameras detection and return a list with the names of detected cameras separated by ";".
- EXPORTED void FliSdk_getDetectedCameras_V2 (FliContext context, char ∗listOfCameras, size_t size)

  Get the list with the names of detected cameras separated by ";".
- EXPORTED bool FliSdk_setGrabber_V2 (FliContext context, const char ∗grabberName)

  Set the grabber to be used.
- EXPORTED bool FliSdk_setCamera_V2 (FliContext context, const char ∗cameraName)

  Set the camera to be used.
- EXPORTED bool FliSdk_getCurrentCameraName_V2 (FliContext context, char ∗cameraName, size_t size)

  Get the name of the current camera used by the SDK.
- EXPORTED void FliSdk_setMode_V2 (FliContext context, Mode mode)

  Set the mode of use of the SDK.
- EXPORTED void FliSdk_setImageDimension_V2 (FliContext context, uint16_t width, uint16_t height)

  Force the image dimension apply to the grabber.
- EXPORTED bool FliSdk_update_V2 (FliContext context)

  Update the changes, must be call after setCamera, setGrabber or setMode to take effects.
- EXPORTED bool FliSdk_start_V2 (FliContext context)

  Start the grabber (must be initialized before)
- EXPORTED bool FliSdk_stop_V2 (FliContext context)

  Stop the grabber.
- EXPORTED bool FliSdk_isStarted_V2 (FliContext context)

Get the state of the grabber (started or stopped)
- EXPORTED CameraModel_C FliSdk_getCurrentCameraModel_V2 (FliContext context)

  returns the current camera model
- EXPORTED void FliSdk_getCameraModelAsString_V2 (FliContext context, char ∗model, size_t size)

  returns the current camera model as a string
- EXPORTED bool FliSdk_enableGrabN_V2 (FliContext context, uint32_t nbFrames)

  Enable grab N mode.
- EXPORTED bool FliSdk_disableGrabN_V2 (FliContext context)

  Disable grab N mode.
- EXPORTED bool FliSdk_isGrabNEnabled_V2 (FliContext context)

  State of the grab N.
- EXPORTED bool FliSdk_isGrabNFinished_V2 (FliContext context)

  State of the grab N.
- const EXPORTED unsigned char ∗ FliSdk_getRawImage_V2 (FliContext context, int64_t index)

  Get the image at index or the last image if index is -1, without processing.
- EXPORTED void FliSdk_display8bImage_V2 (FliContext context, uint8_t ∗image, const char ∗windowName)

  Open an Opencv window to display image.
- EXPORTED void FliSdk_display16bImage_V2 (FliContext context, uint8_t ∗image, const char ∗window↩ Name, bool unsignedPixels)

  Open an Opencv window to display image.
- EXPORTED void FliSdk_initLog_V2 (FliContext context, const char ∗appName)

  init SDK logging
- EXPORTED uint32_t FliSdk_getFps_V2 (FliContext context)

  Get the buffer acquisition rate.
- EXPORTED uint32_t FliSdk_getBufferFilling_V2 (FliContext context)

  Get buffer filling.
- EXPORTED void FliSdk_setBufferSizeInImages_V2 (FliContext context, uint64_t nbImages)

  Change the buffer capacity in number of images.
- EXPORTED void FliSdk_setBufferSize_V2 (FliContext context, uint16_t sizeMo)

  Change the buffer capacity in Mo.
- EXPORTED uint16_t FliSdk_getBufferSize_V2 (FliContext context)

  Get current buffer size.
- EXPORTED bool FliSdk_loadBufferFromFile_V2 (FliContext context, const char ∗path, CroppingData_↩ C ∗bufferCrop)

  Load a buffer from a file, in the ringBuffer of the SDK.
- EXPORTED bool FliSdk_loadBufferRaw_V2 (FliContext context, const uint8_t ∗buffer, uint32_t nbImages)

  Load a buffer in the ringBuffer of the SDK.
- EXPORTED bool FliSdk_getBufferWithInfo_V2 (FliContext context, const char ∗path, LoadBufferInfo_C ∗info)

  Load a buffer from a file, allocate memory, and return that memory to the user.
- EXPORTED void FliSdk_resetBuffer_V2 (FliContext context)

  Reset the buffer.
- EXPORTED bool FliSdk_saveBuffer_V2 (FliContext context, const char ∗path, uint32_t startIndex, uint32_t endIndex)

  Save the buffer at path.
- EXPORTED bool FliSdk_saveBufferWithOptions_V2 (FliContext context, const char ∗path, uint32_t start↩ Index, uint32_t endIndex, saveBufferProgressionCallback func, bool withMetadata, uint16_t offset, bool forceUnsigned, uint16_t decimation)

  Save the buffer at path.
- EXPORTED uint32_t FliSdk_getImagesCapacity_V2 (FliContext context)

  Give the images capacity of the buffer.
- EXPORTED uint8_t ∗ FliSdk_getProcessedImage_V2 (FliContext context, int64_t index)

Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.

- EXPORTED uint8_t ∗ FliSdk_getProcessedImage16b_V2 (FliContext context, int64_t index)

  Get the 16bits grayscale processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.
- EXPORTED bool FliSdk_isCroppingDataValid_V2 (FliContext context, CroppingData_C croppingData)

  Check if the cropping data is valid for Cred2 & Cred3.
- EXPORTED bool FliSdk_getCroppingState_V2 (FliContext context, bool ∗isEnabled, CroppingData_C ∗croppingData)

  Get the cropping data from the camera.
- EXPORTED bool FliSdk_setCroppingState_V2 (FliContext context, bool enable, CroppingData_C cropping←Data)

  Set the cropping data.
- EXPORTED void FliSdk_getCurrentImageDimension_V2 (FliContext context, uint16_t ∗width, uint16_←t ∗height)

  Get the current image dimansion considering cropping.
- EXPORTED callbackHandler FliSdk_addCallbackNewImage_V2 (FliContext context, newImageAvailableCallBack func, uint16_t fpsTrigger, bool beforeCopy, void ∗ctx)

  Add a callback in order to receive frames.
- EXPORTED void FliSdk_removeCallbackNewImage_V2 (FliContext context, callbackHandler ctx)

  Remove callback.
- EXPORTED void FliSdk_setFpsTrigger_V2 (FliContext context, callbackHandler ctx, uint16_t fps)

  Add a callback in order to receive frames.
- EXPORTED bool FliSdk_isCredOne_V2 (FliContext context)
- EXPORTED bool FliSdk_isCredTwo_V2 (FliContext context)
- EXPORTED bool FliSdk_isCredTwoLite_V2 (FliContext context)
- EXPORTED bool FliSdk_isCredThree_V2 (FliContext context)
- EXPORTED bool FliSdk_isCblueOne_V2 (FliContext context)
- EXPORTED bool FliSdk_isCblueTwo_V2 (FliContext context)
- EXPORTED bool FliSdk_isCred_V2 (FliContext context)
- EXPORTED bool FliSdk_isCblueSfnc_V2 (FliContext context)
- EXPORTED bool FliSdk_isOcam2k_V2 (FliContext context)
- EXPORTED bool FliSdk_isOcam2s_V2 (FliContext context)
- EXPORTED bool FliSdk_isSerialCamera_V2 (FliContext context)
- EXPORTED void FliSdk_forceCurrentCameraModel_V2 (FliContext context, CameraModel_C model)

  use this function when a camera is undefined
- EXPORTED void FliSdk_setNbImagesPerBuffer_V2 (FliContext context, uint8_t nbImages)

  Set set number of images the grabber should acquire before trigger, use this function for high FPS.
- EXPORTED bool FliSdk_isUnsignedPixel_V2 (FliContext context)

  Return the pixel sign (int16 or uint16)
- EXPORTED bool FliSdk_isMono8Pixel_V2 (FliContext context)

  Return the pixel size (1 byte if true, 2 bytes if false)
- EXPORTED void FliSdk_enableUnsignedPixel_V2 (FliContext context, bool enable)

  Change the pixel sign (int16 or uint16)
- EXPORTED void FliSdk_enableRingBuffer_V2 (FliContext context, bool enable)

  Enable or disable internal ring buffer of the SDK.
- EXPORTED void FliSdk_getAvailableSaveFormats_V2 (FliContext context, char ∗fullName, size_t full←NameSize, char ∗extension, size_t extensionSize)

  Return a list with the formats full name and a list with the formats extension, each item is separated by a ";".
- EXPORTED uint64_t FliSdk_getNbCountError_V2 (FliContext context)

  Get the number of frame count error.
- EXPORTED unsigned int FliSdk_getOcamFrameNumber_V2 (FliContext context, int64_t index)

Get the frame number of ocam image at index.

- EXPORTED void FliSdk_setOcamFrameNumberOffset_V2 (FliContext context, uint8_t offset)

  Set the offset for the frame number.
- EXPORTED void FliSdk_setBurstFilter_V2 (FliContext context, int16_t id)

  Set the burst filter for id.
- EXPORTED int16_t FliSdk_getBurstFilter_V2 (FliContext context)

  Get the current burst filter id applied.
- EXPORTED void FliSdk_enableSubstractMode_V2 (FliContext context, bool enable)

  Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.
- EXPORTED void FliSdk_enableFowlerProcessing_V2 (FliContext context, bool enable)

  Enable/disable the Fowler processing for C-RED 1 cameras.
- EXPORTED void FliSdk_setFowlerOffset_V2 (FliContext context, int16_t offset)

  Set the value of the Fowler offset to apply on sum of the images.
- EXPORTED void FliSdk_enableFollowUpTheRamp_V2 (FliContext context, bool enable)

  Enable/disable the initialisation of the pixel sum for the follow up.
- EXPORTED bool FliSdk_addEthernetCamera_V2 (FliContext context, const char ∗ip, const char ∗userName, const char ∗sshPassword, char ∗cameraName, size_t size)

  Try to detect an ethernet camera and add it in the list.
- EXPORTED ProcessingId FliSdk_addImageProcessing_V2 (FliContext context)

  add an image processing and return an id
- EXPORTED void FliSdk_removeImageProcessing_V2 (FliContext context, ProcessingId id)

  remove an image processing
- EXPORTED void FliSdk_getProcessedImage_lv_V2 (FliContext context, int64_t index, uint32_t ∗image)

  Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.
- EXPORTED void FliSdk_getProcessedImage16b_lv_V2 (FliContext context, int64_t index, uint16_t ∗image)

  Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.
- EXPORTED void FliSdk_getRawImage_lv_V2 (FliContext context, int64_t index, uint16_t ∗image)

  Get the image at index or the last image if index is -1, without processing.

7.16.1 Typedef Documentation

7.16.1.1 callbackHandler

```
typedef void* callbackHandler
```

7.16.1.2 newImageAvailableCallBack

```
typedef void(* newImageAvailableCallBack) (const uint8_t *image, void *ctx)
```

7.16.1.3 saveBufferProgressionCallback

```
typedef bool(* saveBufferProgressionCallback) (int progress)
```

7.16.2 Function Documentation

7.16.2.1 FliSdk_addCallbackNewImage_V2()

```
EXPORTED callbackHandler FliSdk_addCallbackNewImage_V2 (
             FliContext context,
             newImageAvailableCallBack func,
             uint16_t fpsTrigger,
             bool beforeCopy,
             void * ctx )
```

Add a callback in order to receive frames.

Parameters

context	SDK context
func	callback function
fpsTrigger	at which fps does the callback want to receive images, if 0 then full speed
beforeCopy	if true then the observer will be notified before the copy in the ringbuffer (image from grabber), else after the copy in the ringBuffer (image from ringBuffer). if beforeCopy is set to true, user will have only the time of the buffer overflow of the grabber but less time between the grabber and the notification. if beforeCopy is set to false, user will have more time because the ringBuffer can be bigger than the grabber buffer but it will have a copy between the grabber and the notification. If you want to switch from before to after or after to before then call removeRawImageReceivedObserver before addRawImageReceivedObserver
ctx	user context return in the callback function

Returns

a callbackHandler

7.16.2.2 FliSdk_addEthernetCamera_V2()

```
EXPORTED bool FliSdk_addEthernetCamera_V2 (
             FliContext context,
             const char * ip,
             const char * userName,
             const char * sshPassword,
             char * cameraName,
             size_t size )
```

Try to detect an ethernet camera and add it in the list.

Parameters

context	SDK context
ip	: ip of the camera or a range of ip to auto detect (ex: 192.168.0.1-60)
userName	: the ssh user name of the camera
sshPassword	: the ssh password of the camera
cameraName	: return the detected camera name
size	size of cameraName array

7.16.2.3 FliSdk_addImageProcessing_V2()

```
EXPORTED ProcessingId FliSdk_addImageProcessing_V2 (
             FliContext context )
```

add an image processing and return an id

Parameters

context	SDK context

7.16.2.4 FliSdk_detectCameras_V2()

```
EXPORTED void FliSdk_detectCameras_V2 (
             FliContext context,
             char * listOfCameras,
             size_t size )
```

Start the cameras detection and return a list with the names of detected cameras separated by ";".

Parameters

context	SDK context
listOfCameras	char array allocated by user
size	size of listOfCameras

7.16.2.5 FliSdk_detectGrabbers_V2()

```
EXPORTED void FliSdk_detectGrabbers_V2 (
             FliContext context,
             char * listOfGrabbers,
             size_t size )
```

Start the grabbers detection and return a list with the names of detected grabbers separated by ";".

Parameters

context	SDK context
listOfGrabbers	char array allocated by user
size	size of listOfGrabbers

Attention

This function must be called before FliSdk_detectCameras_V2()

7.16.2.6 FliSdk_disableGrabN_V2()

```
EXPORTED bool FliSdk_disableGrabN_V2 (
             FliContext context )
```

Disable grab N mode.

Parameters

context	SDK context

7.16.2.7 FliSdk_display16bImage_V2()

```
EXPORTED void FliSdk_display16bImage_V2 (
             FliContext context,
             uint8_t * image,
             const char * windowName,
             bool unsignedPixels )
```

Open an Opencv window to display image.

Parameters

context	SDK context
image	pointer to the image buffer
windowName	name of the window
unsignedPixels	indicate if pixel are signed/unsigned

7.16.2.8 FliSdk_display8bImage_V2()

```
EXPORTED void FliSdk_display8bImage_V2 (
             FliContext context,
             uint8_t * image,
             const char * windowName )
```

Open an Opencv window to display image.

Parameters

context	SDK context
image	pointer to the image buffer
windowName	name of the window

7.16.2.9 FliSdk_enableFollowUpTheRamp_V2()

```
EXPORTED void FliSdk_enableFollowUpTheRamp_V2 (
            FliContext context,
            bool enable )
```

Enable/disable the initialisation of the pixel sum for the follow up.

Parameters

context	SDK context
enable	enable/disable the follow up ramp

7.16.2.10 FliSdk_enableFowlerProcessing_V2()

```
EXPORTED void FliSdk_enableFowlerProcessing_V2 (
            FliContext context,
            bool enable )
```

Enable/disable the Fowler processing for C-RED 1 cameras.

Parameters

context	SDK context
enable	enable/disable the Fowler processing

7.16.2.11 FliSdk_enableGrabN_V2()

```
EXPORTED bool FliSdk_enableGrabN_V2 (
            FliContext context,
            uint32_t nbFrames )
```

Enable grab N mode.

Parameters

context	SDK context
nbFrames	: number of frames to grab.

7.16.2.12 FliSdk_enableRingBuffer_V2()

```
EXPORTED void FliSdk_enableRingBuffer_V2 (
            FliContext context,
            bool enable )
```

Enable or disable internal ring buffer of the SDK.

Parameters

context	SDK context
enable	will enable if true, disable if false

Attention

If ring buffer is disabled loadBuffer, saveBuffer, getRawImage, getImage and getImage16b will be disabled. grabN and error count will be disable too.

7.16.2.13 FliSdk_enableSubstractMode_V2()

```
EXPORTED void FliSdk_enableSubstractMode_V2 (
            FliContext context,
            bool enable )
```

Enable/disable the mode substract that will substract the image N by the image N-1 and save it in the buffer.

Parameters

context	SDK context
enable	enable/disable the mode

7.16.2.14 FliSdk_enableUnsignedPixel_V2()

```
EXPORTED void FliSdk_enableUnsignedPixel_V2 (
            FliContext context,
            bool enable )
```

Change the pixel sign (int16 or uint16)

Parameters

context	SDK context
enable	is unsigned if true, signed if false

7.16.2.15 FliSdk_exit_V2()

```
EXPORTED void FliSdk_exit_V2 (
            FliContext context )
```

Delete the SDK context.

Parameters

context	SDK context

7.16.2.16 FliSdk_forceCurrentCameraModel_V2()

```
EXPORTED void FliSdk_forceCurrentCameraModel_V2 (
            FliContext context,
            CameraModel_C model )
```

use this function when a camera is undefined

Parameters

context	SDK context
model	: model to set to the camera

7.16.2.17 FliSdk_getAvailableSaveFormats_V2()

```
EXPORTED void FliSdk_getAvailableSaveFormats_V2 (
            FliContext context,
            char * fullName,
            size_t fullNameSize,
            char * extension,
            size_t extensionSize )
```

Return a list with the formats full name and a list with the formats extension, each item is separated by a ";".

Parameters

context	SDK context

Parameters

fullName	an array of char allocated by user for the list of full name formats
fullNameSize	size of the previous array
extension	an array of char allocated by user for the list of the extensions formats
extensionSize	size of the previous array

7.16.2.18 FliSdk_getBufferFilling_V2()

```
EXPORTED uint32_t FliSdk_getBufferFilling_V2 (
            FliContext context )
```

Get buffer filling.

Parameters

context	SDK context

Returns

a number representing the filling

7.16.2.19 FliSdk_getBufferSize_V2()

```
EXPORTED uint16_t FliSdk_getBufferSize_V2 (
            FliContext context )
```

Get current buffer size.

Parameters

context	SDK context

Returns

the buffer size in Mo

7.16.2.20 FliSdk_getBufferWithInfo_V2()

```
EXPORTED bool FliSdk_getBufferWithInfo_V2 (
            FliContext context,
            const char * path,
            LoadBufferInfo_C * info )
```

Load a buffer from a file, allocate memory, and return that memory to the user.

User must delete this memory if not used. For a raw file, user have to set width, height and isMono8 info in the LoadBufferInfo.

Parameters

context	SDK context
path	path to the file
info	struct with images and info

7.16.2.21 FliSdk_getBurstFilter_V2()

```
EXPORTED int16_t FliSdk_getBurstFilter_V2 (
            FliContext context )
```

Get the current burst filter id applied.

Parameters

context	SDK context

7.16.2.22 FliSdk_getCameraModelAsString_V2()

```
EXPORTED void FliSdk_getCameraModelAsString_V2 (
            FliContext context,
            char * model,
            size_t size )
```

returns the current camera model as a string

Parameters

context	SDK context
model	char array allocated by user
size	size of model

7.16.2.23 FliSdk_getCroppingState_V2()

```
EXPORTED bool FliSdk_getCroppingState_V2 (
            FliContext context,
            bool * isEnabled,
            CroppingData_C * croppingData )
```

Get the cropping data from the camera.

Parameters

context	SDK context
isEnabled	a reference to a bool from the user
croppingData	a reference of the cropping data of user

7.16.2.24 FliSdk_getCurrentCameraModel_V2()

```
EXPORTED CameraModel_C FliSdk_getCurrentCameraModel_V2 (
            FliContext context )
```

returns the current camera model

Parameters

context	SDK context

7.16.2.25 FliSdk_getCurrentCameraName_V2()

```
EXPORTED bool FliSdk_getCurrentCameraName_V2 (
            FliContext context,
            char * cameraName,
            size_t size )
```

Get the name of the current camera used by the SDK.

Parameters

context	SDK context
cameraName	char array allocated by user
size	size of cameraName

7.16.2.26 FliSdk_getCurrentImageDimension_V2()

```
EXPORTED void FliSdk_getCurrentImageDimension_V2 (
            FliContext context,
            uint16_t * width,
            uint16_t * height )
```

Get the current image dimansion considering cropping.

Parameters

context	SDK context
width	reference to user variable width
height	reference to user variable height

7.16.2.27 FliSdk_getDetectedCameras_V2()

```
EXPORTED void FliSdk_getDetectedCameras_V2 (
            FliContext context,
            char * listOfCameras,
            size_t size )
```

Get the list with the names of detected cameras separated by ";".

Parameters

context	SDK context
listOfCameras	char array allocated by user
size	size of listOfCameras

7.16.2.28 FliSdk_getDetectedGrabbers_V2()

```
EXPORTED void FliSdk_getDetectedGrabbers_V2 (
            FliContext context,
            char * listOfGrabbers,
            size_t size )
```

Get the list with the names of detected grabbers separated by ";".

Parameters

context	SDK context
listOfGrabbers	char array allocated by user
size	size of listOfGrabbers

7.16.2.29 FliSdk_getFps_V2()

```
EXPORTED uint32_t FliSdk_getFps_V2 (
            FliContext context )
```

Get the buffer acquisition rate.

Parameters

context	SDK context

Returns

a number representing acquisition FPS

7.16.2.30 FliSdk_getImagesCapacity_V2()

```
EXPORTED uint32_t FliSdk_getImagesCapacity_V2 (
            FliContext context )
```

Give the images capacity of the buffer.

Parameters

context	SDK context

7.16.2.31 FliSdk_getNbCountError_V2()

```
EXPORTED uint64_t FliSdk_getNbCountError_V2 (
            FliContext context )
```

Get the number of frame count error.

Parameters

context	SDK context

Returns

the number of count error

7.16.2.32 FliSdk_getOcamFrameNumber_V2()

```
EXPORTED unsigned int FliSdk_getOcamFrameNumber_V2 (
            FliContext context,
            int64_t index )
```

Get the frame number of ocam image at index.

Parameters

context	SDK context
index	index of the image in the buffer

Returns

the frame number of the image at index

7.16.2.33 FliSdk_getProcessedImage16b_lv_V2()

```
EXPORTED void FliSdk_getProcessedImage16b_lv_V2 (
            FliContext context,
            int64_t index,
            uint16_t * image )
```

Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

context	SDK context
index	: index of the image in the buffer
image	a pointer to the processed image

7.16.2.34 FliSdk_getProcessedImage16b_V2()

```
EXPORTED uint8_t* FliSdk_getProcessedImage16b_V2 (
            FliContext context,
            int64_t index )
```

Get the 16bits grayscale processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

context	SDK context
index	: index of the image in the buffer

Returns

a pointer to the processed image

7.16.2.35 FliSdk_getProcessedImage_lv_V2()

```
EXPORTED void FliSdk_getProcessedImage_lv_V2 (
            FliContext context,
            int64_t index,
            uint32_t * image )
```

Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

context	SDK context
index	: index of the image in the buffer
image	a pointer to the processed image

7.16.2.36 FliSdk_getProcessedImage_V2()

```
EXPORTED uint8_t* FliSdk_getProcessedImage_V2 (
            FliContext context,
            int64_t index )
```

Get the RGB processed image at the given index, if -1 then the last image is processed The buffer is overwritten only when the function is recalled.

Parameters

context	SDK context
index	: index of the image in the buffer

Returns

a pointer to the processed image

7.16.2.37 FliSdk_getRawImage_lv_V2()

```
EXPORTED void FliSdk_getRawImage_lv_V2 (
            FliContext context,
            int64_t index,
            uint16_t * image )
```

Get the image at index or the last image if index is -1, without processing.

Parameters

context	SDK context
index	: index of the image in the buffer.
image	a pointer to the image array if index is valid else nullptr

7.16.2.38 FliSdk_getRawImage_V2()

```
const EXPORTED unsigned char* FliSdk_getRawImage_V2 (
            FliContext context,
            int64_t index )
```

Get the image at index or the last image if index is -1, without processing.

Parameters

context	SDK context
index	: index of the image in the buffer.

Returns

pointer to the image array if index is valid else nullptr

7.16.2.39 FliSdk_init_V2()

```
EXPORTED FliContext FliSdk_init_V2 ( )
```

Create a SDK context.

Returns

FliContext: SDK context

7.16.2.40 FliSdk_initLog_V2()

```
EXPORTED void FliSdk_initLog_V2 (
            FliContext context,
            const char * appName )
```

init SDK logging

Parameters

context	SDK context
appName	: appName will be used for the name of the file

7.16.2.41 FliSdk_isCblueOne_V2()

```
EXPORTED bool FliSdk_isCblueOne_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-BLUE One else false

7.16.2.42 FliSdk_isCblueSfnc_V2()

```
EXPORTED bool FliSdk_isCblueSfnc_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-BLUE camera else false

7.16.2.43 FliSdk_isCblueTwo_V2()

```
EXPORTED bool FliSdk_isCblueTwo_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-BLUE One else false

7.16.2.44 FliSdk_isCred_V2()

```
EXPORTED bool FliSdk_isCred_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-RED camera else false

7.16.2.45 FliSdk_isCredOne_V2()

```
EXPORTED bool FliSdk_isCredOne_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-RED One else false

7.16.2.46 FliSdk_isCredThree_V2()

```
EXPORTED bool FliSdk_isCredThree_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-RED 3 else false

7.16.2.47 FliSdk_isCredTwo_V2()

```
EXPORTED bool FliSdk_isCredTwo_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-RED 2 else false

7.16.2.48 FliSdk_isCredTwoLite_V2()

```
EXPORTED bool FliSdk_isCredTwoLite_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a C-RED 2 else false

7.16.2.49 FliSdk_isCroppingDataValid_V2()

```
EXPORTED bool FliSdk_isCroppingDataValid_V2 (
            FliContext context,
            CroppingData_C croppingData )
```

Check if the cropping data is valid for Cred2 & Cred3.

Parameters

context	SDK context
croppingData	the cropping data of user

Returns

true if valid else false

7.16.2.50 FliSdk_isGrabNEnabled_V2()

```
EXPORTED bool FliSdk_isGrabNEnabled_V2 (
            FliContext context )
```

State of the grab N.

Parameters

context	SDK context

Returns

true if grab N mode activated else false

7.16.2.51 FliSdk_isGrabNFinished_V2()

```
EXPORTED bool FliSdk_isGrabNFinished_V2 (
            FliContext context )
```

State of the grab N.

Parameters

context	SDK context

Returns

true if the grab is over else false

7.16.2.52 FliSdk_isMono8Pixel_V2()

```
EXPORTED bool FliSdk_isMono8Pixel_V2 (
            FliContext context )
```

Return the pixel size (1 byte if true, 2 bytes if false)

Parameters

context	SDK context

7.16.2.53 FliSdk_isOcam2k_V2()

```
EXPORTED bool FliSdk_isOcam2k_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a Ocam2K else false

7.16.2.54 FliSdk_isOcam2s_V2()

```
EXPORTED bool FliSdk_isOcam2s_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a Ocam2S else false

7.16.2.55 FliSdk_isSerialCamera_V2()

```
EXPORTED bool FliSdk_isSerialCamera_V2 (
            FliContext context )
```

Parameters

context	SDK context

Returns

true if the current camera is a serial camera (C-RED or Ocam2) else false

7.16.2.56 FliSdk_isStarted_V2()

```
EXPORTED bool FliSdk_isStarted_V2 (
            FliContext context )
```

Get the state of the grabber (started or stopped)

Parameters

context	SDK context

Returns

true if grabber is started else false

7.16.2.57 FliSdk_isUnsignedPixel_V2()

```
EXPORTED bool FliSdk_isUnsignedPixel_V2 (
            FliContext context )
```

Return the pixel sign (int16 or uint16)

Parameters

context	SDK context

7.16.2.58 FliSdk_loadBufferFromFile_V2()

```
EXPORTED bool FliSdk_loadBufferFromFile_V2 (
            FliContext context,
            const char * path,
            CroppingData_C * bufferCrop )
```

Load a buffer from a file, in the ringBuffer of the SDK.

Parameters

context	SDK context
path	path to the file
bufferCrop	a ref to CroppingData to get current cropping

7.16.2.59 FliSdk_loadBufferRaw_V2()

```
EXPORTED bool FliSdk_loadBufferRaw_V2 (
            FliContext context,
            const uint8_t * buffer,
            uint32_t nbImages )
```

Load a buffer in the ringBuffer of the SDK.

Parameters

context	SDK context
buffer	data buffer
nbImages	nbImages in the buffer

7.16.2.60 FliSdk_removeCallbackNewImage_V2()

```
EXPORTED void FliSdk_removeCallbackNewImage_V2 (
            FliContext context,
            callbackHandler ctx )
```

Remove callback.

Parameters

context	SDK context
ctx	callback handler

7.16.2.61 FliSdk_removeImageProcessing_V2()

```
EXPORTED void FliSdk_removeImageProcessing_V2 (
            FliContext context,
            ProcessingId id )
```

remove an image processing

Parameters

context	SDK context
id	id of the imageprocessing to remove

7.16.2.62 FliSdk_resetBuffer_V2()

```
EXPORTED void FliSdk_resetBuffer_V2 (
            FliContext context )
```

Reset the buffer.

Parameters

context	SDK context

7.16.2.63 FliSdk_saveBuffer_V2()

```
EXPORTED bool FliSdk_saveBuffer_V2 (
            FliContext context,
            const char * path,
            uint32_t startIndex,
            uint32_t endIndex )
```

Save the buffer at path.

Parameters

context	SDK context
path	: path of the file
startIndex	: start index of the buffer
endIndex	: end index of the buffer

7.16.2.64 FliSdk_saveBufferWithOptions_V2()

```
EXPORTED bool FliSdk_saveBufferWithOptions_V2 (
            FliContext context,
            const char * path,
            uint32_t startIndex,
            uint32_t endIndex,
            saveBufferProgressionCallback func,
            bool withMetadata,
            uint16_t offset,
            bool forceUnsigned,
            uint16_t decimation )
```

Save the buffer at path.

Parameters

context	SDK context
path	: path of the file
startIndex	: start index of the buffer
endIndex	: end index of the buffer
func	: a callback to notify the progression of the save, return false to stop the save
withMetadata	: true to include camera conf in metadata
offset	: apply an offset on all the pixels of all images
forceUnsigned	: force the save with unsigned pixels type
decimation	: apply a decimation on the index of saved images

7.16.2.65 FliSdk_setBufferSize_V2()

```
EXPORTED void FliSdk_setBufferSize_V2 (
            FliContext context,
            uint16_t sizeMo )
```

Change the buffer capacity in Mo.

Parameters

context	SDK context
sizeMo	: capacity of the ring buffer in Mo

7.16.2.66 FliSdk_setBufferSizeInImages_V2()

```
EXPORTED void FliSdk_setBufferSizeInImages_V2 (
            FliContext context,
            uint64_t nbImages )
```

Change the buffer capacity in number of images.

Parameters

context	SDK context
nbImages	: capacity of the ring buffer in nb images

7.16.2.67 FliSdk_setBurstFilter_V2()

```
EXPORTED void FliSdk_setBurstFilter_V2 (
            FliContext context,
            int16_t id )
```

Set the burst filter for id.

Parameters

context	SDK context
id	: id to display

7.16.2.68 FliSdk_setCamera_V2()

```
EXPORTED bool FliSdk_setCamera_V2 (
            FliContext context,
            const char * cameraName )
```

Set the camera to be used.

Parameters

context	SDK context
cameraName	name of the camera

Returns

true if camera exists else false

Attention

Call update() to apply.

7.16.2.69 FliSdk_setCroppingState_V2()

```
EXPORTED bool FliSdk_setCroppingState_V2 (
            FliContext context,
            bool enable,
            CroppingData_C croppingData )
```

Set the cropping data.

Parameters

context	SDK context
enable	enable or disable cropping
croppingData	cropping data

7.16.2.70 FliSdk_setFowlerOffset_V2()

```
EXPORTED void FliSdk_setFowlerOffset_V2 (
            FliContext context,
            int16_t offset )
```

Set the value of the Fowler offset to apply on sum of the images.

Parameters

context	SDK context
offset	the value of the offset (between 0 and 65535), default is 0

7.16.2.71 FliSdk_setFpsTrigger_V2()

```
EXPORTED void FliSdk_setFpsTrigger_V2 (
             FliContext context,
             callbackHandler ctx,
             uint16_t fps )
```

Add a callback in order to receive frames.

Parameters

context	SDK context
ctx	callback handler
fps	at which fps does the callback want to receive images, if 0 then full speed

7.16.2.72 FliSdk_setGrabber_V2()

```
EXPORTED bool FliSdk_setGrabber_V2 (
             FliContext context,
             const char * grabberName )
```

Set the grabber to be used.

Parameters

context	SDK context
grabberName	name of the grabber

Returns

true if grabber exists else false

Attention

Call update() to apply.

7.16.2.73 FliSdk_setImageDimension_V2()

```
EXPORTED void FliSdk_setImageDimension_V2 (
             FliContext context,
             uint16_t width,
             uint16_t height )
```

Force the image dimension apply to the grabber.

Parameters

context	SDK context
width	width of image
height	height of image

7.16.2.74 FliSdk_setMode_V2()

```
EXPORTED void FliSdk_setMode_V2 (
            FliContext context,
            Mode mode )
```

Set the mode of use of the SDK.

Parameters

context	SDK context
mode	mode used (full, grabOnly, configOnly)

Attention

Call update() to apply.

7.16.2.75 FliSdk_setNbImagesPerBuffer_V2()

```
EXPORTED void FliSdk_setNbImagesPerBuffer_V2 (
            FliContext context,
            uint8_t nbImages )
```

Set set number of images the grabber should acquire before trigger, use this function for high FPS.

Parameters

context	SDK context
nbImages	: number of images.

7.16.2.76 FliSdk_setOcamFrameNumberOffset_V2()

```
EXPORTED void FliSdk_setOcamFrameNumberOffset_V2 (
            FliContext context,
            uint8_t offset )
```

Set the offset for the frame number.

Parameters

context	SDK context
offset	0 for simulator, 8 for camera

7.16.2.77 FliSdk_start_V2()

```
EXPORTED bool FliSdk_start_V2 (
             FliContext context )
```

Start the grabber (must be initialized before)

Parameters

context	SDK context

7.16.2.78 FliSdk_stop_V2()

```
EXPORTED bool FliSdk_stop_V2 (
             FliContext context )
```

Stop the grabber.

Parameters

context	SDK context

7.16.2.79 FliSdk_update_V2()

```
EXPORTED bool FliSdk_update_V2 (
             FliContext context )
```

Update the changes, must be call after setCamera, setGrabber or setMode to take effects.

Parameters

context	SDK context

7.17 FliSerialCamera.h File Reference

Classes

- class FliSerialCamera

  This class is the base class of all serial camera (CameraLink). It implements common C-RED and Ocam functions.

7.18 FliSfncCamera.h File Reference

Classes

- class FliSfncCamera

  This class defined all the register of an SFNC compliant camera.

7.19 IFliSdkObserver.h File Reference

Classes

- class IFliSdkObserver

  This interface defines an observer to observe some SDK states.

7.20 IImageProcessing.h File Reference

Classes

- class IImageProcessing

7.21 ImageProcessing.h File Reference

Classes

- class ImageProcessing

  This class manages all the processing of the images such as : statistics (mean stddev), clipping, flipping, sharpen etc...

7.22 ImageRingBuffer.h File Reference

Classes

- class ImageRingBuffer

  This class derive from pure virtual FliRingBuffer and manages the images inside a ring buffer with some put methods to add one or several images or nro or iota buffers into the ring buffer.

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