CoaXPress

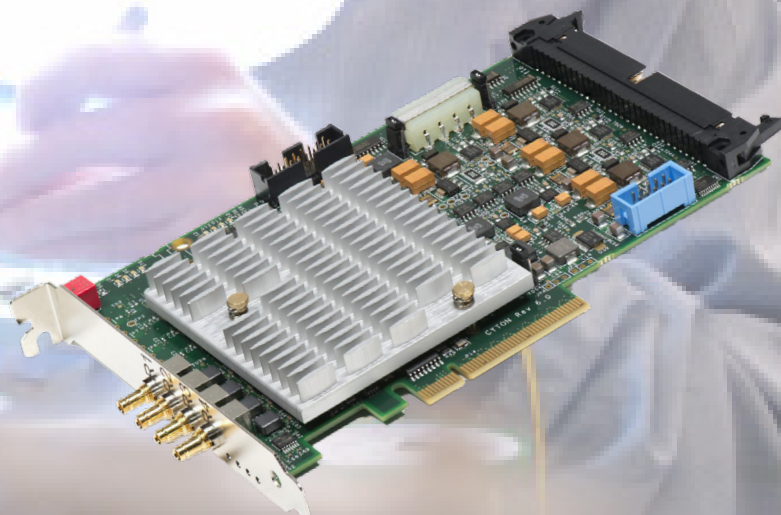## BOOST YOUR FRAME RATES BY UP TO 85%!

andor.oxinst.com

Boost Sona and Marana frame rates by up to 85% with the CoaXPress Upgrade!

Certain Sona and Marana camera models can be upgraded to use the higher bandwidth CoaXPress connection. Upgrading from USB 3.1 (Gen 1) operation to CoaXPress removes the bottleneck in data transmission and permits the camera to run at higher frame rates. You can find out more about CoaXPress in the CoaxPress Tech Note.

Why Upgrade to CoaXPress?

✓ Study faster processes at wider fields of view – boost speeds up to 85%

✓ Long distance transmission without extenders of up to 68 metres (with suitable length cable)

✓ EMP resistant interface – greater protection from electromagnetic disruption than other data transfer interfaces.

Example Suitable Applications

✓ Calcium Imaging e.g. in neurons and cardiomyocytes

✓ Cell Trafficking – view dynamic processes with greater temporal resolution

✓ X-ray Tomography & in situ imaging
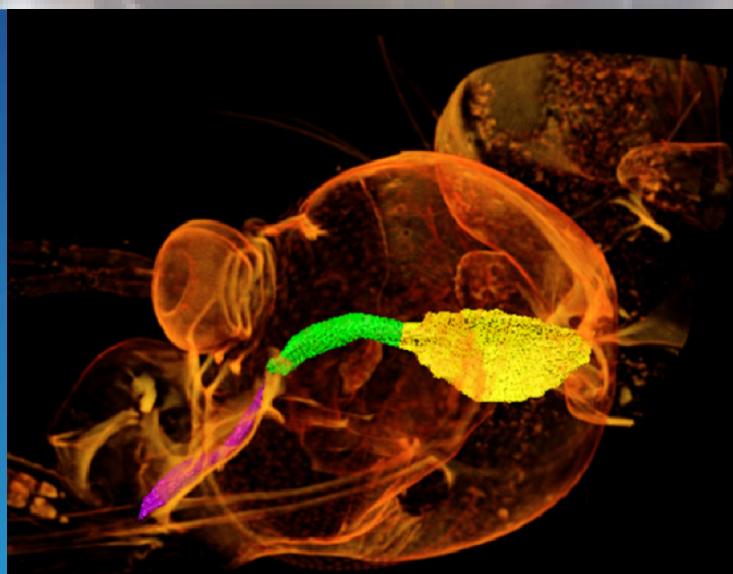
✓ High Harmonic Generation beam monitoring

Image courtesy of Prof. S.J. Lee & Dr. Ha, Pohang University of Science and Technology (POSTECH), Republic of Korea.

What Does the Upgrade Include?

Compatible cameras already have the CoaXPress connections so there is no need for a camera to be shipped back to Andor for upgrade. The upgrade includes CoaXPress card, cables (2 x 3 m) and a remote session from an Andor support specialist to upgrade the camera firmware and unlock CoaXPress capability from your camera.

Other Accessories:

CoaXPress cables: 30 m cables (set of 2x individual cables supplied)	ACC-COAXP-CABLE-2020

What Sona and Marana Cameras Models can Benefit From the CoaXPress (CXP) Upgrade?

Sona and Marana cameras can be upgraded. Some Sona and Marana cameras using the GS400BSI sensor do not have an option to upgrade to CoaXPress. Model suitability is identified in the following table:

Camera Models	Product Code	CXP Compatibility
Sona 4.2B-6	SONA-4BV6U	Yes
Sona 4.2B-11	SONA-4BV11	No
Sona 2.0B-11	SONA-2BV11	No
Marana 4.2B-6	MARANA-4BV6U	Yes
Marana 4.2B-11	MARANA-4BU11	No
Marana 4.2B-11	MARANA-4BV11	No
Marana-X 4.2B-6	MARANA-4BN6U-SOI/M	Yes
Marana-X 4.2B-11	MARANA-4BN1U-SOI/M	Yes

What Speed Increases are Possible?

A comparison of frame rate performance for fast high dynamic range mode (16-bit) is shown below. Note: frame rate increases are only seen for 2020 sensor variants not 400 versions. Higher array sizes result in higher data requirements and the USB 3.1 (Gen 1) interface cannot meet what is possible from the sensor. With the CoaXPress connection this means it is possible to maintain higher frame rates without compromising field of view when compared to using USB 3.0. As sensor array sizes decreases, image data is reduced meaning that the connection between the camera and the computer disc is no longer limiting.

Sensor array size (W x H)	Normal USB 3.1 operation	Using CoaXPress Upgrade	Speed Increase
2048 x 2048	40	74	+85%
1400 x 1400	85	108	+27%
1200 x 1200	116	126	+8.6%
1024 x 1024	148	148	-
512 x 512	295	295	-
256 x 256	587	587	-
128 x 128	1165	1166	-

To Order:
Use code: CHAM-UPG-CXP

Customer Support

Andor products are regularly used in critical applications and we can provide a variety of customer support services to maximize the return on your investment and ensure that your product continues to operate at its optimum performance.

Andor has customer support teams located across North America, Asia and Europe, allowing us to provide local technical assistance and advice. Requests for support can be made at any time by contacting our technical support team at andor.oxinst.com/support.

Head Office
7 Millennium Way
Springvale Business Park
Belfast BT12 7AL
Northern Ireland
Tel: +44 (0)28 9023 7126
Fax: +44 (0)28 9031 0792

North America
300 Baker Avenue
Suite 150
Concord, MA 01742
USA
Tel: +1 860-290-9211
Fax: +1 860-290-9566

Japan
5F IS Building
3-32-42 Higashi-Shinagawa
Tokyo 140-0002
Japan
Tel: +81-(0)3-6732-8968
Fax: +81-(0)3-6732-8939

China
Building B2 West,
No. 11 West Third Ring North Road,
Haitong Times Business Center,
Haidian District,
China
100089
Tel: +86 (10)-5884-7902
Fax: +86 (10)-5884-7901

Find us on

Visit andor.oxinst.com

OXFORD INSTRUMENTS | ANDOR