

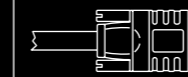
xiC / xiX (small)

The **xiC** is an extremely diversified and highly modular camera family designed for the Sony Pregius™ sensor series. It offers multiple choices of combining sensors and interfaces. Even though it is a board stack, for system integrators it has all the benefits of a single board design and is incredibly small.

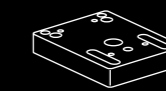
The small **xiX** cameras are based on the same board-level concept and stream images to the host computer via 2 lanes on a PCI Express Gen2 bus. Together with minimal latencies and CPU load, the cameras are a perfect fit for embedded vision and multi-camera applications. Thanks to flat flex cabling, the board-level and semi-housed variants allow integration in tight spaces and close proximity between cameras.



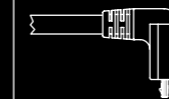
ACCESSORIES



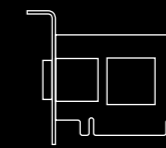
USB cable, passive
length: 1, 3, 5 m



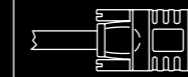
Universal tripod
mounting bracket



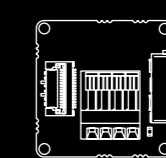
USB cable, passive,
angled micro-B connector
length: 3 m



PCI express adapter:
2x USB ports
4x USB ports



USB cable, active
length: 10, 15, 20 m



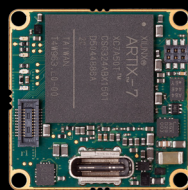
Breakout Box USB micro-B



Sync cable, digital I/O
length: 5 m

CONNECTORS / BOARD-LEVEL CAMERAS

xiC



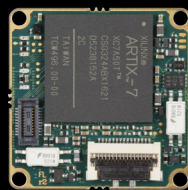
Standard Type-C

Board-level version of standard housed camera with Type-C connector, perpendicular to board surface



Standard Micro-B

Board-level version of standard housed camera with Micro-B connector, perpendicular to board surface



Flex-Line boards

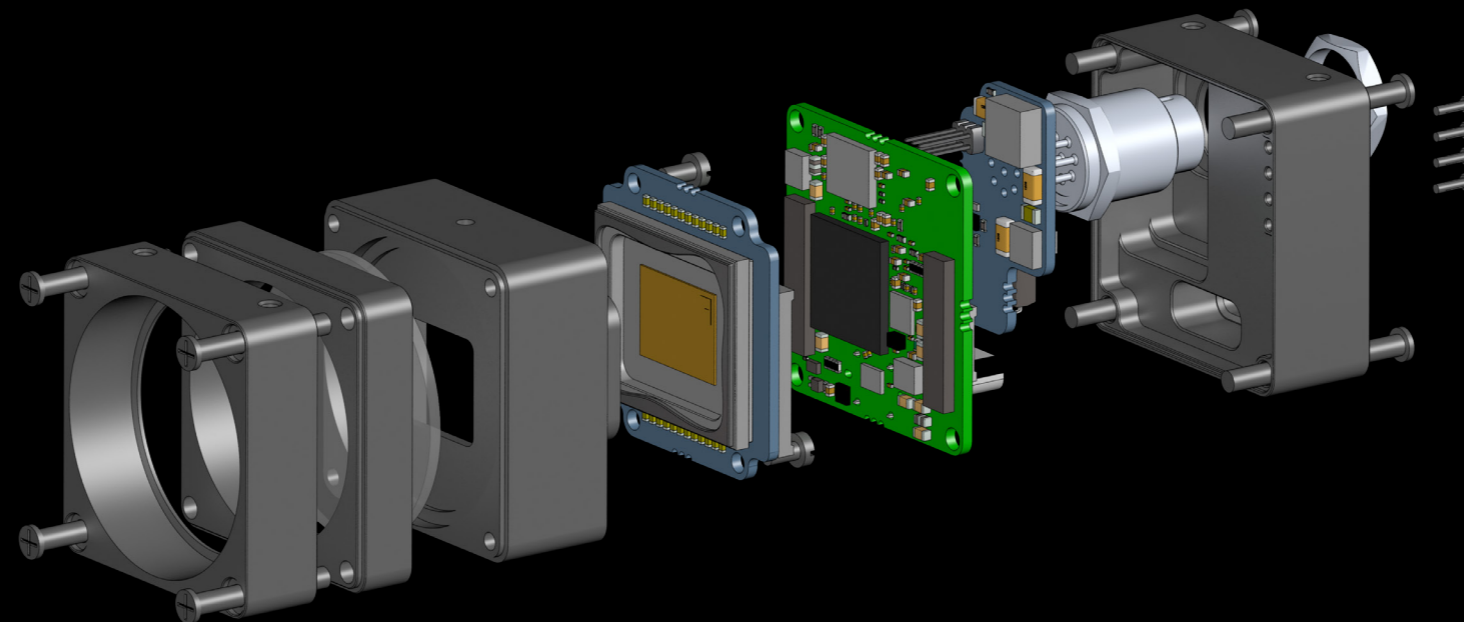
Connector for flat flex cables (FFC) including USB 3.1 Gen1 signals and GPIOs. Flexline connector parallel to board or perpendicular to board

xiX



PCIe Gen2 x2, C/CS-mount

Connector for flat flex cables (FFC), with data lines, AUX power and digital IOs. 2 PCIe lanes for up to 10 Gbit/s bandwidth.



SENSORS & MODELS

Sensor	Color ¹⁾	Resolution	Camera series	Pixel size [µm]	ADC [bits]	DR [dB]	Optical size	Sensor size/diagonal [mm]	FPS ²⁾
Sony IMX174	M, C	1936 × 1216 2.3 Mpix	xiC, xiX, xiT	5.86	10, 12	72	1/1.2"	11.3 × 7.1 13.4	165
Sony IMX252	M, C	2064 × 1544 3.1 Mpix	xiC, xiX	3.45	8, 10, 12	71	1/1.8"	7.1 × 5.3 8.9	122
Sony IMX250	M, C	2464 × 2056 5.0 Mpix	xiC, xiX	3.45	8, 10, 12	71	2/3"	8.5 × 7.1 11.1	76
Sony IMX255	M, C	4112 × 2176 8.9 Mpix	xiC, xiX	3.45	8, 10, 12	71	1"	14.2 × 7.5 16.1	43
Sony IMX253	M, C	4112 × 3008 12.4 Mpix	xiC, xiX	3.45	8, 10, 12	70	1.1"	14.2 × 10.4 17.6	31
CMOSIS CMV2000	M, C, NIR	2048 × 1088 2.2 Mpix	xiX	5.5	8, 10	60 ³⁾	2/3"	11.3 × 6.0 12.8	340
CMOSIS CMV4000	M, C, NIR	2048 × 2048 4.2 Mpix	xiX	5.5	8, 10	60 ³⁾	1"	11.3 × 11.3 15.9	180

Note 1: M: monochrome, C: Color, NIR: monochrome NIR-extended • Note 2: Full resolution; 8 bits • Note 3: HDR mode available

HIGHLIGHTS

- USB 3.1 Gen1
- Lowest power consumption. All models are bus powered
- Smallest footprint in class
- Very light
- USB3 Vision compliant

MODULARITY / VARIANTS

- Various connection technologies available
xiC: · Type-C · Micro B · flat ribbon
xiX: · PCIe Gen2 x2 flat ribbon
Additional: Thunderbolt Gen 1 (xiT series)
- All variants are available as housed cameras and board level cameras
- A modular board-level design makes it ideal for system integration in small mobile applications and robotics
- The board stack is incredibly small with all the benefits of a single board design
- Board level cameras are separable for remote operation
- Designed to use with embedded system platforms
- More than 30 popular machine vision libraries supported, e.g. MatLAB, LabView, Halcon, OpenCV, ...
- Compatible with Windows, LINUX, MacOS
- Conform to various Standards: USB3-Vision, GenIcam / GenTL

ADDITIONAL CONNECTION

xiT



- Thunderbolt 1 interface for direct bidirectional access with up to 20 GBit/s
- Dual powered: bus powered or AUX powered

BIG IN MODULARITY

ximea