# xiB

- high resolution
- minimal size
- perfect for aggregation





[sci-bi:] or [ksi-bi:]	The <b>xiB</b> cameras stream images to the host computer via 4 lanes on a PCI Express Gen2 bus, boasting an impressive 20 Gbit/s of bandwidth. Together with minimal latencies and CPU load, the PCIe technology is ideal for high resolution CMOS sensors. The cameras are compactly housed in $60 \times 60 \times 38 \text{ mm}^3$ , can be fully synchronized with their multiple GPIOs and offer an active Canon EF-mount. All properties are extremely useful in multi-camera applications like 360 panorama. In situations where multiple camera heads need to be placed in close proximity, system integrators can combine and aggregate the data streams from cameras with various resolutions via additional accessories.					
Quick facts	<ul> <li>PCle Gen2 x4 interface for direct access to the computer memory with up to 20 Gbit/s</li> <li>No frame grabber required</li> <li>Most recent high resolution CMOSIS sensors from 12 to 50 Mpix</li> </ul>	<ul> <li>Active Canon EF lens mount for control of aperture and focus</li> <li>100+ m cable lengths possible</li> <li>Compact housing 60 × 60 × 38 mm<sup>3</sup></li> <li>Direct data transfer to GPU possible on Linux</li> </ul>				
Housed cameras		60 12 pin Hirose connector for AUX power and GPIOs: 2 * opto-isolated inputs 2 * opto-isolated outputs 4 * fast non-isolated bidirectional IOs iPass External PCIe x4 connector				

#### 54.1 mm diameter hole with 4 \* M3 mounting threads for custom lens mounts. Extendable with active Canon EF-mount adapter (model suffix –EF).

#### Board-level cameras

Option for optimal system integration



#### Standard iPass (-BRD)

 Board-level version of standard housed camera with iPass (PCIe x4) connector, parallel to board surface

6,8

 Modular board stack with remote usable sensor board

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#### Supported vision libraries

#### Compatible with more than 30 popular machine vision libraries



XIMEA strives to create and maintain compatibility and interfaces for the most common and advanced vision image-processing libraries and applications. Major support is available for MVTec Halcon, National Instruments LabVIEW, MathWorks MATLAB and OpenCV. Please check our XIMEA website for an up-to-date list of other supported libraries and software packages.

#### Compatibility Supported operating systems



Linux

Windows

**Standards** 





#### About us

#### Why would we make that claim?



We say that because we just love to make cameras small, and excel at this task. Nobody makes the same thing any smaller. Is that a good thing? We certainly think so, especially when our products exceed customer satisfaction and specification. With small, comes low mass, another massive advantage for all our customers. High density means we have to take extraordinary care regarding power consumption and heat dissipation. But... that does not mean we allow any compromises. Everything we include in our products is of industry standard or better. Thanks to the full metal body, our cameras – literally and figuratively – are extremely cool, and because of our love for speed they are also fast. This design paradigm optimizes for the most ideal specifications for the broadest set of customers.

Our passion about small things also extends to the company itself.

We take conscious action to stay small and agile as a company. Consequentially our people must be extraordinarily talented to ensure efficient processes and cover all bases. We have well defined outsourcing interfaces with close interactions internally and externally with management as a part of the team. Being small keeps everyone focused and aware of what is going on, which quickly translates into customer satisfaction.

Thanks for your time.

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#### Sensors and models

Model		Sensor	Resolution	Pixel size [µm]	ADC [bits]	DR [dB]	FWC	Sensor size/ diagonal [mm]	FPS
CB120MG-CM-EF	b/w	CMOSIS CMV12000	4096×3072 4K: 12 Mpix	5.5	8, 10, 12	60	13500 e-	22.5×16.9 28.1	133 / 103 / 86 <sup>1)</sup>
CB120CG-CM-EF	color								
CB120RG-CM-EF	b/w NIR								
CB200MG-CM-EF	b/w	CMOSIS CMV20000	5120×3840 5K: 20 Mpix	6.4	12	66	15000 e-	32.8×24.6 41.0	32 @ 12 bits
CB200CG-CM-EF	color								
CB500MG-CM-EF 3)	b/w	CMOSIS CMV50000	7920×6004 8K: 47.6 Mpix 4.6	4.0	12, 14	60	16000 e-	36.4×27.6 45.6	30 / 22 <sup>2)</sup>
CB500CG-CM-EF 3)	color			4.0					

Note 1: RAW 8 bits, 10 bits and 12 bits

Note 2: RAW 8 bits and 12 bits

**Note 3:** Engineering samples available Q1/2017, production series approx. Q3/2017. Please check our website for updates on schedules.

#### Please visit **www.ximea.com** for complete product information. Get in touch with our teams at **sales@ximea.com**. We will be glad to assist and consult you regarding our products.

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