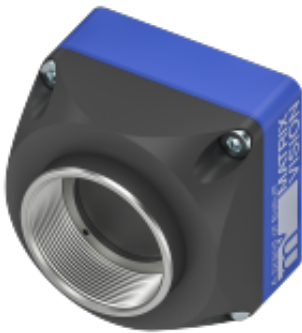


## PCI Express camera module series - mvBlueNAOS2

| [Camera selector](#)

[Get a free quote: +49 - 71 91 - 94 32 - 888](#)



- **Platform independence**  
thanks to direct data transfer via a PCI Express interface
- **Low overall operating costs**  
thanks to easy integration and on-board image pre-processing
- **Shorten your time to market**  
through high flexibility and ease of connection
- **High investment security**  
thanks to a scalable interface and a standardized GenICam interface
- **Minimum latency and high efficiency**  
thanks to real-time control and reduced communication overhead

By using the platform-independent PCI Express interface, the mvBlueNAOS2 offers the maximum possible transfer rates. Image data can be transferred directly to the memory (DMA - direct memory access) with almost zero latency and without any overhead or diversions via additional interfaces.

Applications with the highest performance requirements can be realized and at the same time the overall system costs remain low.

The latest global shutter sensors from the Sony Pregius and Pregius S series are used in the mvBlueNAOS2 series. Thanks to their superb image quality coupled with a small pixel size and high transfer rates, these sensors offer the ideal properties for this camera platform.

A wide range of processor architectures based on NVIDIA, ARM and x86 are supported by the mvIMPACT Acquire SDK. The GenICam GenTL Producer enables compatibility with existing software and ensures smooth switching between different hardware platforms. Adapter boards or plug-in cards are available for the respective computer platforms.

/\* \*/

- Sensors
- Features
- Accessories
- Image formats
- Application areas
- Dimensional drawing
- Downloads

CMOS-Sensoren (Sony Pregius - Global Shutter)

**Pregius**

CMOS

mvBlueNAOS

	✓	✓	✓	✓	✓	✓
Availability to order	✓	✓	✓	✓	✓	✓
Variant <sup>1</sup>	G / C	G / C	G / C	G / C	G / C	G / C
Resolution <sup>2</sup>	1456 x 1088	2064 x 1544	2464 x 2056	4112 x 2176	4112 x 3008	5328 x 4608
MPixel	1.6	3.2	5.1	8.9	12.4	24.6
Max. frame rate [Hz] <sup>3</sup>	226.5 / 226.5 / 505	191.5 / 191.5 / 373	140 / 140 / 277	88.7 / 88.7 / 172	64.6 / 64.6 / 126	24.1 / 24.1 / 87
<a href="#">Binning</a> <sup>4</sup>	2 / 2 / 2 / 2	1 / 2 / 2 / 2	1 / 2 / 2 / 2	2 / 2 / 2 / 2	2 / 2 / 2 / 2	2 / 2 / 2 / 2
Shutter	Global	Global	Global	Global	Global	Global
Sensor size	1/2.9	1/1.8	2/3	1	1.1	1.2
Pixel size [µm]	3.45	3.45	3.45	3.45	3.45	2.74
Exposure time	10 µs - 20 s	10 µs - 20 s	10 µs - 20 s	10 µs - 20 s	10 µs - 20 s	10 µs - 20 s
ADC	12	12	12	12	12	12
resolution / output	/	/	/	/	/	/
Spectral sensitivity	/	/	/	/	/	/
SNR <sub>max</sub> <sup>5</sup>	40.1	40.2	40.3	40.3	40.1	39.6
DR <sup>6</sup>	71.1	71.3	71.3	71.0	71.1	70.2

	✓	✓	✓	✓	✓	<a href="#">G / C</a> ✓
<a href="#">Pipelined global shutter in trigger mode</a>	✓	✓	✓	✓	✓	✓
Power consumption [W]	3.4	4.0	4.0	4.5	4.5	4.0
Manufacturer	Sony	Sony	Sony	Sony	Sony	Sony
Sensor	IMX273	IMX252	IMX250	IMX255	IMX253	IMX540

<sup>1</sup> G = Gray, C = Color, E = Gray & Infrared Enhanced

<sup>2</sup> Data of gray scale version

<sup>3</sup> streaming / [Burst mode](#) / Max. streaming depending on sensor either with 2x2 Binning or Decimation (Horizontal x Vertical)

<sup>4</sup> Max. Binning Horizontal / Max. Binning Vertical / Max. Decimation Horizontal / Max. Decimation Vertical. **Note: Not all combinations of binning and decimation values are possible.**

<sup>5</sup> EMVA1288 measurement data of gray scale version

<sup>6</sup> EMVA1288 measurement data of gray scale version

- PCI Ex  
press  
Gen.2 -  
4  
Lanes

(16  
Gbit/s)