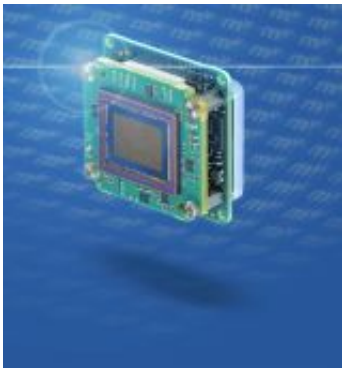


Compact USB3 Vision board-level camera for embedded vision - mvBlueFOX3-5M

| [Camera selector](#)

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

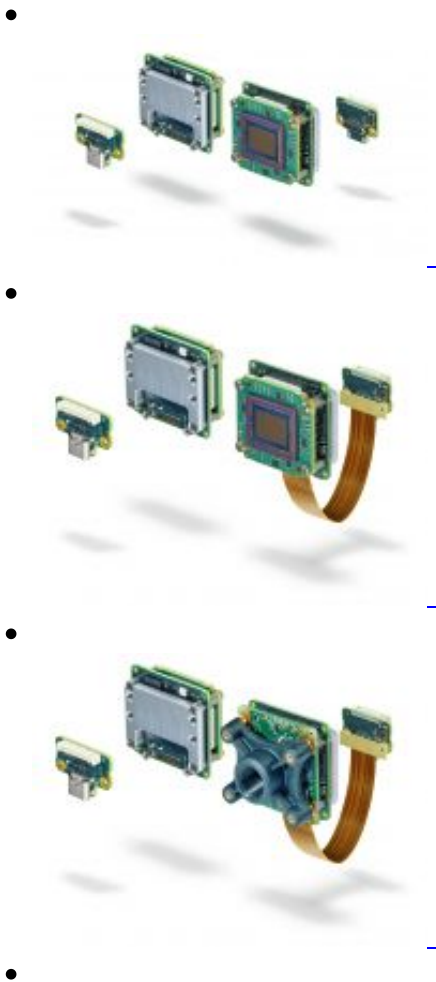


- Compact board-level camera for USB 3 with high quality Sony Pregius and Starvis CMOS sensors (gray scale / color)
- Easy integration into embed systems with different USB interface options via [BFEmbedded Interface](#)
- Same API for Linux or Windows
- Integrated camera features independant of the used embedded system
- Hardware preprocessing onboard (FPGA)
- 256 MByte integrated image memory
- Excellent cost-benefit ratio

The new board-level camera family mvBlueFOX3-5M combines flexibility, image quality, and performance with low cost. The cameras have a huge image memory and a powerful FPGA for onboard preprocessings as well as digital interfaces. With the board-to-board connector there are many integration

scenarios in different environments possible. In doing so you can connect the power supply, USB, and the digital I/Os using the connector. Beside the available interface options you can realize custom specific solutions and direct connections to embedded computers via the open **BFembedded Interface**. For this reason the board-level camera family is suitable for many applications in medicine, microscopy, traffic and industry.

"BFembedded Interface" [Module Kit elements:](#)





/* */

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

CMOS-Sensoren (Sony Pregius - Global Shutter)

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¹ G = Gray, C = Color, E = Gray & Infrared Enhanced

² Data of gray scale version

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

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

⁵ mvDualADCEnable = On, otherwise 12

⁶ EMVA1288 measurement data of gray scale version

CMOS-Sensoren (Sony Starvis - Rolling Shutter)

STARVIS

CMOS

Model

	BF3-5M-0064Z	BF3-5M-0124R	BF3-5M-0205Z
Availability to order	✓	✓	✓
Variant ¹	G / C	G / C	G / C
Resolution ²	3096 x 2080	4064 x 3044	5544 x 3692
MPixel	6.4	12.4	20.5
Max. frame rate [Hz] ³	59 / 60 / 60	30.7 / 35.4 / 35.4	18.5 / 21.98 / 52
Binning ⁴	16 / 16 / 16 / 16	16 / 16 / 16 / 16	16 / 16 / 16 / 16
Shutter	Rolling Shutter / Global	Rolling Shutter / Global	Rolling Shutter / Global
	Reset	Reset	Reset
Sensor size	1/1.8	1/1.7	1
Pixel size [µm]	2.4	1.85	2.4
Exposure time	70 µs - 20 s	110 µs - 20 s	490 µs - 20 s
ADC resolution / output	12	12	12
Spectral sensitivity	/	/	/
SNR _{max} ⁵			
DR ⁶			
EMVA 1288	/	/	/
Power consumption [W]	2.9	2.9	2.9
Manufacturer	Sony	Sony	Sony
Sensor	IMX178	IMX226	IMX183

¹ G = Gray, C = Color, E = Gray & Infrared Enhanced

² Data of gray scale version

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

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

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⁶ EMVA1288 measurement data of gray scale version

- USB 3.2 Gen 1 (5 GBit/s)