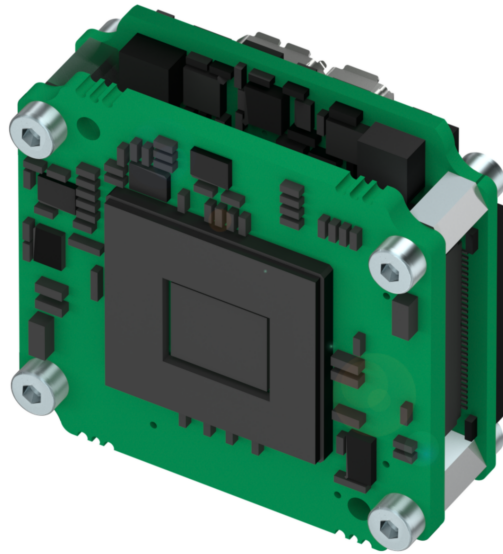


MATRIX VISION Industrial Cameras
mvBlueFOX3-2 Series – Board-level



BVS CA-SF2-xxxxxx-(1)(2)(3)(4)(5)(6)-001

mvBlueFOX3-M2 / BVS CA-SF2-xxxxxx-(1)(2)(3)(4)(5)(6)-001
USB3 Vision board-level camera

xxxxxx Model
See table below

(1) Handling
1 = Standard handling
2 = Extended temperature range test

(2) Lensholder
0 = Without lensholder
1 = C-Mount, Type2, with high durability and factory-set backfocus, fixed square filter
2 = C-Mount, Type1, with adjustable backfocus, round filter with screw ring, Ø23.2 mm
B = C-Mount, Type2, high durability, filter screwable
Y = S-Mount, 13 mm length

(3) Filter
0 = Without filter

(4) Housing
0 = Without housing
5 = Mounting and thermal conduction plate for board level camera

(5) I/O
0 = Without digital I/Os
2 = Standard I/Os

(6) Software
0 = None

MATRIX VISION Industrial Cameras
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Balluff model name	Model name	Resolution	FPS*	Sensor	Pixel size
BVS CA-SF2-	mvBlueFOX3-M2				
0004FG/C	004G/C	0.4 MP (728 x 544)	436.9/436.9	IMX287 (1/2.9", GS, CMOS)	6.9 µm
0016ZG/C	016G/C	1.6 MP (1456 x 1088)	226.5/226.5	IMX273 (1/2.9", GS, CMOS)	3.45 µm
0017ZG/C	017G/C	1.7 MP (1600 x 1104)	213.2/213.2	IMX425 (1.1", GS, CMOS)	9 µm
0024ZG/C	024G/C	2.4 MP (1936 x 1216)	164/161.4	IMX174 (1/1.2", GS, CMOS)	5.86 µm
0024AG/C	024aG/C	2.4 MP (1936 x 1216)	46.9/46.9	IMX249 (1/1.2", GS, CMOS)	5.86 µm
0032ZG/C	032G/C	3.2 MP (2064 x 1544)	123/119.2	IMX252 (1/1.8", GS, CMOS)	3.45 µm
0032AG/C	032aG/C	3.2 MP (2064 x 1544)	55/55	IMX265 (1/1.8", GS, CMOS)	3.45 µm
0051ZG/C	051G/C	5.1 MP (2464 x 2056)	80/75	IMX250 (2/3", GS, CMOS)	3.45 µm
0051PG/C	051pG/C	5.1 MP (2464 x 2056)	80/75	IMX250_POL (2/3", GS, CMOS)	3.45 µm
0051AG/C	051aG/C	5.1 MP (2464 x 2056)	35/35	IMX264 (2/3", GS, CMOS)	3.45 µm
0051DG/C	051dG/C	5.1 MP (2472 x 2064)	74.0/74.0	IMX547 (1/1.8", GS, CMOS)	2.74 µm
0064ZG/C	064G/C	6.4 MP (3096 x 2080)	60/59	IMX178 (1/1.8", RS, CMOS)	2.4 µm
0071ZG/C	071G/C	7.1 MP (3216 x 2208)	60.2/53.5	IMX420 (1.1", GS, CMOS)	4.5 µm
0071AG/C	071aG/C	7.1 MP (3216 x 2208)	50.9/50.9	IMX428 (1.1", GS, CMOS)	4.5 µm
0081AG/C	081aG/C	8.1 MP (2856 x 2848)	48.0/46.7	IMX546 (2/3", GS, CMOS)	2.74 µm
0089ZG/C	089G/C	8.9 MP (4096 x 2176)	47/42.6	IMX255 (1", GS, CMOS)	3.45 µm
0089AG/C	089aG/C	8.9 MP (4096 x 2176)	31.9/31.9	IMX267 (1", GS, CMOS)	3.45 µm
0124ZG/C	124G/C	12.3 MP (4096 x 3008)	34/30.8	IMX253 (1.1", GS, CMOS)	3.45 µm
0124AG/C	124aG/C	12.3 MP (4096 x 3008)	23/23	IMX304 (1.1", GS, CMOS)	3.45 µm
0124RG/C	124rG/C	12.4 MP (4064 x 3044)	35.4/30.7	IMX226 (1/1.7", RS, CMOS)	1.85 µm
0124DG/C	124dG/C	12.4 MP (4128 x 3008)	33.0/30.6	IMX545 (1/1.1", GS, CMOS)	2.74 µm
0162AG/C	162G/C	16.2 MP (5328 x 3040)	26.3/23.4	IMX542 (1.1", GS, CMOS)	2.74 µm
0204AG/C	204G/C	20.4 MP (4512 x 4512)	20.9/18.6	IMX541 (1.1", GS, CMOS)	2.74 µm
0205ZG/C	205G/C	20.5 MP (5544 x 3692)	21.98/18.5	IMX183 (1", RS, CMOS)	2.4 µm
0246AG/C	246G/C	24.6 MP (5328 x 4608)	17.6/15.4	IMX540 (1.2", GS, CMOS)	2.74 µm

G/C = Monochrome and color models available
FPS = Frames per Second
GS = Global Shutter
RS = Rolling Shutter
** = Burst Mode/Streaming*

MATRIX VISION Industrial Cameras mvBlueFOX3-2 Series – Board-level



Basic features

Approval/Conformity	CE UKCA EAC WEEE
Standards	GenICam EMVA 1288 USB3 Vision
Version	USB3 Vision industrial camera

Electrical connection

Connection 1	USB3: MicroB-Female, 9-pin
Connection 2	Optional: Power / IO: HIROSE-Male, 12-pin
Polarity reversal protected	yes
Short-circuit protection	no

Electrical data

Current draw max.	500 mA
Operating voltage Ub	10...28 VDC

Environmental conditions

Ambient temperature	0...45 °C
EN 60068-2-27, Shock	-
EN 60068-2-6, Vibration	-
Relative humidity	20...80%
Storage temperature	-20...60 °C

Remarks

Not included in scope of delivery: Camera lens, filter, light, connection cable, power supply

* Refer to manual for exact values

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Functional Characteristics

Binning	1x1...16x16 *
Data storage	256 MB
Decimation	1x1...16x16 *
Exposure time	10 µs...20 s *
Filter	IR cut filter
Image formats	Mono8...Mono16 Bayer8...Bayer16, RGB, YUV *
Trigger Modi	Free run Hardware trigger Software trigger

Interface

Interface	USB 2.0 / 3.0
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Material

Housing material	Aluminium, Powder coated, Painted
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Mechanical data

Dimension	40 x 40 x 50.9 mm
Lens mount	None
Weight	110 g

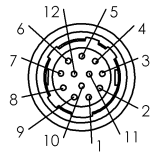
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Connector Diagramm

USB3 (MicroB)



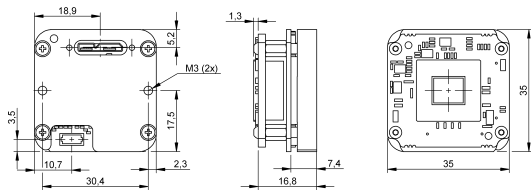
Power / IO (Hirose) - optional



- PIN 1: GND
- PIN 2: PWR_IN
- PIN 3: Opto DigOut3
- PIN 4: Opto DigIn0
- PIN 5: Opto DigOut2
- PIN 6: Opto DigOut0
- PIN 7: Opto DigIn_GND
- PIN 8: RS232 RX
- PIN 9: RS232 TX
- PIN10: Opto DigOut_PWR_IN
- PIN11: Opto DigIn1
- PIN12: DigOut1

Product View

BVS_CA-SF2-xxxxxx-x00500



BVS_CA-SF2-xxxxxx-x1x02x

