Allied Vision

Alvium FP3

Alvium FP3-203

Alvium FP3-203 innovative FPD-Link III camera with Sony IMX422 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model	Alvium FP3-203
Product series	Alvium FP3
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	1,632 × 1,248 (2.00 MP)
Sensor model	Sony IMX422
Sensor architecture (material)	cmos
Shutter type(s)	Global shutter (GS)
Sensor size	7.3 × 5.6 mm (9.2 mm, Type 1/1.7)
Pixel size	4.50 µm × 4.50 µm

Pixel formats

Sensor bit depth	10-bit, 12-bit, 8-bit
Monochrome pixel formats	GREY, RAW10, RAW12, RAW8, Y10, Y12
YUV pixel formats	UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit
RGB pixel formats	BGR8, RGB3, RGB8 (default), RGB888 (default)
Bayer pixel formats	BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8

Timing and gain

Max. frame rate	Mainly depends on hardware and register settings.
Exposure time	18 µs to 10 s
Gain	0.0 dB to 48.0 dB

I/Os and power

Non-isolated lines	2 programmable GPIOs
I/O connector	Coax, STP
Power supply	5 VDC over MIPI CSI-2
Power consumption	Value for the integrated serializer adds to CSI-2 model value.

Operating conditions

Operating temperature (housing)	-20 °C to 65 °C ((housing))

Mechanical properties

Body dimensions (L x W x H in mm)	41 × 29 × 29
Lens mount(s)	C-Mount, CS-Mount
Weight	70 g

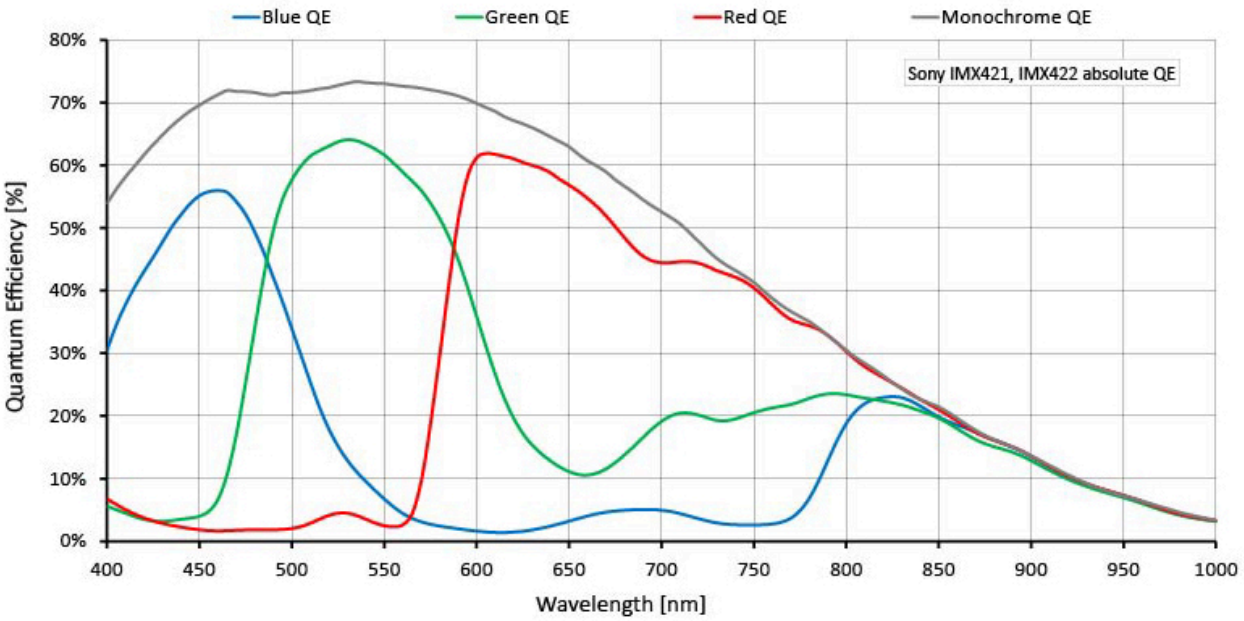
On-board memory and FPGA

Image buffer (RAM)	256 KByte
Non-volatile memory (Flash)	1024 KByte

Interfaces

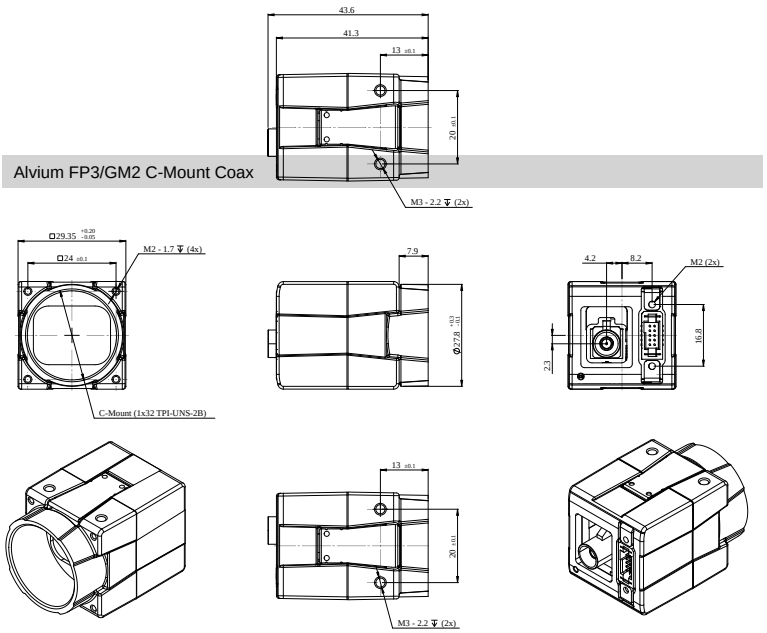
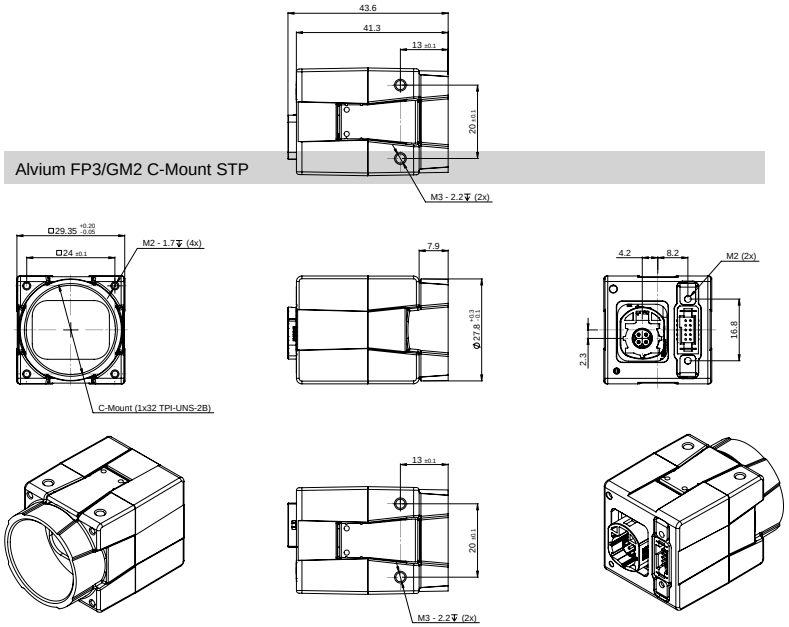
Digital interface	FPD-Link III, based on MIPI CSI-2, up to 4 lanes

Quantum Efficiency



Technical Drawing

Alvium FP3/GM2 C-Mount Coax



Alvium FP3/GM2 C-Mount STP