Allied Vision

Alvium FP3

Alvium FP3-2050

Alvium FP3-2050 innovative FPD-Link III camera with Sony IMX183 CMOS rolling shutter sensor provides industrial performance for cost effective embedded vision applications.

General

Model:	Alvium FP3-2050
Product series:	Alvium FP3
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	5,376 × 3,672 (19.70 MP)
Sensor model:	Sony IMX183
Shutter type(s):	Global Reset Shutter, Rolling Shutter
Sensor size:	16.3 mm ø (Type 1)
Pixel size:	2.40 µm × 2.40 µm

Pixel formats

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

Imaging performance

Quantum efficiency @ 529 nm:	80 %

Timing and gain

Max. frame rate:	Mainly depends on hardware and register settings.
Exposure time:	13 µs to 10 s
Gain:	0.0 dB to 27.0 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
Weight:	70 g

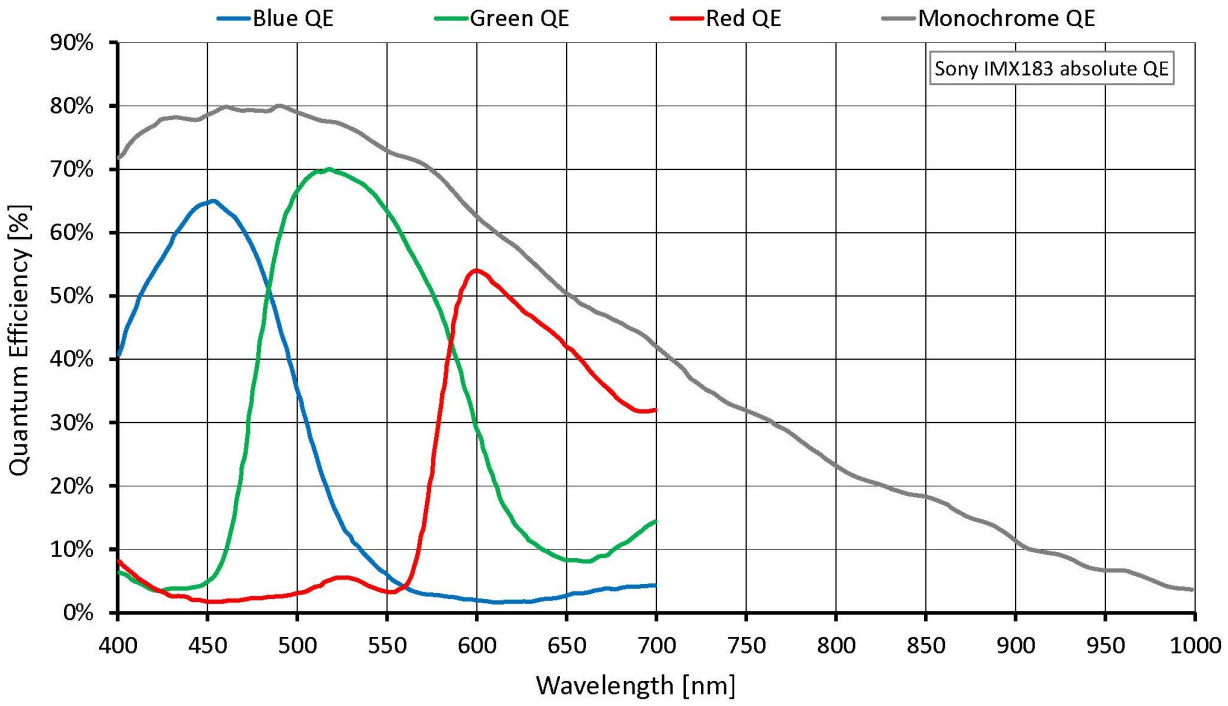
On-board memory and FPGA

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

Interfaces

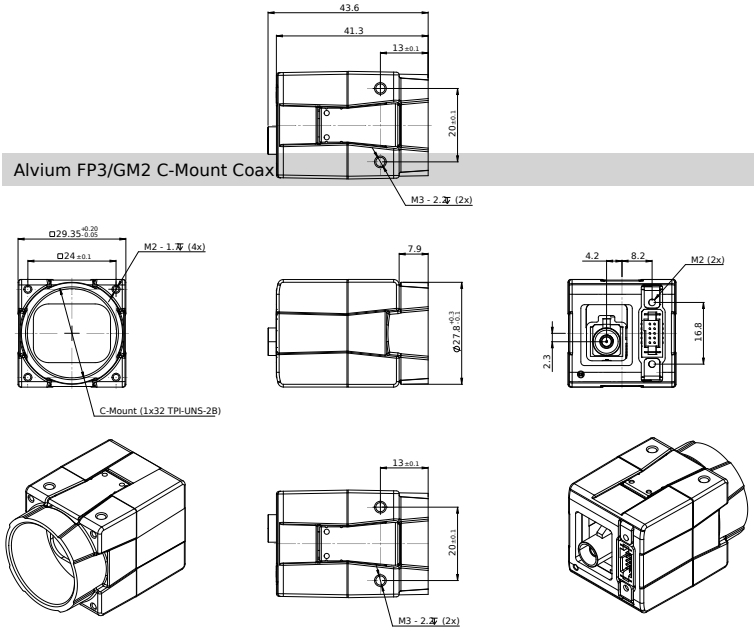
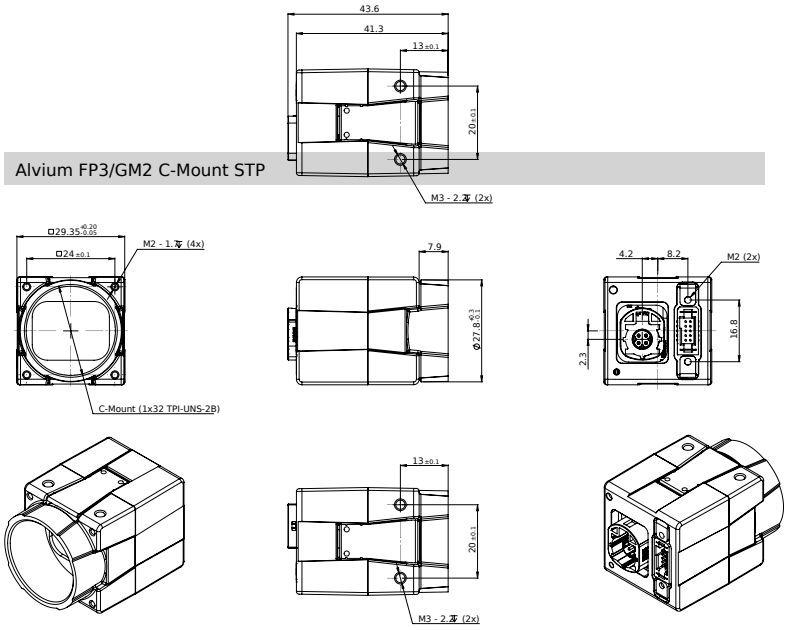
Digital interface:	FPD-Link III, based on MIPI CSI-2, up to 4 lanes

Quantum Efficiency



Technical Drawing

Alvium FP3/GM2 C-Mount Coax



Alvium FP3/GM2 C-Mount STP