Allied Vision

Alvium C

Alvium 1800 C-2050



Alvium 1800 C-2050 innovative MIPI CSI-2 camera with Sony IMX183 CMOS rolling shutter sensor provides industrial performance for cost effective embedded vision applications.

General

Model	Alvium 1800 C-2050
Product series	Alvium C
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	5,376 × 3,672 (19.70 MP)
Sensor model	Sony IMX183
Sensor architecture (material)	cmos
Shutter type(s)	Global Reset Shutter, Rolling shutter (RS)
Sensor size	13.1 × 8.8 mm (15.9 mm, Type 1)
Pixel size	2.40 µm × 2.40 µm

Pixel formats

Sensor bit depth	10-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

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Imaging performance

Quantum efficiency @ 529 nm	80 %

Timing and gain

Max. frame rate	26 fps
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
Power supply	5 VDC over MIPI CSI-2
Power consumption	Typical: 2.9 W

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm)	26 × 29 × 29
Lens mount(s)	C-Mount
Weight	40 g

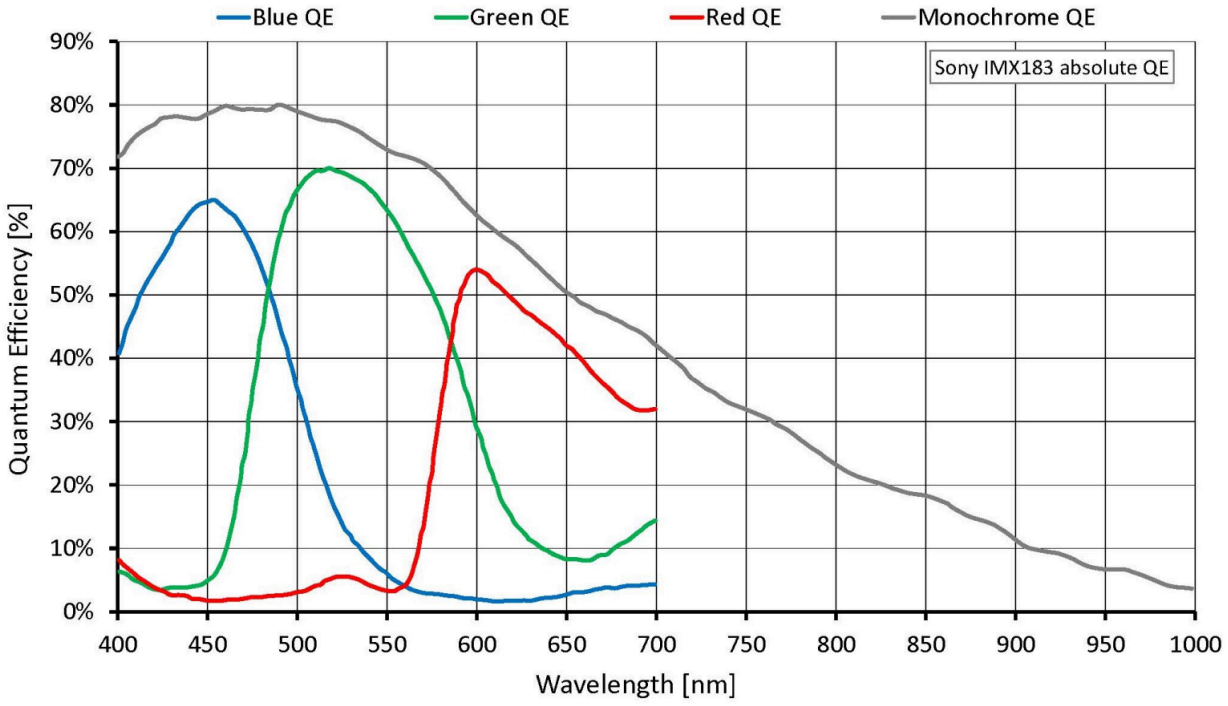
On-board memory and FPGA

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

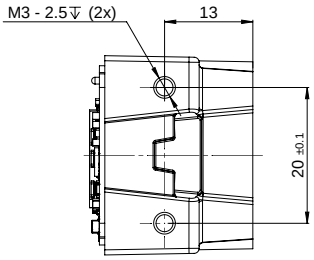
Interfaces

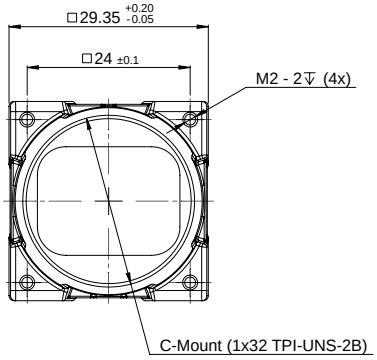
Digital interface	MIPI CSI-2, up to 4 lanes

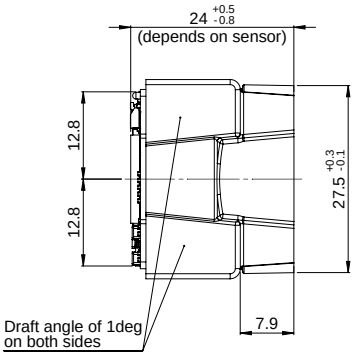
Quantum Efficiency

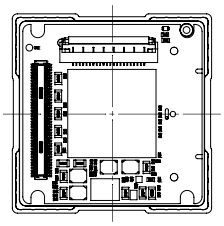


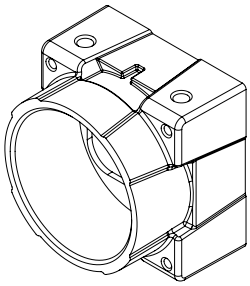
Technical Drawing

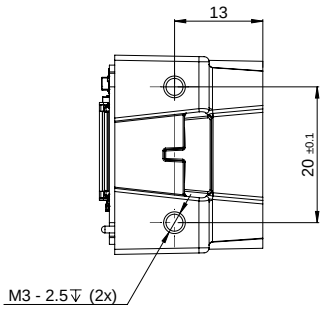


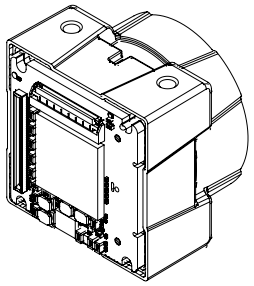












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