Allied Vision

Alvium GM2

Alvium GM2-235



Alvium GM2-235 innovative GMSL2 camera with Sony IMX174 CMOS global shutter sensor provides industrial performance for cost effective embedded vision applications.

General

Model	Alvium GM2-235
Product series	Alvium GM2
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	1,936 × 1,216 (2.40 MP)
Sensor model	Sony IMX174
Sensor architecture (material)	cmos
Shutter type(s)	Global shutter (GS)
Sensor size	11.3 × 7.1 mm (13.4 mm, Type 1/1.2)
Pixel size	5.86 µm × 5.86 µm

Pixel formats

Sensor bit depth	10-bit, 12-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	19 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

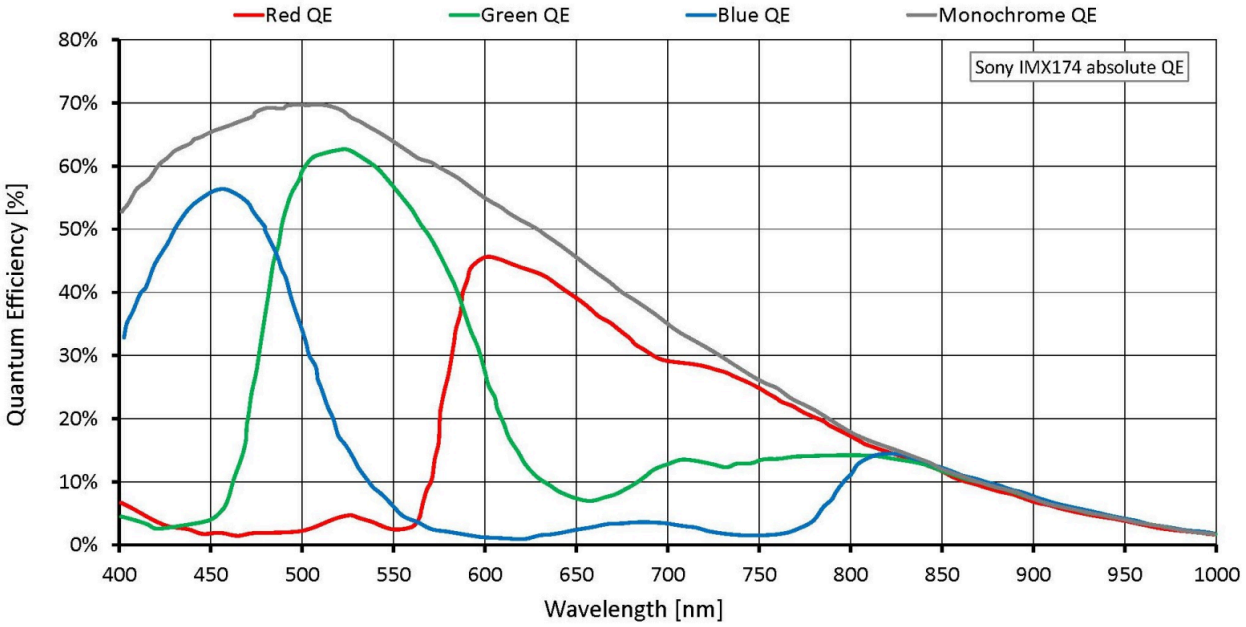
On-board memory and FPGA

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

Interfaces

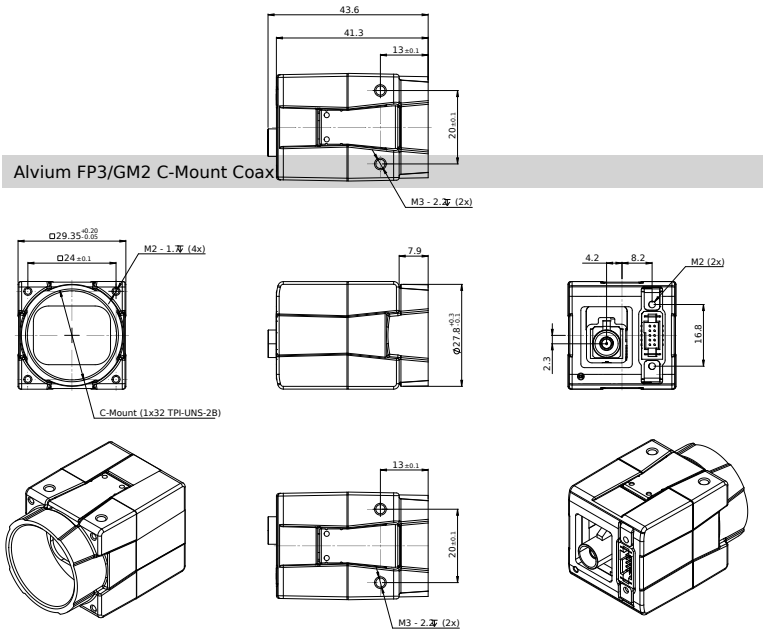
Digital interface	GMSL2, based on MIPI CSI-2, up to 4 lanes

Quantum Efficiency



Technical Drawing

Alvium FP3/GM2 C-Mount Coax



Alvium FP3/GM2 C-Mount STP

