



Alvium 1800 U

Alvium 1800 U-510

Alvium 1800 U-510 innovative USB camera with Sony IMX548 global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model	Alvium 1800 U-510
Product series	Alvium 1800 U
Status	Available

Sensor

Sensor type	Area scan
Chroma	Mono or Color
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	2,464 × 2,064 (5.10 MP)
Sensor model	Sony IMX548
Sensor architecture (material)	CMOS
Shutter type(s)	Global Shutter
Sensor size	9 mm ø (Type 1/1.8)
Pixel size	2.74 µm × 2.74 µm

Pixel formats

Sensor bit depth	12-bit
Monochrome pixel formats	Mono8, Mono10, Mono10p, Mono12, Mono12p
YUV pixel formats	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB pixel formats	RGB8 (default), BGR8
Bayer pixel formats	BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p

Imaging performance

Quantum efficiency @ 529 nm 68 %

Timing and gain

Max. frame rate 79 fps

I/Os and power

Non-isolated lines 4 programmable GPIOs

Power supply Power over USB 3.1 Gen 1 | External power 5.0 V

Power consumption USB power: 3.0 W (typical) | Ext. power: 3.2 W (typical)

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm) 38 × 29 × 29

Lens mount(s) C-Mount, CS-Mount, S-Mount

Weight 65 g

On-board memory and FPGA

Image buffer (RAM) 256 KByte

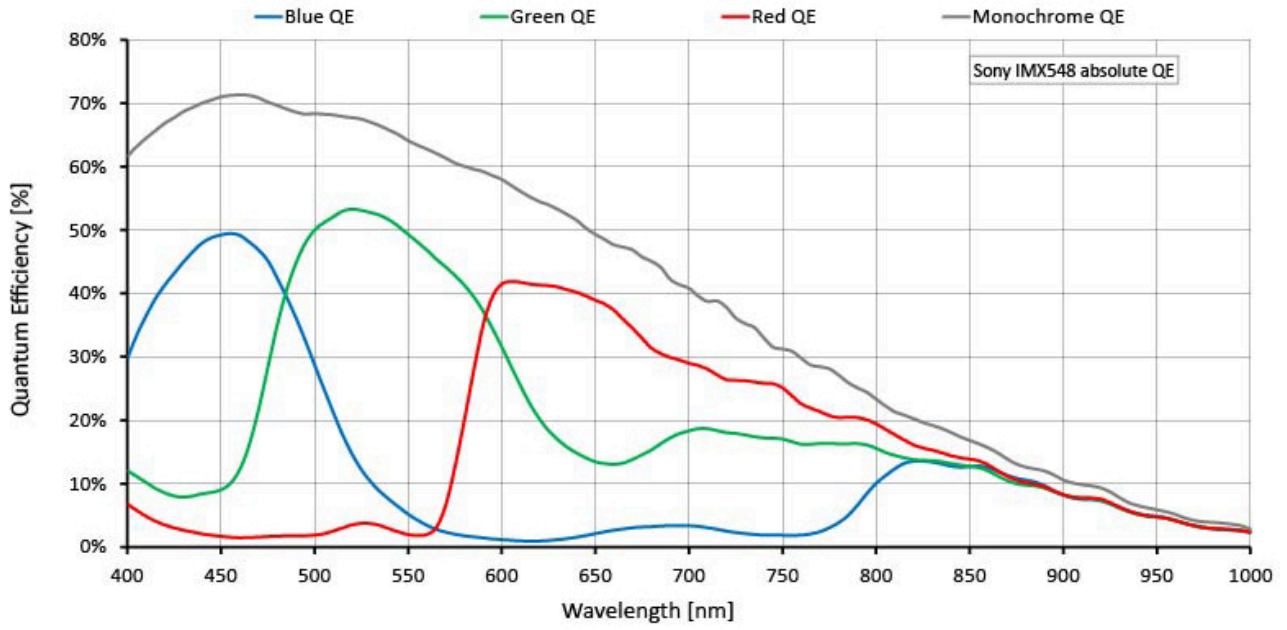
Non-volatile memory (Flash) 1024 KByte

Interfaces

Digital interface usb3.0

Vision standard USB3 Vision

Quantum Efficiency



Technical Drawing

