



Alvium 1800 U

Alvium 1800 U-508

Alvium 1800 U-508 innovative USB camera with Sony IMX250 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model	Alvium 1800 U-508
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 × 2,056 (5.10 MP)
Sensor model	Sony IMX250
Sensor architecture (material)	CMOS
Shutter type(s)	Global Shutter
Sensor size	12.75 mm ø (Type 2/3)
Pixel size	3.45 µm × 3.45 µm

Pixel formats

Sensor bit depth	8-bit, 10-bit, 12-bit; Adaptive (10-bit, 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	64 %
-----------------------------	------

Timing and gain

Max. frame rate	84 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: 2.9 W (typical) Ext. power: 3.1 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
---------------	-------------------

Weight	65 g
--------	------

On-board memory and FPGA

Image buffer (RAM)	256 KByte
--------------------	-----------

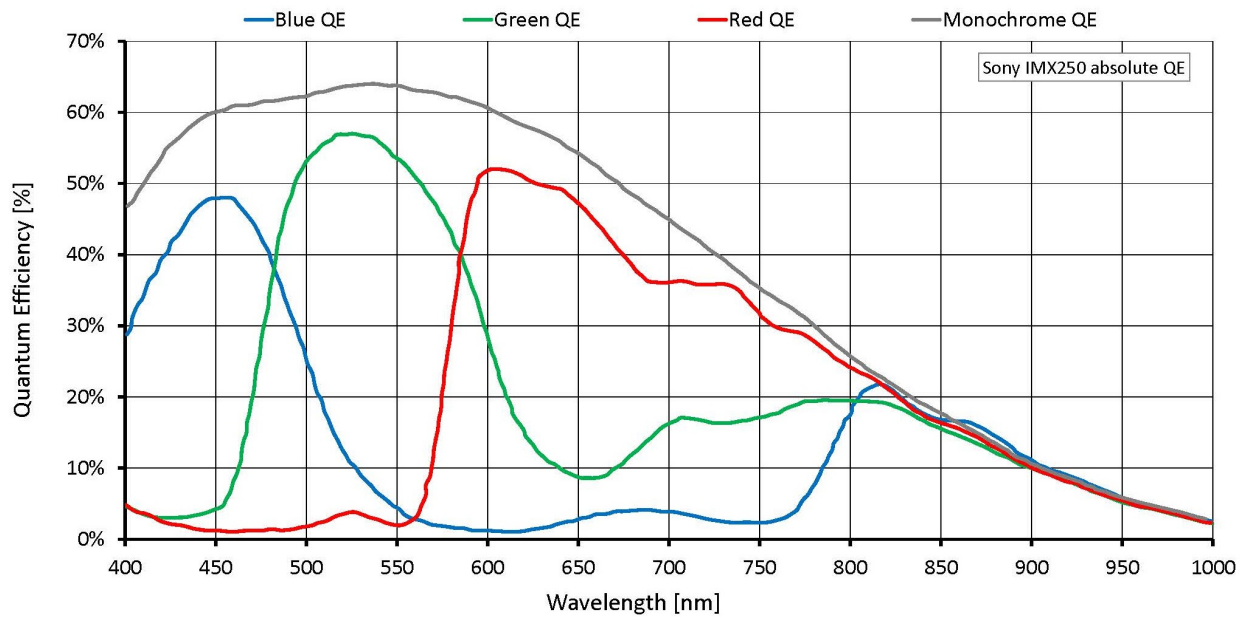
Non-volatile memory (Flash)	1024 KByte
-----------------------------	------------

Interfaces

Digital interface	usb3.0
-------------------	--------

Vision standard	USB3 Vision
-----------------	-------------

Quantum Efficiency



Technical Drawing

