



Alvium 1800 U

Alvium 1800 U-050

Alvium 1800 U-050 innovative USB camera with ON Semi PYTHON 480 global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model	Alvium 1800 U-050
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	808 × 608 (0.50 MP)
Sensor model	ON Semi PYTHON 480
Sensor architecture (material)	CMOS
Shutter type(s)	Global Shutter
Sensor size	4.9 mm ø (Type 1/3.6)
Pixel size	4.80 µm × 4.80 µm

Pixel formats

Sensor bit depth	10-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	53 %
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Timing and gain

Max. frame rate	117 fps
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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: 1.5 W (typical) Ext. power: 1.7 W (typical)

Operating conditions

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

Body dimensions (L x W x H in mm)	38 × 29 × 29
Lens mount(s)	C-Mount, CS-Mount, S-Mount
Weight	60 g

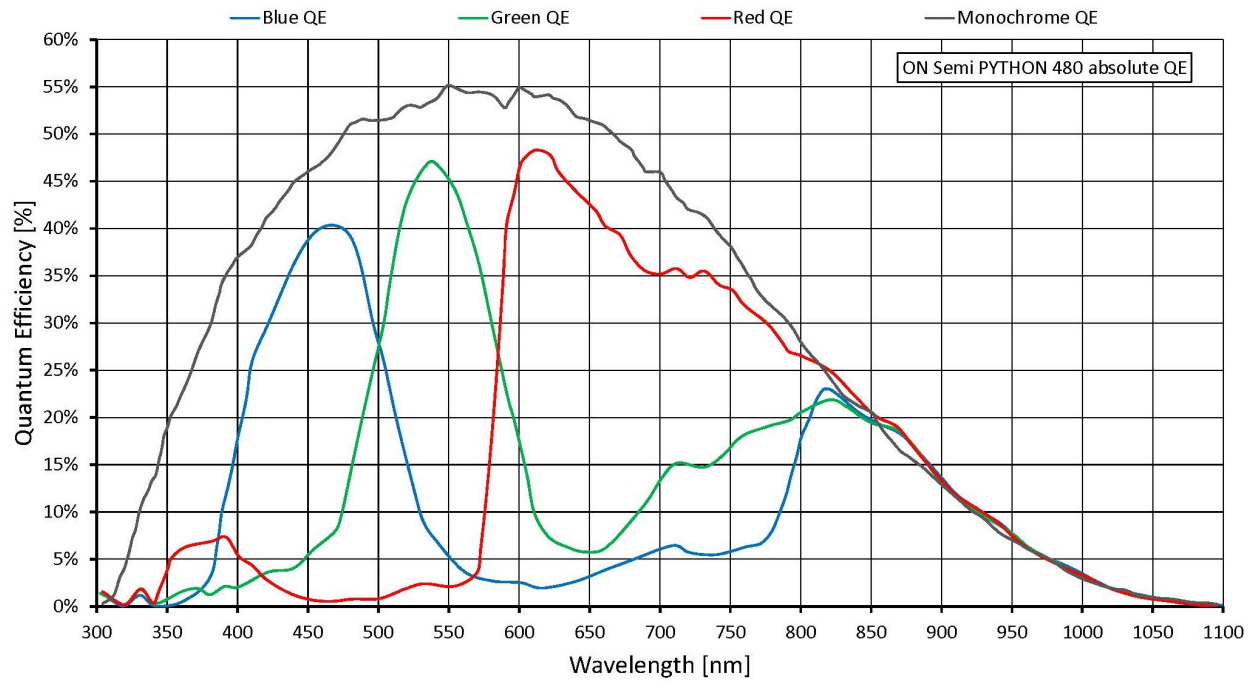
On-board memory and FPGA

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

Interfaces

Digital interface	usb3.0
Vision standard	USB3 Vision

Quantum Efficiency



Technical Drawing

