

Alvium 1800 U

Alvium 1800 U-811
Color, Bare Board

Alvium 1800 U-811 innovative USB camera with Sony IMX546 global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

Configuration: 15872

General

Model:	Alvium 1800 U-811
Product code:	15872
Product series:	Alvium 1800 U
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	2,848 × 2,848 (8.10 MP)
Sensor model:	Sony IMX546
Sensor architecture (material):	CMOS
Shutter type(s):	Global Shutter
Sensor size:	12.75 mm \varnothing (Type 2/3)
Pixel size:	2.74 μm × 2.74 μm

Pixel formats

Sensor bit depth:	12-bit
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: 51

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: 3.3 W (typical) | Ext. power: 3.5 W (typical)

Operating conditions

Operating temperature (housing): -20 °C to 85 °C

Mechanical properties

Housing: Bare Board

Body dimensions (L x W x H in mm): 14 × 26 × 26 mm

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

Camera angle: Standard

Weight: 15 g

On-board memory and FPGA

Image buffer (RAM): 256 KByte

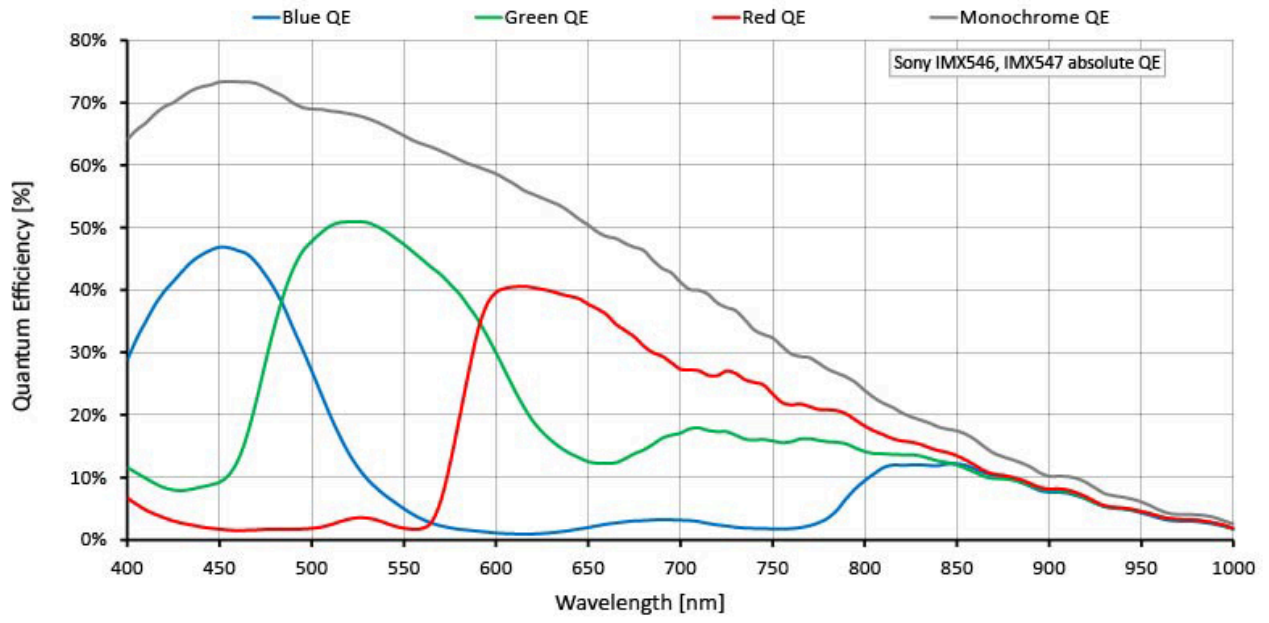
Non-volatile memory (Flash): 1024 KByte

Interfaces

Digital interface: usb3.0

Vision standard: USB3 Vision

Quantum Efficiency



Technical Drawing

