Allied Vision

Alvium 1800 U

Alvium 1800 U-501 NIR



Alvium 1800 U-501m/c NIR innovative USB camera with ON Semi AR0522 CMOS rolling shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

一般

型號	Alvium 1800 U-501 NIR
產品系列	Alvium 1800 U
狀態	Available

感測器

感測器類型	Area scan
色度	Color, Mono
光譜	Visible NIR
光譜範圍	300 nm to 1100 nm
解析度	2,592 × 1,944 (5.00 MP)
感測器型號	ON Semi AR0522
感測器架構 (材料)	cmos
快門類型	Rolling shutter (RS)
感測器尺寸	5.7 × 4.3 mm (7.1 mm, Type 1/2.5)
像素大小	2.20 µm × 2.20 µm

像素格式

感測器位深	10-bit
YUV 像素格式	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB 像素格式	BGR8, RGB8 (default)
Bayer 像素格式	BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8

影像性能

量子效率 @ 529 nm	84 %
量子效率 @ 850 nm	30 %

時序與增益

最大影格率	68 fps
曝光時間	8 µs to 480.00 ms
增益	0.0 dB to 24.1 dB

I/O 與電源

非隔離線	4 programmable GPIOs
電源供應	Power over USB 3.1 Gen 1 | External power 5.0 V
功耗	USB power: 2.2 W (typical) | Ext. power: 2.4 W (typical)

操作條件

操作溫度 (機殼)	-20 °C to 65 °C ((housing))

機械特性

機殼尺寸 (長 x 寬 x 高 mm)	38 × 29 × 29
鏡頭接口	C-Mount, CS-Mount, S-Mount
重量	60 g

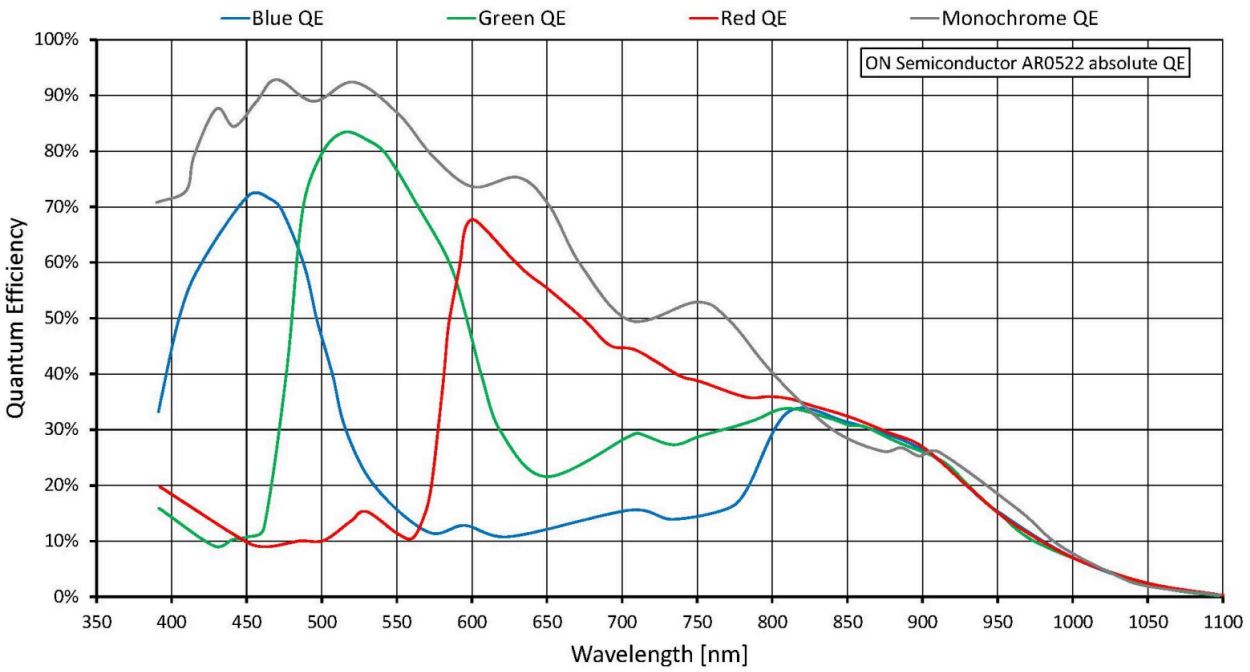
板載記憶體與 FPGA

影像緩衝區 (RAM)	256 KByte
非揮發性記憶體 (Flash)	1024 KByte

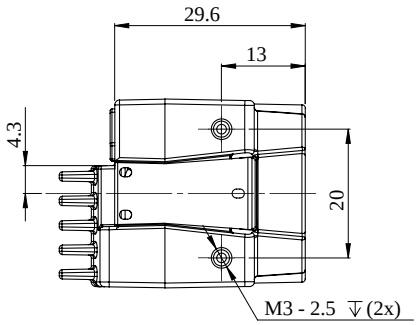
介面

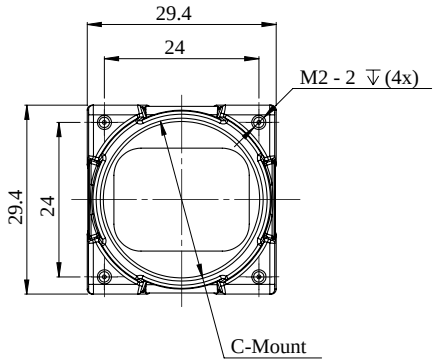
數位介面	usb3.0
視覺標準	USB3 Vision

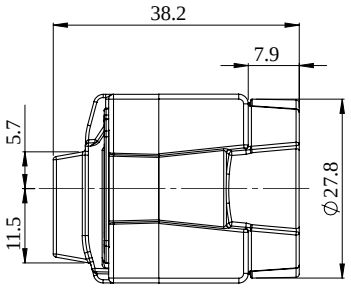
量子效率

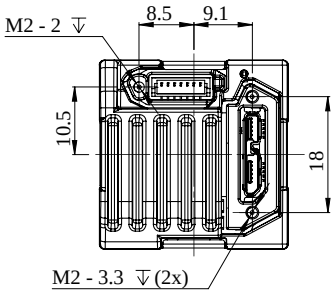

Blue QE
Green QE
Red QE
Monochrome QE
ON Semiconductor AR0522 absolute QE
Quantum Efficiency
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
1100
Wavelength [nm]

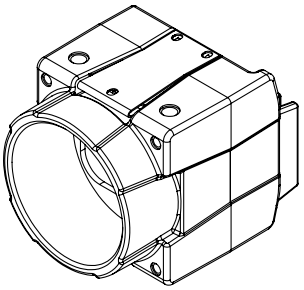
技術圖紙

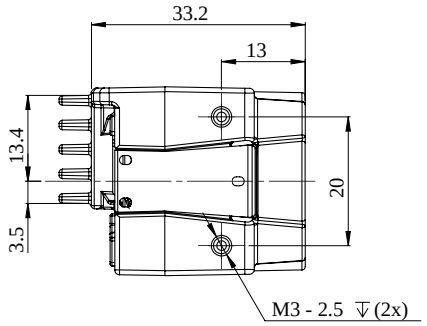

29.6
13
4.3
20
M3 - 2.5 ↧(2x)


29.4
24
M2 - 2 ↧(4x)
29.4
24
C-Mount


38.2
7.9
5.7
11.5
⌀27.8


M2 - 2 ↧
8.5
9.1
10.5
18
M2 - 3.3 ↧(2x)




33.2
13
13.4
20
3.5
M3 - 2.5 ↧(2x)

