

Allied Vision

Alvium 1800 U

Alvium 1800 U-291

Alvium 1800 U-291 innovative USB camera with Sony IMX421 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

般	
型號	Alvium 1800 U-291
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
光譜範圍	300 nm to 1100 nm
解析度	1,944 × 1,472 (2.90 MP)
感測器型號	Sony IMX421
感測器架構 (材料)	cmos
快門類型	Global shutter (GS)
感測器尺寸	8.8 × 6.6 mm (10.8 mm, Type 2/3)
像素大小	4.50 µm × 4.50 µm

像素格式	
感測器位深	10-bit, 12-bit, 8-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	BayerRG12

影像性能	
量子效率 @ 529 nm	73 %

時序與增益

最大影格率	144 fps
曝光時間	14 µs to 10 s
增益	0.0 dB to 48.0 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: 1.9 W (typical) | Ext. power: 2.1 W (typical)

操作條件

操作溫度	-20 °C to 65 °C (機殼)

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
重量	60 g

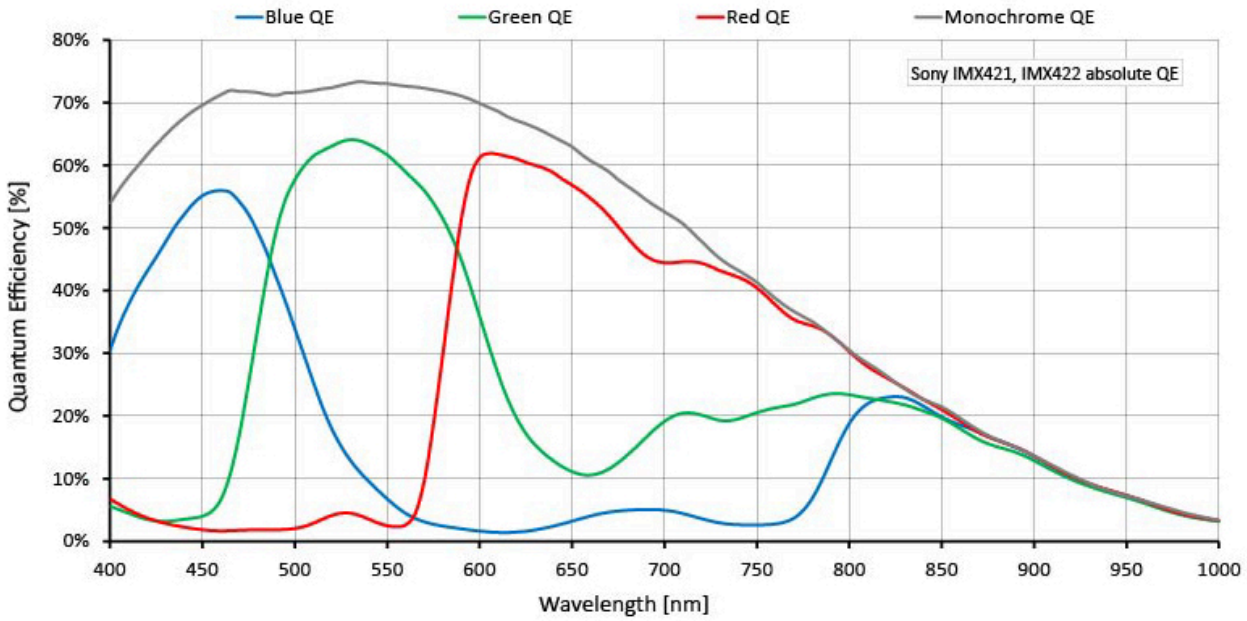
板載記憶體與 FPGA

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

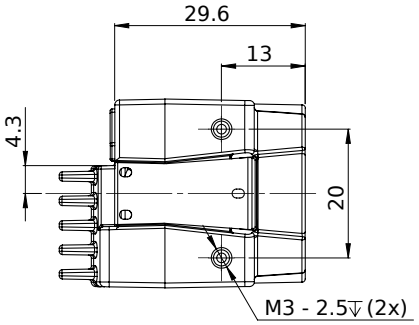
介面

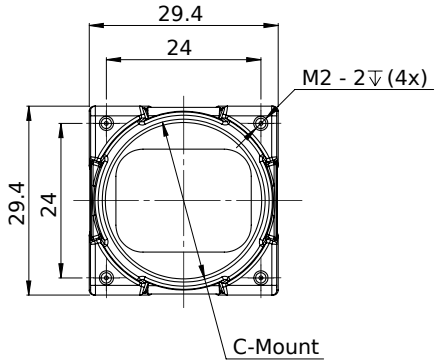
數位介面	usb3.0
視覺標準	USB3 Vision

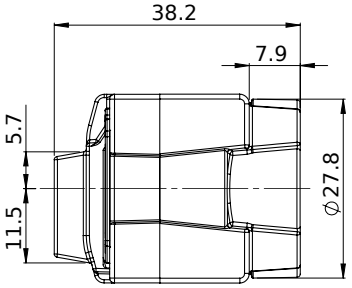
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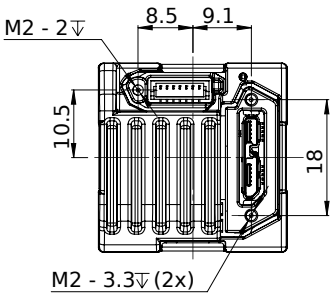

Blue QE
Green QE
Red QE
Monochrome QE
Sony IMX421, IMX422 absolute QE
Quantum Efficiency [%]
80%
70%
60%
50%
40%
30%
20%
10%
0%
400
450
500
550
600
650
700
750
800
850
900
950
1000
Wavelength [nm]

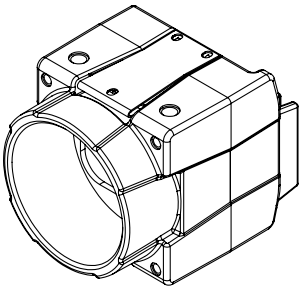
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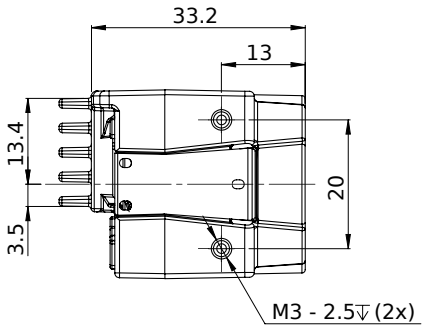

29.6
13
4.3
20
M3 - 2.5↧(2x)


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
3.5
20
M3 - 2.5↧(2x)

