

Allied Vision

Alvium 1800 U

Alvium 1800 U-2050

Alvium 1800 U-2050 innovative USB3 Vision camera with Sony IMX183 CMOS rolling shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

般	
型號	Alvium 1800 U-2050
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	5,496 × 3,672 (20.20 MP)
感測器型號	Sony IMX183
感測器架構 (材料)	cmos
快門類型	Global Reset Shutter, Rolling shutter (RS)
感測器尺寸	13.1 × 8.8 mm (15.9 mm, Type 1)
像素大小	2.40 µm × 2.40 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	BayerRG12

影像性能	
量子效率 @ 529 nm	80 %

時序與增益

最大影格率	21 fps
曝光時間	15 µs to 10 s
增益	0.0 dB to 27.0 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: 3.2 W (typical) | Ext. power: 3.4 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
重量	65 g

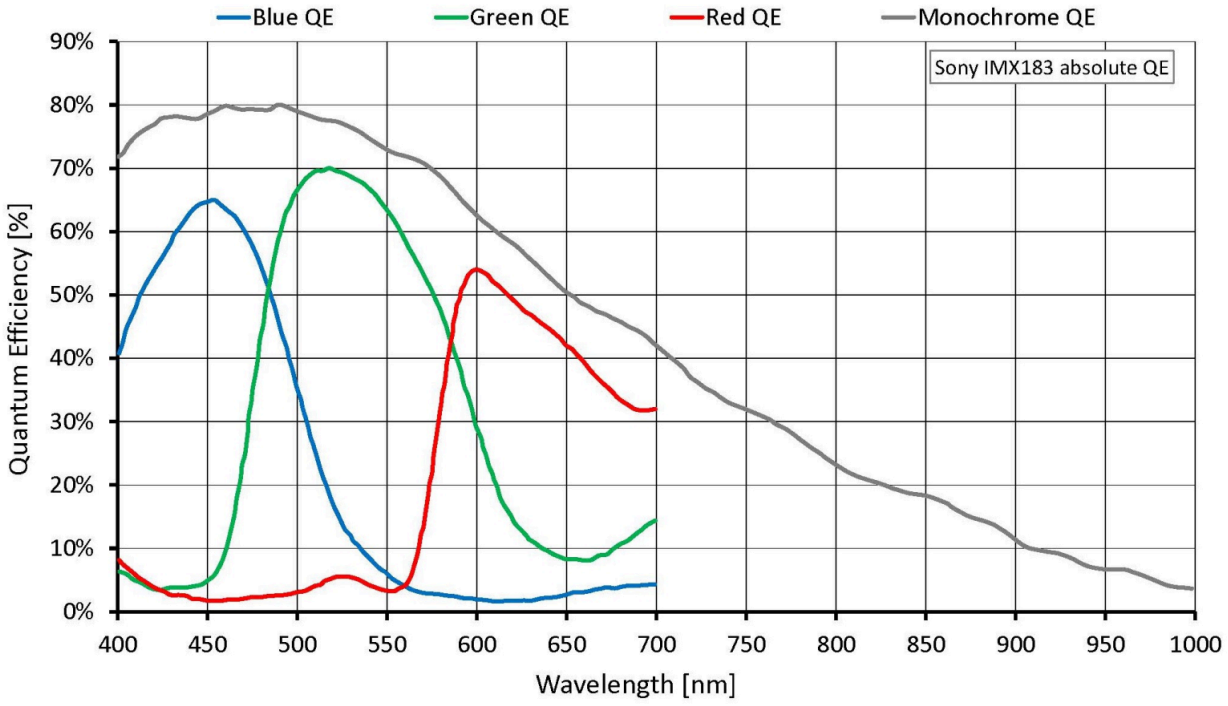
板載記憶體與 FPGA

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

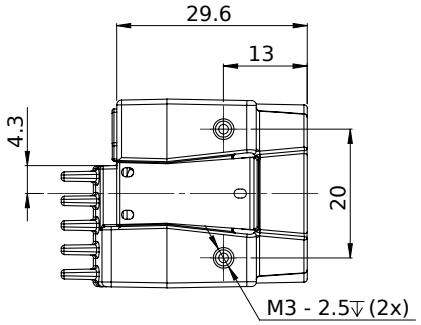
介面

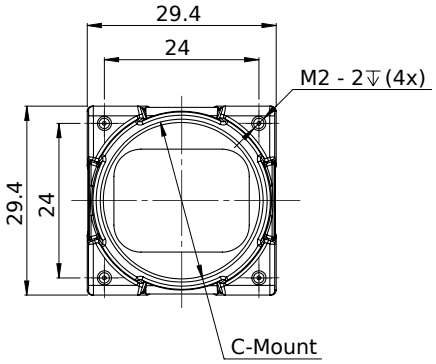
數位介面	usb3.0
視覺標準	USB3 Vision

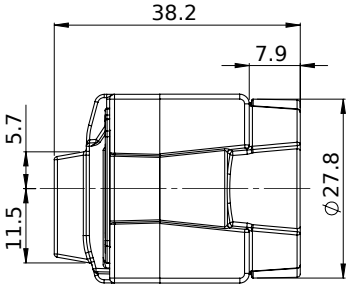
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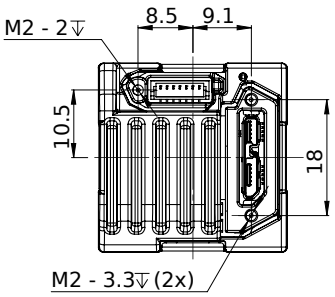

Blue QE
Green QE
Red QE
Monochrome QE
Sony IMX183 absolute QE
Quantum Efficiency [%]
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
400
450
500
550
600
650
700
750
800
850
900
950
1000
Wavelength [nm]

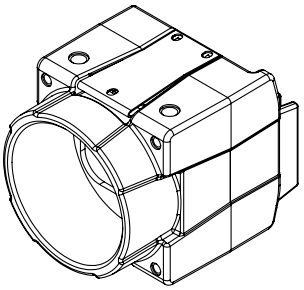
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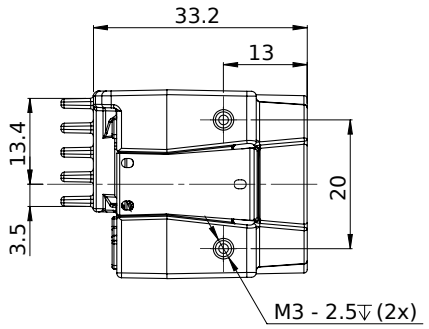

29.6
13
4.3
20
M3 - 2.5↧(2x)


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)

