Allied Vision

Alvium C

Alvium 1800 C-2040



Alvium 1800 C-2040 innovative MIPI CSI-2 camera with Sony IMX541 CMOS global shutter sensor provides industrial performance for cost effective embedded applications.

一般

型號	Alvium 1800 C-2040
產品系列	Alvium C
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	4,512 × 4,512 (20.40 MP)
感測器型號	Sony IMX541
感測器架構 (材料)	cmos
快門類型	Global shutter (GS)
感測器尺寸	12.4 × 12.4 mm (17.5 mm, Type 1.1)
像素大小	2.74 µm × 2.74 µm

像素格式

感測器位深	12-bit
單色像素格式	GREY, RAW10, RAW12, RAW8, Y10, Y12
YUV 像素格式	UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit
RGB 像素格式	BGR8, RGB3, RGB8 (default), RGB888 (default)
Bayer 像素格式	BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8

影像性能

量子效率 @ 529 nm	68 %

時序與增益

最大影格率	25 fps
曝光時間	11 µs to 10 s
增益	0.0 dB to 48.0 dB

I/O 與電源

非隔離線	2 programmable GPIOs
電源供應	5 VDC over MIPI CSI-2
功耗	Typical: 3.7 W

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)	26 × 29 × 29
鏡頭接口	C-Mount, CS-Mount
重量	40 g

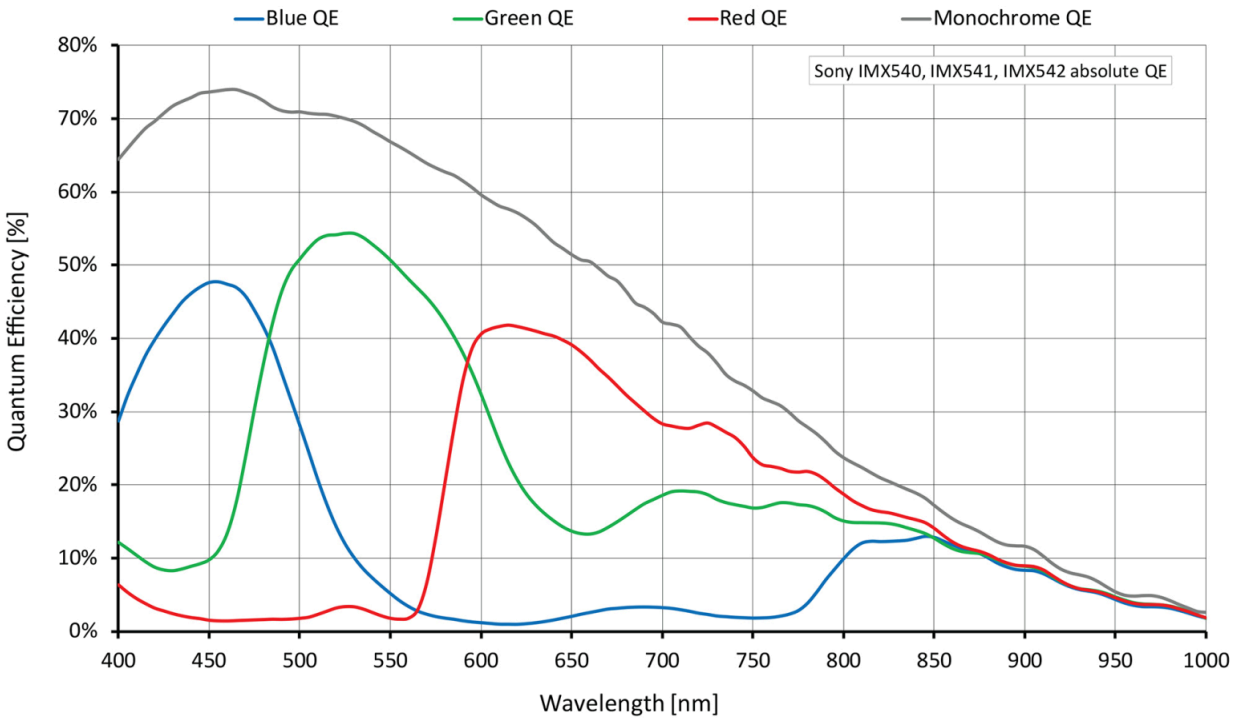
板載記憶體與 FPGA

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

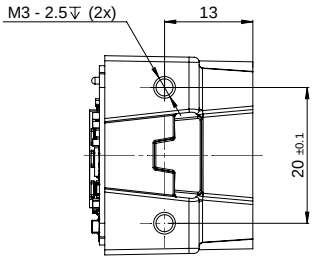
介面

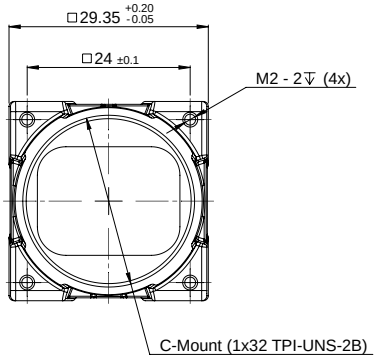
數位介面	MIPI CSI-2, up to 4 lanes

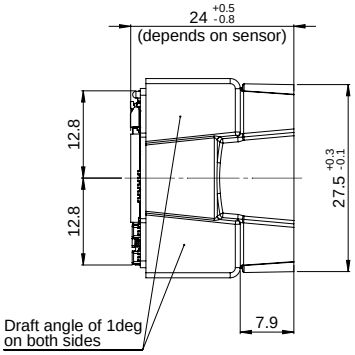
量子效率

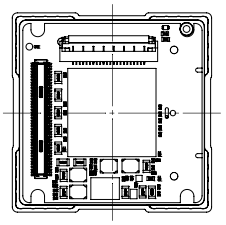

Blue QE
Green QE
Red QE
Monochrome QE
Sony IMX540, IMX541, IMX542 absolute QE
Quantum Efficiency [%]
80%
70%
60%
50%
40%
30%
20%
10%
0%
400
450
500
550
600
650
700
750
800
850
900
950
1000
Wavelength [nm]

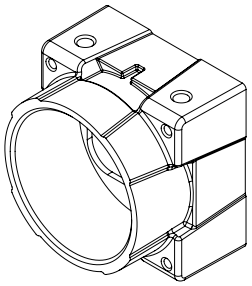
技術圖紙

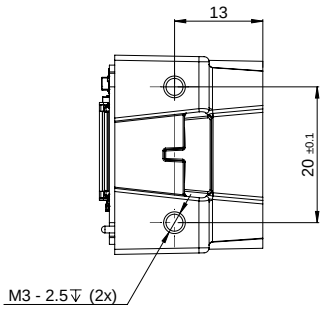

M3 - 2.5↧ (2x)
13
20 ±0.1


□29.35 +0.20 -0.05
□24 ±0.1
M2 - 2↧ (4x)
C-Mount (1x32 TPI-UNS-2B)


24 +0.5 -0.8
(depends on sensor)
12.8
12.8
27.5 +0.3 -0.1
7.9
Draft angle of 1deg
on both sides






13
20 ±0.1
M3 - 2.5↧ (2x)

