Alecs

Alecs G1-030 VSWIR NX16



Alecs G1-030 VSWIR innovative vision system with Sony IMX991 InGaAs global shutter sensor and NVIDIA® Jetson Orin™ NX16 enables developping applications for the near infrared spectrum faster. The NVIDIA® Jetson Orin™ NX16 embedded board provides 16 GByte RAM, with power modes up to 25 W. Embedded technologies enable advanced AI models and compute-intensive edge detection: Deep Learning Accelerator (DLA) with dedicated cores offloads the hosts' CPU and GPU and Programmable Vision Accelerator (PVA) with dedicated cores extends the Alvium BSP feature set by NVIDIA vision libraries. Alecs G1 comes with 128 GByte NVMe storage, providing sufficient space for AI models, datasets, and

一般

型號	Alecs G1-030 VSWIR NX16
產品系列	Alecs
狀態	Available

感測器

感測器類型	Area scan
色度	Mono
光譜	SWIR, Visible SWIR
光譜範圍	400 nm to 1700 nm
解析度	565 × 520 (0.30 MP)
感測器型號	Sony IMX991 | InGaAs
感測器架構 (材料)	cmos-ingaas
快門類型	Global shutter (GS)
感測器尺寸	3.3 × 2.6 mm (4.1 mm, Type 1/4)
像素大小	5.00 µm × 5.00 µm

像素格式

感測器位深	12-bit
單色像素格式	GREY, RAW10, RAW12, RAW8, Y10, Y12

時序與增益

最大影格率	130 fps
曝光時間	15 µs to 10 s
增益	0.0 dB to 42.0 dB

I/O 與電源

非隔離線	2 inputs, 2 outputs, 1 trigger input, 1 strobe output
電源供應	24 VDC
功耗	SoM: Max. 10 W to 25 W | Carrier board: Max. 2.0 W | Camera: Max. 1.8 W || Idle state: 8.5 W

操作條件

操作溫度 (機殼)	-20 °C to 55 °C ((housing))

機械特性

機殼尺寸 (長 x 寬 x 高 mm)	102 × 72 × 112
鏡頭接口	C-Mount
重量	810 g

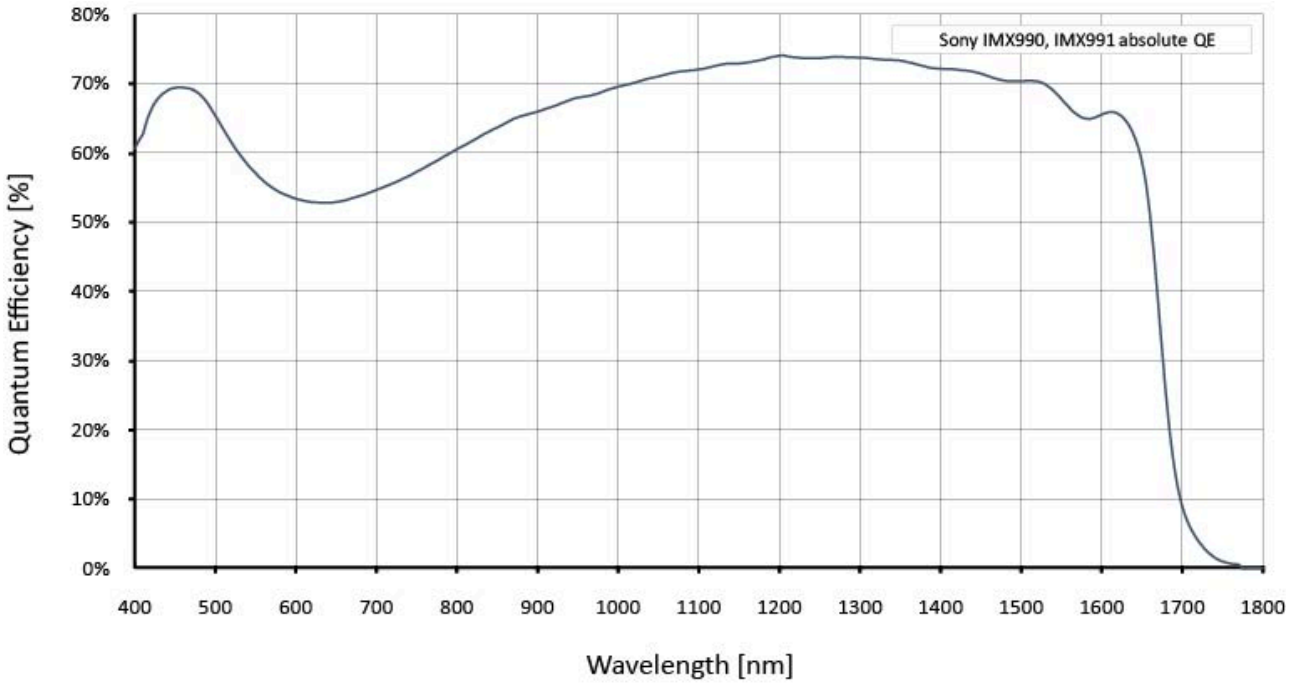
板載記憶體與 FPGA

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

介面

數位介面	IEEE 802.3 1000BASE-T

量子效率


Sony IMX990, IMX991 absolute QE
Quantum Efficiency [%]
80%
70%
60%
50%
40%
30%
20%
10%
0%
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
Wavelength [nm]

技術圖紙

Alecs Main Housing with Lens Tube LT4649

