Alecs

Alecs G1-130 VSWIR NX16



Alecs G1-130 VSWIR innovative vision system with Sony IMX990 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

Generale

Modello	Alecs G1-130 VSWIR NX16
Serie di prodotti	Alecs
Stato	Available

Sensore

Tipo di sensore	Area scan
Croma	Mono
Spettro	SWIR, Visible SWIR
Gamma spettrale	400 nm to 1700 nm
Risoluzione	1,296 × 1,032 (1.30 MP)
Modello sensore	Sony IMX990 | InGaAs
Architettura sensore (Materiale)	cmos-ingaas
Tipi di otturatore	Global shutter (GS)
Dimensione sensore	6.4 × 5.1 mm (8.2 mm, Type 1/2)
Dimensione pixel	5.00 µm × 5.00 µm

Formati pixel

Profondità bit sensore	12-bit
Formati pixel monocromatici	GREY, RAW10, RAW12, RAW8, Y10, Y12

Tempi e guadagno

Frequenza fotogrammi max.	130 fps
Tempo di esposizione	15 µs to 10 s
Guadagno	0.0 dB to 42.0 dB

I/O e alimentazione

Linee non isolate	2 inputs, 2 outputs, 1 trigger input, 1 strobe output
Alimentazione	24 VDC
Consumo energetico	SoM: Max. 10 W to 25 W | Carrier board: Max. 2.0 W | Camera: Max. 2.8 W || Idle state: 8.5 W

Condizioni operative

Temperatura operativa (Custodia)	-20 °C to 55 °C ((housing))

Proprietà meccaniche

Dimensioni custodia (L x P x A in mm)	102 × 72 × 112
Attacco/i obiettivo	C-Mount
Peso	810 g

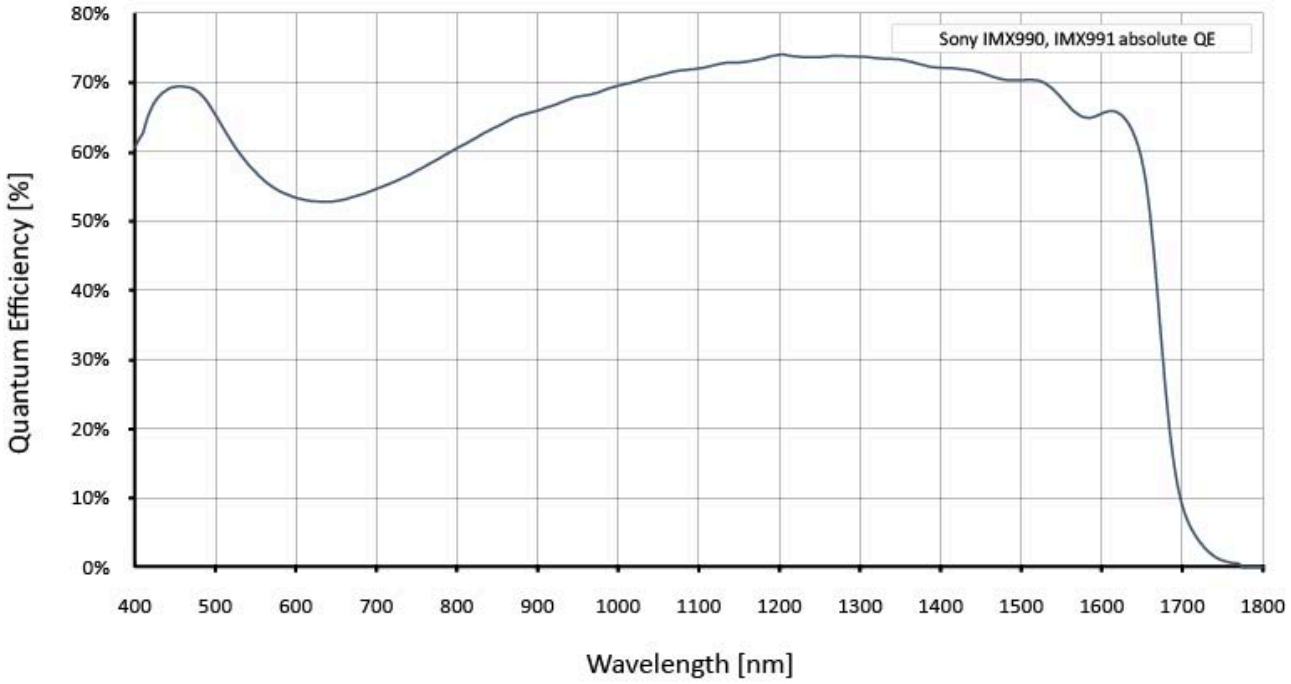
Memoria onboard e FPGA

Buffer immagine (RAM)	256 KByte
Memoria non volatile (Flash)	1024 KByte

Interfacce

Interfaccia digitale	IEEE 802.3 1000BASE-T

Efficienza quantica



Disegno tecnico

Alecs Main Housing with Lens Tube LT4649

