Allied Vision

# Alecs

## Alecs G1-530 VSWIR NX16



Alecs G1-530 VSWIR innovative vision system with Sony IMX992 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

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|---|---|
| Modello | Alecs G1-530 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 | 2,592 × 2,056 (5.30 MP) |
| Modello sensore | Sony IMX992 \| 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

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

## Tempi e guadagno

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|---|---|
| Frequenza fotogrammi max. | 130 fps |
| Tempo di esposizione | 36 µs to 10 s |
| Guadagno | 0.0 dB to 42.0 dB |

## I/O e alimentazione

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|---|---|
| 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. 2.7 W \|\| Idle state: 8.5 W |

## Condizioni operative

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

## Proprietà meccaniche

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

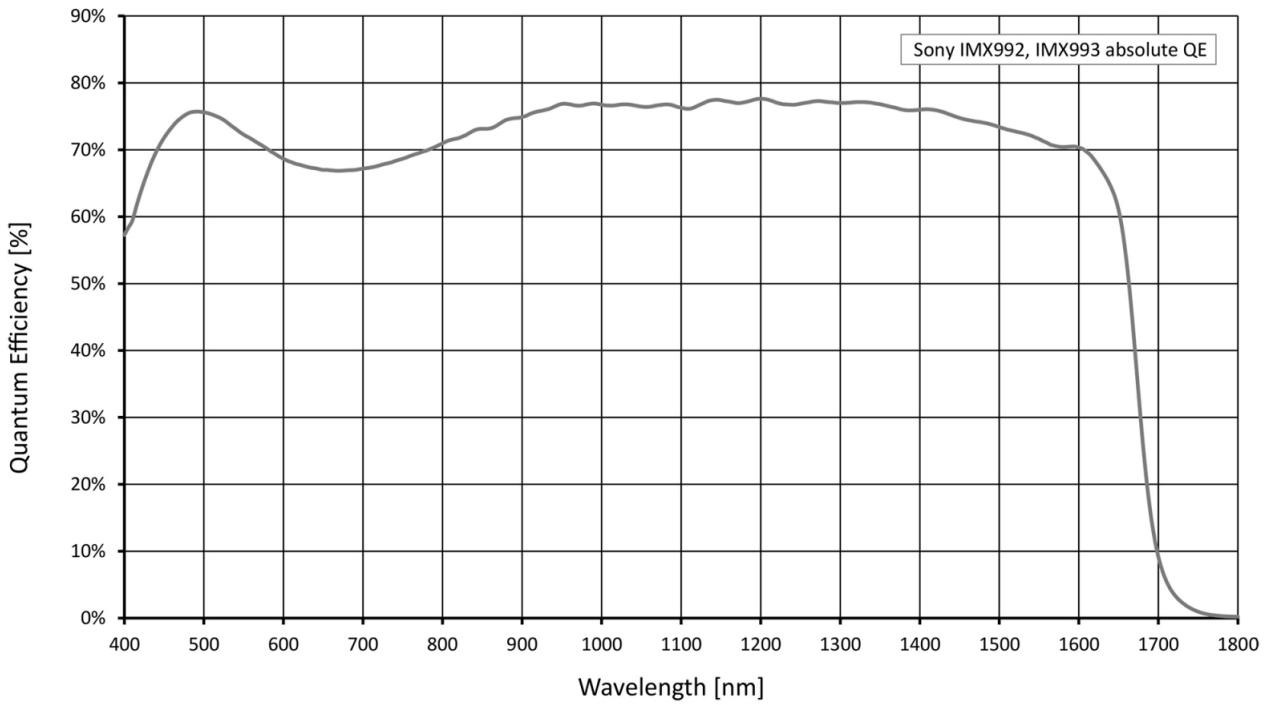
## Memoria onboard e FPGA

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

## Interfacce

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|---|---|
| Interfaccia digitale | IEEE 802.3 1000BASE-T |

## Efficienza quantica



# Disegno tecnico

## Alecs Main Housing with Lens Tube LT4649

