Allied Vision

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

Allgemein

Modell	Alecs G1-130 VSWIR NX16
Produktserie	Alecs
Status	Available

Sensor

Sensortyp	Area scan
Chroma	Mono
Spektrum	SWIR, Visible SWIR
Spektralbereich	400 nm to 1700 nm
Auflösung	1,296 × 1,032 (1.30 MP)
Sensormodell	Sony IMX990 | InGaAs
Sensorarchitektur (Material)	cmos-ingaas
Verschlusstyp(en)	Global shutter (GS)
Sensorgröße	6.4 × 5.1 mm (8.2 mm, Type 1/2)
Pixelgröße	5.00 µm × 5.00 µm

Pixelformate

Sensor-Bittiefe	12-bit
Monochrome Pixelformate	GREY, RAW10, RAW12, RAW8, Y10, Y12

Timing und Verstärkung

Max. Bildrate	130 fps
Belichtungszeit	15 µs to 10 s
Verstärkung	0.0 dB to 42.0 dB

I/Os und Stromversorgung

Nicht-isolierte Leitungen	2 inputs, 2 outputs, 1 trigger input, 1 strobe output
Stromversorgung	24 VDC
Stromverbrauch	SoM: Max. 10 W to 25 W | Carrier board: Max. 2.0 W | Camera: Max. 2.8 W || Idle state: 8.5 W

Betriebsbedingungen

Betriebstemperatur (Gehäuse)	-20 °C to 55 °C ((housing))

Mechanische Eigenschaften

Gehäuseabmessungen (L x B x H in mm)	102 × 72 × 112
Objektivanschluss/-anschlüsse	C-Mount
Gewicht	810 g

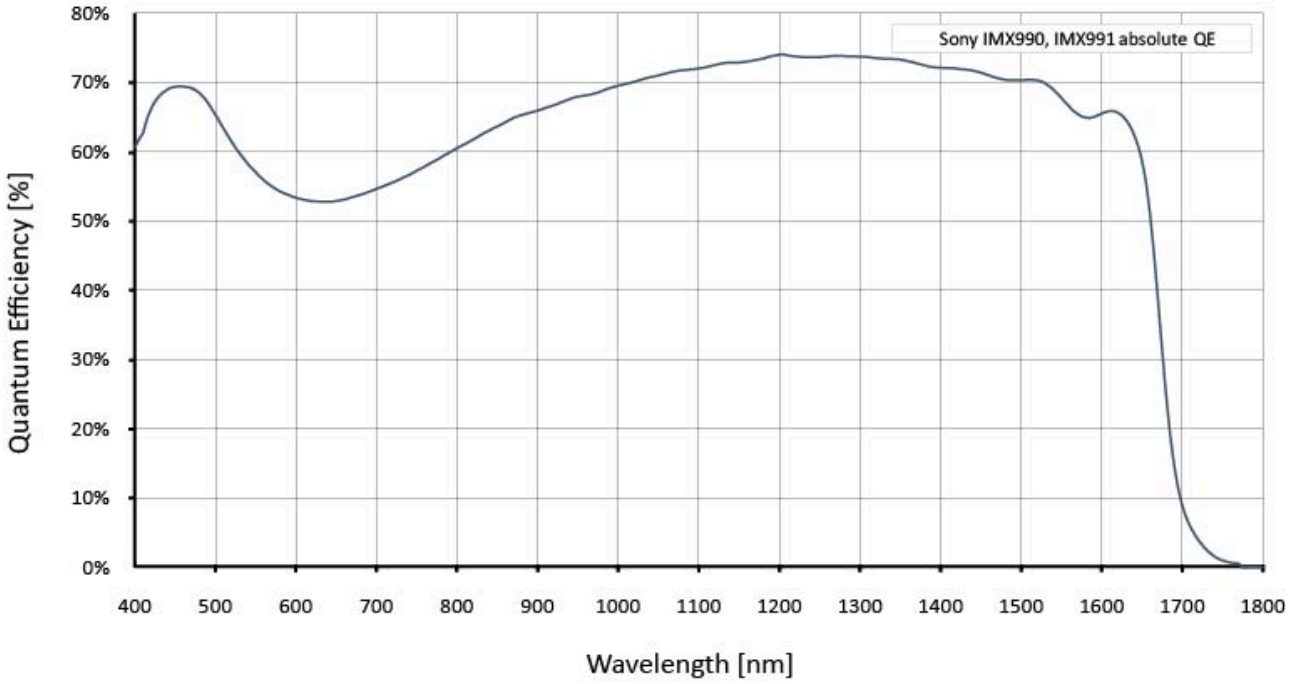
Onboard-Speicher und FPGA

Bildpuffer (RAM)	256 KByte
Nichtflüchtiger Speicher (Flash)	1024 KByte

Schnittstellen

Digitale Schnittstelle	IEEE 802.3 1000BASE-T

Quanteneffizienz



Technische Zeichnung

Alecs Main Housing with Lens Tube LT4649

