Allied Vision

Alecs

Alecs G1-1242 NA8

NVIDIA
NVIDIA® Jetson Orin™
Nano 8GB or NX 16GB inside

Alecs G1-1242 innovative vision system with Sony IMX545 CMOS global shutter sensor and NVIDIA® Jetson Orin™ Nano8 enables developping applications faster.

General

Model:	Alecs G1-1242 NA8
Product series:	Alecs
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	4,128 × 3,008 (12.40 MP)
Sensor model:	Sony IMX545
Sensor architecture (material):	CMOS
Shutter type(s):	Global Shutter
Sensor size:	14 mm ø (Type 1/1.1)
Pixel size:	2.74 µm × 2.74 µm

Pixel formats

Sensor bit depth:	12-bit
Monochrome pixel formats:	Mono8, Mono10, Mono10p, Mono12, Mono12p, RAW8, RAW10, RAW12, GREY, Y10, Y12
YUV pixel formats:	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit, UYVY

Pixel formats

RGB pixel formats:	RGB8 (default), BGR8, RGB888 (default), RGB3
Bayer pixel formats:	BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p

Imaging performance

Quantum efficiency @ 529 nm:	68 %

Timing and gain

Max. frame rate:	40 fps

I/Os and power

Non-isolated lines:	2 inputs, 2 outputs, 1 trigger input, 1 strobe output
Power supply:	24 VDC
Power consumption:	SoM: Max. 10 W to 25 W | Carrier board: Max. 2.0 W | Camera: Max. 3.2 W || Idle state: 8.5 W

Operating conditions

Operating temperature (housing):	-20 °C to 65 °C (housing)

Mechanical properties

Body dimensions (L x W x H in mm):	102 × 72 × 112
Lens mount(s):	C-Mount, CS-Mount
Weight:	810 g

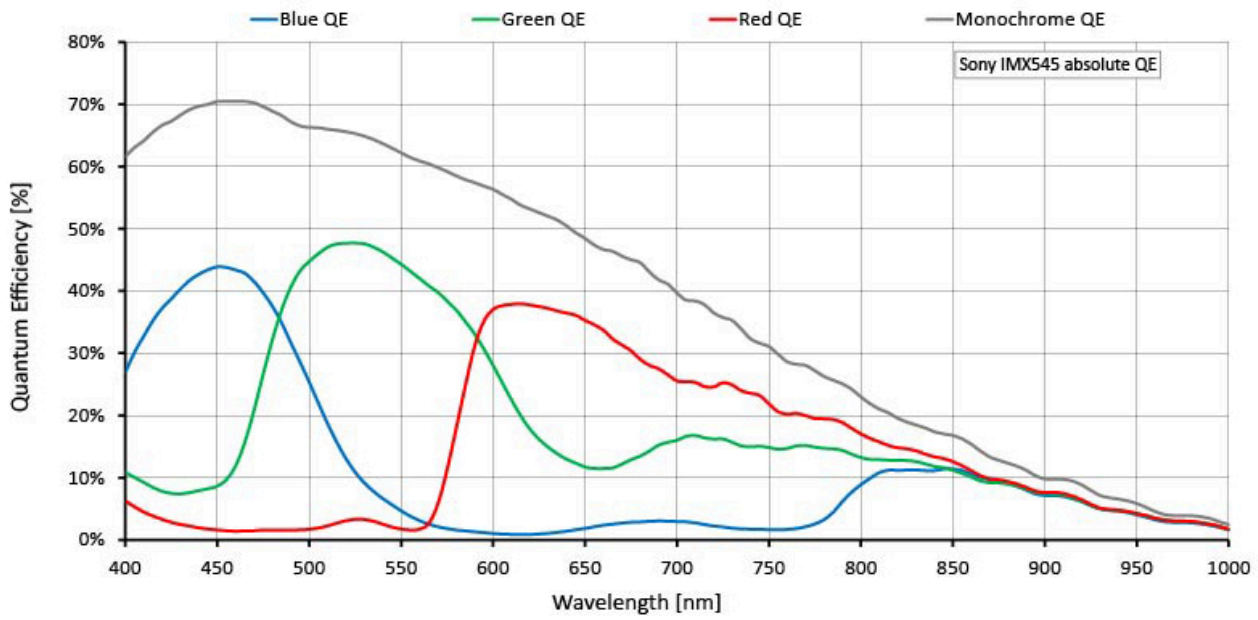
On-board memory and FPGA

Image buffer (RAM):	256 KByte
Non-volatile memory (Flash):	1024 KByte

Interfaces

Digital interface:	IEEE 802.3 1000BASE-T

Quantum Efficiency



Technical Drawing

Alecs Main Housing with Lens Tube LT4649