



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

General

Model	Alecs G1-1242 NA8
Product series	Alecs
Status	Available

Sensor

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

Pixel formats

Monochrome pixel formats	GREY, RAW10, RAW12, RAW8, Y10, Y12
YUV pixel formats	UYVY, YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit
RGB pixel formats	BGR8, RGB3, RGB8 (default), RGB888 (default)
Bayer pixel formats	BayerRG12

Imaging performance

Quantum efficiency @ 529 nm	68 %
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Timing and gain

Max. frame rate	40 fps
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I/Os and power

Non-isolated lines	2 inputs, 2 outputs, 1 trigger input, 1 strobe output
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Power supply	24 VDC
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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
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Operating conditions

Operating temperature (housing)	-20 °C to 65 °C ((housing))
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Mechanical properties

Body dimensions (L x W x H in mm)	102 × 72 × 112
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Lens mount(s)	C-Mount
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Weight	810 g
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On-board memory and FPGA

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

Digital interface	IEEE 802.3 1000BASE-T
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Quantum Efficiency



Technical Drawing

 Technical Drawing