Allied Vision

Alvium G5

Alvium G5-291



Alvium G5-291 innovative 5GBASE-T camera with Sony IMX421 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model	Alvium G5-291
Product series	Alvium G5
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	1,944 × 1,472 (2.90 MP)
Sensor model	Sony IMX421
Sensor architecture (material)	cmos
Shutter type(s)	Global shutter (GS)
Sensor size	8.8 × 6.6 mm (10.8 mm, Type 2/3)
Pixel size	4.50 µm × 4.50 µm

Pixel formats

Sensor bit depth	10-bit, 12-bit, 8-bit
YUV pixel formats	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB pixel formats	BGR8, RGB8 (default)
Bayer pixel formats	BayerRG12

Imaging performance

Quantum efficiency @ 529 nm	73 %

Timing and gain

Max. frame rate	166 fps
Exposure time	17 µs to 10 s
Gain	0.0 dB to 48.0 dB

I/Os and power

Non-isolated lines	2 GPIOs (LVTTL)
Opto-isolated lines	1 input, 1 output
Power supply	10.8 to 26.4 VDC AUX | IEEE 802.3af, Power Class 0 PoE
Power consumption	External power: 6.6 W at 12 VDC (typical) | Power over Ethernet: 7.2 W (typical)

Operating conditions

Operating temperature (housing)	-20 °C to 60 °C (housing temperature)

Mechanical properties

Body dimensions (L x W x H in mm)	60 × 29 × 29
Lens mount(s)	C-Mount, CS-Mount
Weight	100 g

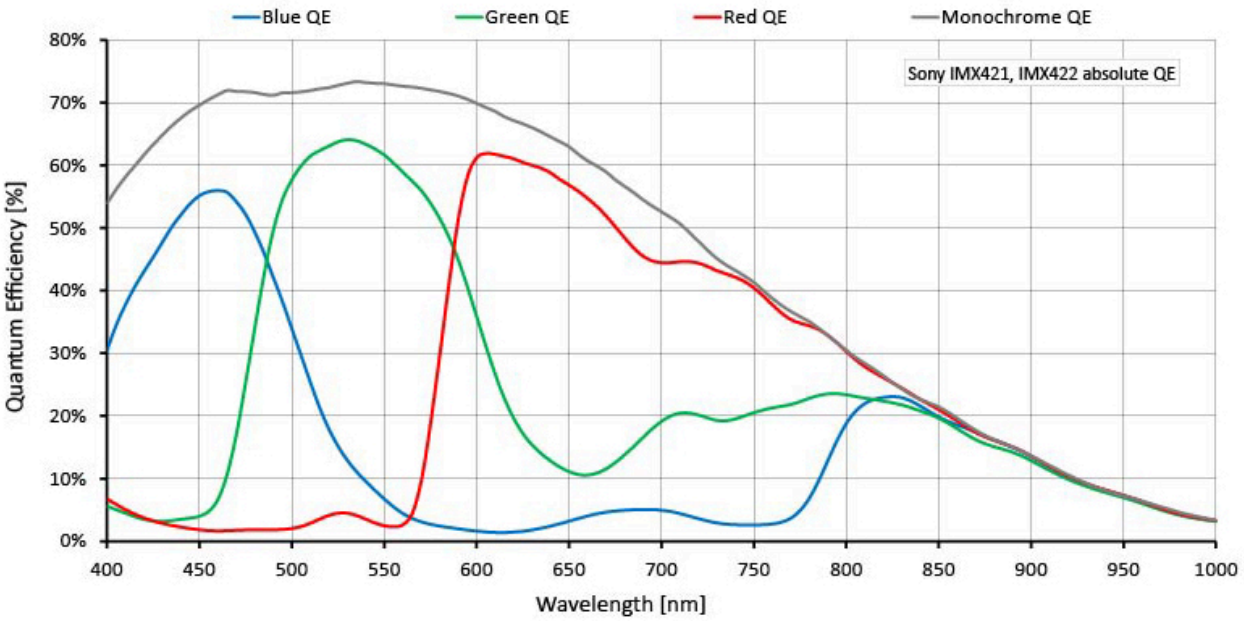
On-board memory and FPGA

Image buffer (RAM)	512 MByte
Non-volatile memory (Flash)	1024 KByte

Interfaces

Digital interface	IEEE 802.3: 5GBASE-T or 2.5GBASE-T (NBASE-T) and 1000BASE-T, IEEE 802.3af Power Class 0 PoE

Quantum Efficiency



Technical Drawing

