Allied Vision

Alvium G1

Alvium G1-500

Alvium G1-500 innovative GigE camera with ON Semi AR0521 CMOS rolling shutter sensor provides industrial performance for cost effective machine vision applications.

General

Model:	Alvium G1-500
Product series:	Alvium G1
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	2,592 × 1,944 (5.00 MP)
Sensor model:	ON Semi AR0521SR
Sensor architecture (material):	CMOS
Shutter type(s):	Rolling Shutter
Sensor size:	7.13 mm ø (Type 1/2.5)
Pixel size:	2.20 µm × 2.20 µm

Pixel formats

Sensor bit depth:	10-bit
Monochrome pixel formats:	Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono12Packed
YUV pixel formats:	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB pixel formats:	RGB8 (default), BGR8

Pixel formats

Bayer pixel formats:	BayerGR8, BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR12Packed

Imaging performance

Quantum efficiency @ 529 nm:	79 %

Timing and gain

Max. frame rate:	23

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: 2.9 W at 12 VDC (typical) | Power over Ethernet: 3.2 W (typical)

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm):	41 × 29 × 29
Lens mount(s):	C-Mount, CS-Mount, S-Mount
Weight:	70 g

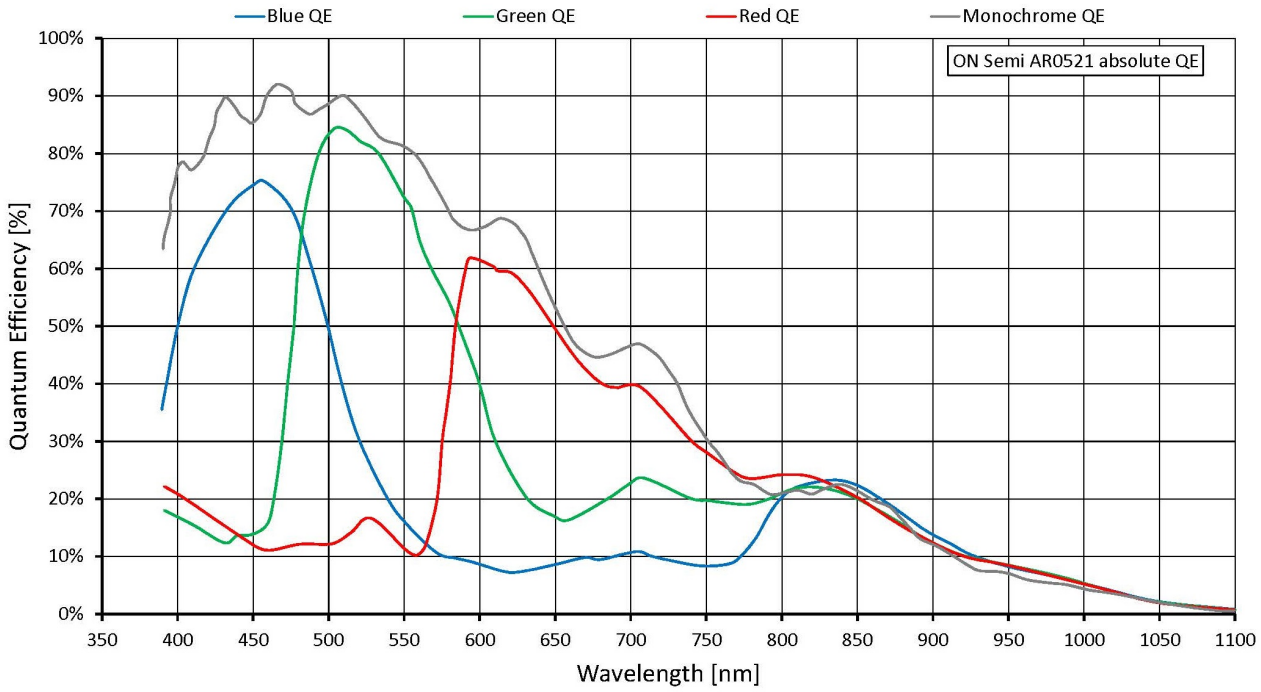
On-board memory and FPGA

Image buffer (RAM):	32 MByte
Non-volatile memory (Flash):	1024 KByte

Interfaces

Digital interface:	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)

Quantum Efficiency



Technical Drawing