

Alvium 1800 C

Alvium 1800 C-291



Alvium 1800 C-291 innovative MIPI CSI-2 camera with Sony IMX421 CMOS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

Model:	Alvium 1800 C-291
Product series:	Alvium 1800 C
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Spectral range:	300 nm to 1100 nm
Resolution:	1,944 × 1,472 (2.90 MP)
Sensor model:	Sony IMX421
Shutter type(s):	Global Shutter
Sensor size:	12.75 mm \varnothing (Type 2/3)
Pixel size:	4.50 μm × 4.50 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)

Pixel formats

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

Imaging performance

Quantum efficiency @ 529 nm: 73 %

Timing and gain

Max. frame rate: 166 fps

Exposure time: 17 μ s to 10 s

Gain: 0.0 dB to 48.0 dB

I/Os and power

Non-isolated lines: 2 programmable GPIOs

Power supply: 5 VDC over MIPI CSI-2

Power consumption: Typical: 3.8 W

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm): 26 × 29 × 29

Lens mount(s): C-Mount, CS-Mount

Weight: 40 g

On-board memory and FPGA

Image buffer (RAM): 256 KByte

Non-volatile memory (Flash): 1024 KByte

Interfaces

Digital interface: MIPI CSI-2, up to 4 lanes

Quantum Efficiency



