



Alvium C

Alvium 1800 C-500

Alvium 1800 C-500 innovative MIPI CSI-2 camera with ON Semi AR0521 CMOS rolling shutter sensor provides industrial performance for cost effective embedded applications.

General

Model	Alvium 1800 C-500
Product series	Alvium C
Status	Available

Sensor

Sensor type	Area scan
Chroma	Color, Mono
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 (RS)
Sensor size	5.7 × 4.3 mm (7.1 mm, Type 1/2.5)
Pixel size	2.20 µm × 2.20 µm

Pixel formats

Sensor bit depth	10-bit
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	BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8

Imaging performance

Quantum efficiency @ 529 nm	79 %
-----------------------------	------

Timing and gain

Max. frame rate	68 fps
Exposure time	8 μ s to 480.00 ms
Gain	0.0 dB to 24.0 dB

I/Os and power

Non-isolated lines	2 programmable GPIOs
Power supply	5 VDC over MIPI CSI-2
Power consumption	Typical: 1.9 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, S-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



Technical Drawing

