Alvium 1800 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 1800 C
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
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

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:	79 %

Timing and gain

Max. frame rate:	68 fps
Exposure time:	8 µs 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

M3 - 2.5↧ (2x)

13

20 ±0.1

□29.35 +0.20 -0.05

□24 ±0.1

M2 - 2↧ (4x)

C-Mount (1x32 TPI-UNS-2B)

24 +0.5 -0.8
(depends on sensor)

12.8

12.8

27.5 +0.3 -0.1

Draft angle of 1deg
on both sides

7.9

13

20 ±0.1

M3 - 2.5↧ (2x)

Allied Vision