Alvium 1800 C
Alvium 1800 C-1240

Alvium 1800 C-1240 innovative MIPI CSI-2 camera with Sony IMX226 CMOS rolling shutter sensor provides industrial performance for cost effective embedded applications.

General

Model:	Alvium 1800 C-1240
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:	4,024 × 3,032 (12.20 MP)
Sensor model:	Sony IMX226
Shutter type(s):	Global Reset Shutter, Rolling Shutter
Sensor size:	9.33 mm ø (Type 1/1.7)
Pixel size:	1.85 µm × 1.85 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:	74 %

Timing and gain

Max. frame rate:	41 fps
Exposure time:	10 µs to 10 s
Gain:	0.0 dB to 27.0 dB

I/Os and power

Non-isolated lines:	2 programmable GPIOs
Power supply:	5 VDC over MIPI CSI-2
Power consumption:	Typical: 2.9 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

M3 - 2.5$\overline{\nabla}$ (2x)

13

20 ±0.1

□29.35$^{+0.20}_{-0.05}$

□24 ±0.1

M2 - 2$\overline{\nabla}$ (4x)

24$^{+0.5}_{-0.8}$
(depends on sensor)

12.8

12.8

27.5$^{+0.3}_{-0.1}$

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

Draft angle of 1deg
on both sides

7.9

13

20 ±0.1

M3 - 2.5$\overline{\nabla}$ (2x)

Allied Vision