



Alvium GM2

Alvium GM2-2040

Alvium GM2-2040 innovative GMSL2 camera with Sony IMX541 CMOS global shutter sensor provides industrial performance for cost effective embedded applications.

General

Model	Alvium GM2-2040
Product series	Alvium GM2
Status	Available

Sensor

Sensor type	Area scan
Chroma	Mono or Color
Spectrum	Visible
Spectral range	300 nm to 1100 nm
Resolution	4,512 × 4,512 (20.40 MP)
Sensor model	Sony IMX541
Sensor architecture (material)	CMOS
Shutter type(s)	Global Shutter
Sensor size	17.6 mm ø (Type 1.1)
Pixel size	2.74 µm × 2.74 µm

Pixel formats

Sensor bit depth	12-bit
Monochrome pixel formats	Mono8, Mono10, Mono10p, Mono12, Mono12p, RAW8, RAW10, RAW12, GREY, Y10, Y12
YUV pixel formats	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr, YUV422 8-bit, UYVY
RGB pixel formats	RGB8 (default), BGR8, RGB888 (default), RGB3
Bayer pixel formats	BayerGR8, BayerGR10, BayerGR10p, BayerGR12, BayerGR12p

Imaging performance

Quantum efficiency @ 529 nm	68 %
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Timing and gain

Max. frame rate	Mainly depends on hardware and register settings.
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I/Os and power

Non-isolated lines	2 programmable GPIOs
I/O connector	Coax, STP
Power supply	5 VDC over MIPI CSI-2
Power consumption	Value for the integrated serializer adds to CSI-2 model value.

Operating conditions

Operating temperature (housing)	-20 °C to 65 °C ((housing))
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Mechanical properties

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

On-board memory and FPGA

Image buffer (RAM)	256 KByte
Non-volatile memory (Flash)	1024 KByte

Interfaces

Digital interface	GMSSL2, based on MIPI CSI-2, up to 4 lanes
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Quantum Efficiency



Technical Drawing

