

Alvium 1800 U

Alvium 1800 U-120



Alvium 1800 U-120 innovative USB camera with ON Semi AR0135CS global shutter sensor provides industrial performance for cost effective embedded and machine vision applications.

General

| | |
|-----------------|-------------------|
| Model: | Alvium 1800 U-120 |
| Product series: | Alvium 1800 U |
| Status: | Available |

Sensor

| | |
|---------------------------------|-----------------------------------------|
| Sensor type: | Area scan |
| Chroma: | Mono or Color |
| Spectrum: | Visible |
| Spectral range: | 300 nm to 1100 nm |
| Resolution: | 1,280 × 960 (1.20 MP) |
| Sensor model: | ON Semi AR0135CS |
| Sensor architecture (material): | CMOS |
| Shutter type(s): | Global Shutter |
| Sensor size: | 6.09 mm \varnothing (Type 1/3) |
| Pixel size: | 3.75 μm × 3.75 μm |

Pixel formats

| | |
|---------------------------|------------------------------------------------------|
| Sensor bit depth: | 12-bit |
| Monochrome pixel formats: | Mono8, Mono10, Mono10p, Mono12, Mono12p |
| YUV pixel formats: | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr |

Pixel formats

RGB pixel formats: RGB8 (default), BGR8

Bayer pixel formats: BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p

Imaging performance

Quantum efficiency @ 529 nm: 69 %

Timing and gain

Max. frame rate: 52 fps

I/Os and power

Non-isolated lines: 4 programmable GPIOs

Power supply: Power over USB 3.1 Gen 1 | External power 5.0 V

Power consumption: USB power: 1.3 W (typical) | Ext. power: 1.5 W (typical)

Operating conditions

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

Mechanical properties

Body dimensions (L x W x H in mm): 38 × 29 × 29

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

Weight: 60 g

On-board memory and FPGA

Image buffer (RAM): 256 KByte

Non-volatile memory (Flash): 1024 KByte

Interfaces

Digital interface: usb3.0

Vision standard: USB3 Vision

Quantum Efficiency



