



## Alvium 1800 U

Alvium 1800 U-192

Alvium 1800 U-192 innovative USB camera with e2v EV76C570 CMOS sensor provides industrial performance for cost effective embedded and machine vision applications.

### General

|                |                   |
|----------------|-------------------|
| Model          | Alvium 1800 U-192 |
| Product series | Alvium 1800 U     |
| Status         | Available         |

### Sensor

|                                |                                 |
|--------------------------------|---------------------------------|
| Sensor type                    | Area scan                       |
| Chroma                         | Color, Mono                     |
| Spectrum                       | Visible                         |
| Spectral range                 | 300 nm to 1100 nm               |
| Resolution                     | 1,600 × 1,200 (1.90 MP)         |
| Sensor model                   | Teledyne e2v EV76C570           |
| Sensor architecture (material) | cmos                            |
| Shutter type(s)                | Global shutter (GS)             |
| Sensor size                    | 7.2 × 5.4 mm (9 mm, Type 1/1.8) |
| Pixel size                     | 4.50 µm × 4.50 µm               |

### Pixel formats

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Sensor bit depth    | 10-bit                                               |
| YUV pixel formats   | YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr |
| RGB pixel formats   | BGR8, RGB8 (default)                                 |
| Bayer pixel formats | BayerRG12                                            |

### Timing and gain

|                 |                    |
|-----------------|--------------------|
| Max. frame rate | 59 fps             |
| Exposure time   | 14 µs to 800.00 ms |

## Timing and gain

|      |                   |
|------|-------------------|
| Gain | 0.0 dB to 12.5 dB |
|------|-------------------|

## 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: 1.6 W (typical)   Ext. power: 1.6 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

 Specifications Image

## Technical Drawing

