



# Alvium C

## Alvium 1800 C-508 Pol

Alvium 1800 C-508 Pol innovative MIPI CSI-2 camera with Sony IMX250 Polarizer CMOS global shutter sensor provides industrial performance for cost effective embedded applications.

### General

|                |                       |
|----------------|-----------------------|
| Model          | Alvium 1800 C-508 Pol |
| Product series | Alvium C              |
| Status         | Available             |

### Sensor

|                                |                                  |
|--------------------------------|----------------------------------|
| Sensor type                    | Area scan                        |
| Chroma                         | Color, Mono                      |
| Spectrum                       | Visible                          |
| Spectral range                 | 300 nm to 1100 nm                |
| Resolution                     | 2,464 × 2,056 (5.10 MP)          |
| Sensor model                   | Sony IMX250 Polarizer            |
| Sensor architecture (material) | cmos                             |
| Shutter type(s)                | Global shutter (GS)              |
| Sensor size                    | 8.5 × 7.1 mm (11.1 mm, Type 2/3) |
| Pixel size                     | 3.45 µm × 3.45 µm                |

### Pixel formats

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| Sensor bit depth         | 10-bit, 12-bit, 8-bit                                  |
| Monochrome pixel formats | GREY, RAW10, RAW12, RAW8, Y10, Y12                     |
| Bayer pixel formats      | BayerGR10, BayerGR10p, BayerGR12, BayerGR12p, BayerGR8 |

### Timing and gain

|                 |               |
|-----------------|---------------|
| Max. frame rate | 95 fps        |
| Exposure time   | 19 µs to 10 s |

## Timing and gain

|      |                   |
|------|-------------------|
| Gain | 0.0 dB to 48.0 dB |
|------|-------------------|

## I/Os and power

|                    |                      |
|--------------------|----------------------|
| Non-isolated lines | 2 programmable GPIOs |
|--------------------|----------------------|

|              |                       |
|--------------|-----------------------|
| Power supply | 5 VDC over MIPI CSI-2 |
|--------------|-----------------------|

|                   |                |
|-------------------|----------------|
| Power consumption | Typical: 2.8 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 |
|---------------|-------------------|

|        |      |
|--------|------|
| 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

 Specifications Image

## Technical Drawing

