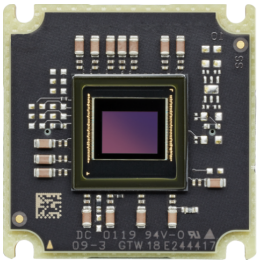
Allied Vision

# Alvium
## 1800 U-2460m



- IMX540 CMOS sensor
- ALVIUM image processing
- USB3 Vision
- Various hardware options

Hardware option: Bare Board Standard

**Alvium 1800 U – Your entry into high-performance imaging**

## Industrial USB cameras with attractive price-performance ratio

Alvium 1800 U-2460 with Sony IMX540 runs 17.0 frames per second at 24.6 MP resolution.

Alvium 1800 U is your entry into high-performance imaging with ALVIUM® Technology for industrial applications. Equipped with the newest generation of sensors, these small and lightweight cameras deliver high image quality and frame rates at the best price-performance ratio. With its USB3 Vision compliant interface and industrial-grade hardware, it is your workhorse for different machine vision applications whether it is on a PC-based or an embedded system.

Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

See the Alvium Cameras Hardware Options for lens mount and housing options, as well as the Customization and OEM Solutions webpage for additional options.

Allied Vision

## Specifications

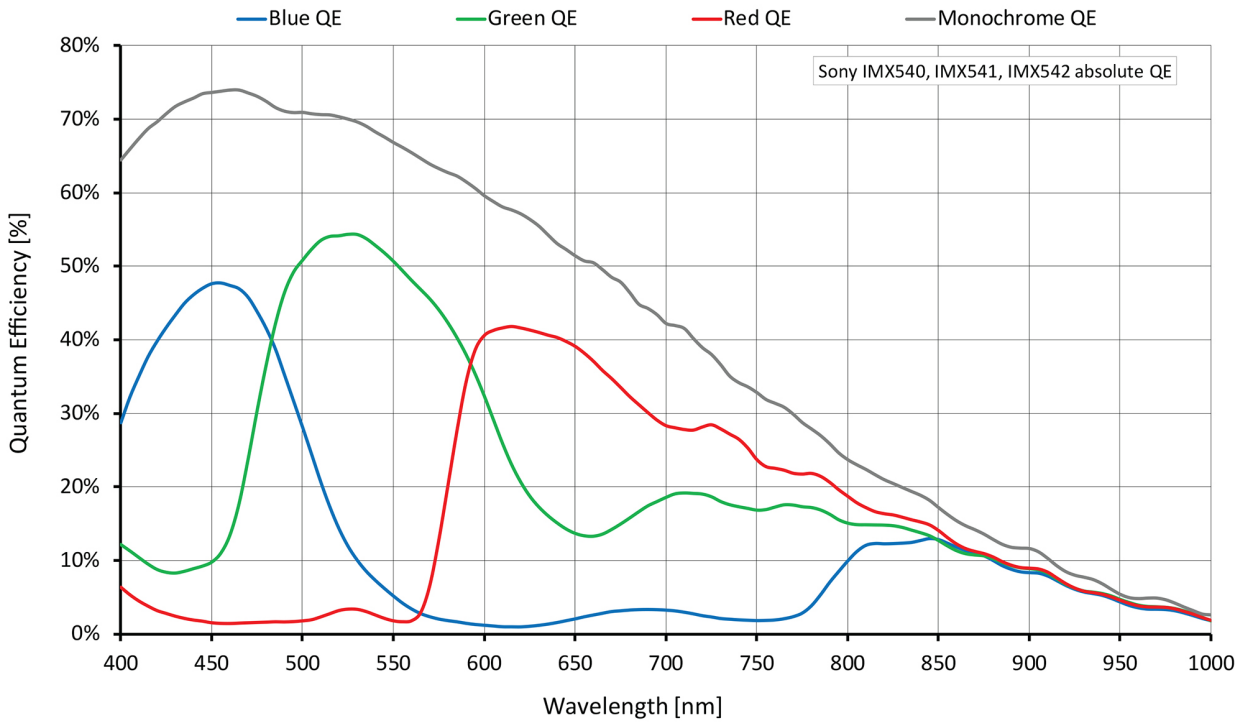
| | |
|---|---|
| Product code | 15185 |
| Interface | USB3 Vision |
| Resolution | 5328 (H) × 4608 (V) |
| Spectral range | 300 to 1100 nm |
| Sensor | Sony IMX540 |
| Sensor type | CMOS |
| Shutter mode | Global shutter |
| Sensor size | Type 1.2 |
| Pixel size | 2.74 µm × 2.74 µm |
| Lens mounts (available) | C-Mount |
| Max. frame rate at full resolution | 17 fps at 450 MByte/s, Mono8 |
| ADC | 12 Bit |
| Image buffer (RAM) | 256 KByte |
| Non-volatile memory (Flash) | 1024 KByte |

| **Output** | |
|---|---|
| Bit depth | 12-bit Bit |
| Monochrome pixel formats | Mono8, Mono10, Mono10p, Mono12, Mono12p |

| **General purpose inputs/outputs (GPIOs)** | |
|---|---|
| TTL I/Os | 4 programmable GPIOs |

| **Operating conditions/dimensions** | |
|---|---|
| Operating temperature | -20 °C to +85 °C (cooling areas) |
| Power requirements (DC) | Power over USB 3.1 Gen 1 \| External power 5.0 V |
| Power consumption | USB power: 4.0 W (typical) \| Ext. power: 4.2 W (typical) |
| Mass | 15 g |
| Body dimensions (L × W × H in mm) | 14 × 26 × 26 |
| Regulations | 2011/65/EU, including amendment 2015/863/EU (RoHS) |

# Quantum efficiency



# Features

## Image control: Auto

- Auto exposure
- Auto gain
- Auto white balance (color models)

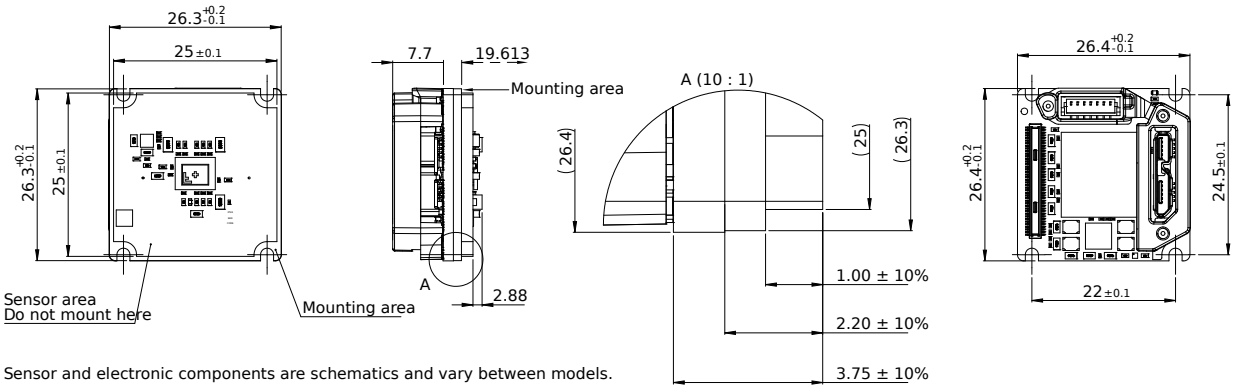
## Image control: Other

- Adaptive noise correction
- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Contrast
- Custom convolution
- De-Bayering up to 5×5 (color models)
- DPC (defect pixel correction)
- FPNC (fixed pattern noise correction)
- Gamma
- LUT (look-up table)
- Reverse X/Y
- ROI (region of interest)
- Sharpness/Blur

## Camera control

- Acquisition frame rate
- Bandwidth control
- Counters and timers
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Sequencer
- Serial I/Os
- Temperature monitoring
- U3 Power Saving Mode
- User sets

# Technical drawing




Sensor and electronic components are schematics and vary between models.