Allied Vision

Alvium
G1-192m

- e2v EV76C570 CMOS sensor
- ALVIUM image processing
- GigE Vision
- 3 lens mount options

Hardware option: Closed Housing CS-Mount

Alvium G1 – Reliability designed for the future

Compact GigE camera for constant image quality

Alvium G1-192 with Teledyne e2v EV76C570 runs 59.0 frames per second at 1.9 MP resolution.

Alvium G1 is the first GigE Vision camera powered by ALVIUM® Technology, Allied Vision's ASIC chip. It combines the advantages of the established GigE Vision standard with the flexibility of the Alvium platform. In addition to a comprehensive feature set and a broad sensor selection, it offers great versatility. With its very compact housing and industrial standard hardware, it can easily be integrated into any vision system while ensuring long-term availability and reliability.

Easy software integration with Vimba X and compatibility to the most popular third party image-processing libraries.

Specifications

Product code	19943
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	1600 (H) × 1200 (V)
Spectral range	300 to 1100 nm
Sensor	Teledyne e2v EV76C570
Sensor type	CMOS
Shutter mode	GS (Global shutter)
Sensor size	Type 1/1.8
Pixel size	4.5 µm × 4.5 µm
Lens mount	CS-Mount
Max. frame rate at full resolution	59 fps at 122 MByte/s, Mono8
ADC	10 Bit
Image buffer (RAM)	32 MByte
Non-volatile memory (Flash)	1024 KByte

Output	
Bit depth	10-bit
Monochrome pixel formats	Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono12Packed

General purpose inputs/outputs (GPIOs)	
TTL I/Os	2 GPIOs (LVTTL)
Opto-isolated I/Os	1 input, 1 output

Operating conditions/dimensions	
Operating temperature	-20 °C to +65 °C (Housing)
Power requirements (DC)	10.8 to 26.4 VDC AUX or IEEE 802.3af, Power Class 0 PoE
Power consumption	External power: 2.3 W | Power over Ethernet: 2.6 W
Mass	70 g
Body dimensions (L × W × H in mm)	36 × 29 × 29

Features

Image control: Auto

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

Image control: Other

- Adaptive noise correction
- Binning (digital)
- 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
- Lens shading correction
- LUT (look-up table)
- Reverse X/Y
- ROI (region of interest)
- Sharpness/Blur

Camera control

- Acquisition frame rate
- Action commands, incl. ToE (trigger over Ethernet)
- Bandwidth control
- Burst mode
- Counters and timers
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Power Saving Mode
- PTP (IEEE 1588 Precision Time Protocol)
- Sequencer
- Serial I/Os
- Temperature monitoring
- User sets

Technical drawing