

Alvium 1500 C-500

- AR0521 CMOS sensor
- ALVIUM image processing
- MIPI CSI-2 interface
- Various hardware options



Model without hardware options

Alvium 1500 C – 模块化相机，嵌入式专属，卓而不凡

革命性的 MIPI CSI-2 接口相机模块

Alvium 1500 C-500 搭载 ON Semi AR0521SR 传感器，在 68.0MP 分辨率下速度可达 5.0 帧/秒。

Alvium 1500 C 是一款革命性的 MIPI CSI-2 接口相机，针对嵌入式视觉应用进行了优化。此款工业相机兼具嵌入式应用所需的高性能和多功能性。此外，Alvium 1500 C 还搭载了 ON Semiconductor 工业级 CMOS 传感器，可以较低的成本提供优异的画质和高帧率。

标准化的 CSI-2 驱动程序支持快速集成，方便轻松灵活地变换相机型号。探索所有 1500 C 相机机型，从中找到最适合您的产品。

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

To operate Alvium 1500 C cameras on your vision system, Allied Vision provides different access modes: - [Direct Register Access \(DRA\)](#) to control the cameras via registers for advanced users. - Video4Linux2 Access allows to control the cameras via established V4L2 API and applications like GStreamer and OpenCV. Open-source CSI-2 drivers are available on [GitHub](#) for different boards and system on chips (SoCs).

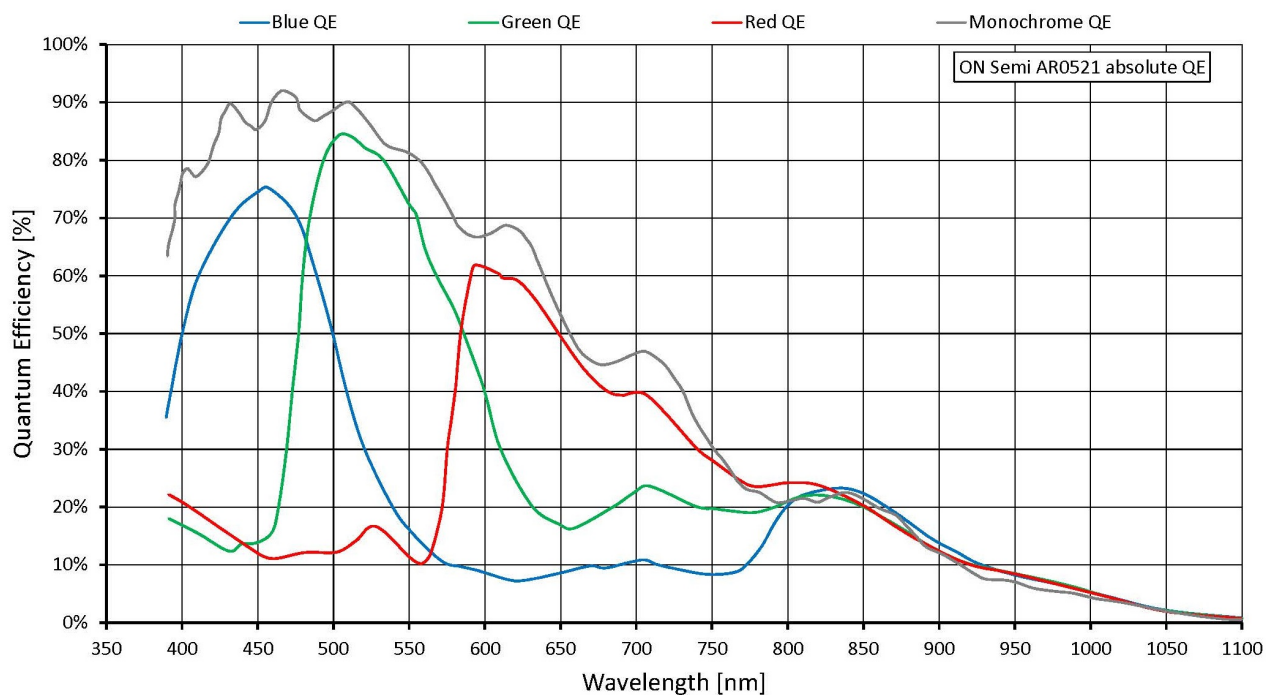
性能参数

Alvium 1500 C-500	
接口	MIPI CSI-2, up to 4 lanes
分辨率	2592 (H) × 1944 (V)

Alvium 1500 C-500	
Spectral range	300 to 1100 nm
传感器	ON Semi AR0521SR
传感器类型	CMOS
快门种类	Rolling shutter
传感器尺寸	Type 1/2.5
像元尺寸	2.2 μm $\times$ 2.2 μm
Lens mounts (available)	C-Mount, CS-Mount, S-Mount
最大满帧帧率	68 fps using 4 lanes, RAW8 (GREY)
ADC	10 Bit
缓存 (RAM)	256 KB
非易失性内存 (Flash)	1024 KB
成像性能	
Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured without optical filter.	
在波长为 529nm 下, 量子转换效率	79 %
暗噪声	5.9 e^-
饱和电子数	9890 e^-
动态范围	63 dB
绝对灵敏度阈值	7.1 e^-
输出	
Bit 位数	Max. 10 Bit
YUV 彩色像素格式	YUV422 8-bit (UYVY) [MIPI CSI-2 (FOURCC)]
RGB 彩色像素格式	RGB888 (RGB3) [MIPI CSI-2 (FOURCC)]
原始像素格式	RAW8 (GREY), RAW10 (Y10) [MIPI CSI-2 (FOURCC)]
通用输入输出口 (GPIOs)	
TTL I/Os	2 programmable GPIOs
工作条件/尺寸	
工作温度	+5 $^{\circ}\text{C}$ to +65 $^{\circ}\text{C}$ housing temperature (with heat sink)
电源要求 (DC)	5 VDC over MIPI CSI-2
功耗	Typical: 1.9 W

Alvium 1500 C-500	
重量	10 g (bare board)
尺寸 (L × W × H in mm)	7 × 26 × 26 (bare board)
符合规范	2011/65/EU, including amendment 2015/863/EU (RoHS)

量子转换效率



特性

Image control

Auto control

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

Other image controls

- Black level
- De-Bayering up to 5×5 (color models)
- DPC (factory calibrated)
- Exposure time
- FPNC (factory calibrated)
- Gain
- Gamma
- Hue (color models)
- Region of interest (ROI)
- Reverse X/Y
- Saturation (color models)

Camera control

- Acquisition Frame Rate
- Temperature monitoring (sensor board)
- Triggering (Frame Start)

外形尺寸



Camera hardware options

