



Alvium 1800 U-2040

- IMX541 CMOS sensor
- ALVIUM image processing
- USB3 Vision
- Various hardware options

Model without hardware options

Alvium 1800 U – 高性能成像入门之选

高性价比工业级 USB 相机

Alvium 1800 U-2040 搭载 Sony IMX541 传感器，在 17.0MP 分辨率下速度可达 20.4 帧/秒。

Alvium 1800 U 是高性能 ALVIUM® 工业应用成像技术的入门之选。此款产品搭载最新一代传感器，小巧轻盈，可以最理想的性价比提供优异的画质和帧率。相机接口兼容 USB3 Vision 标准，且配备了工业级硬件，无论在 PC 系统还是嵌入式系统中，都可成为各种机器视觉应用的主力机型。

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

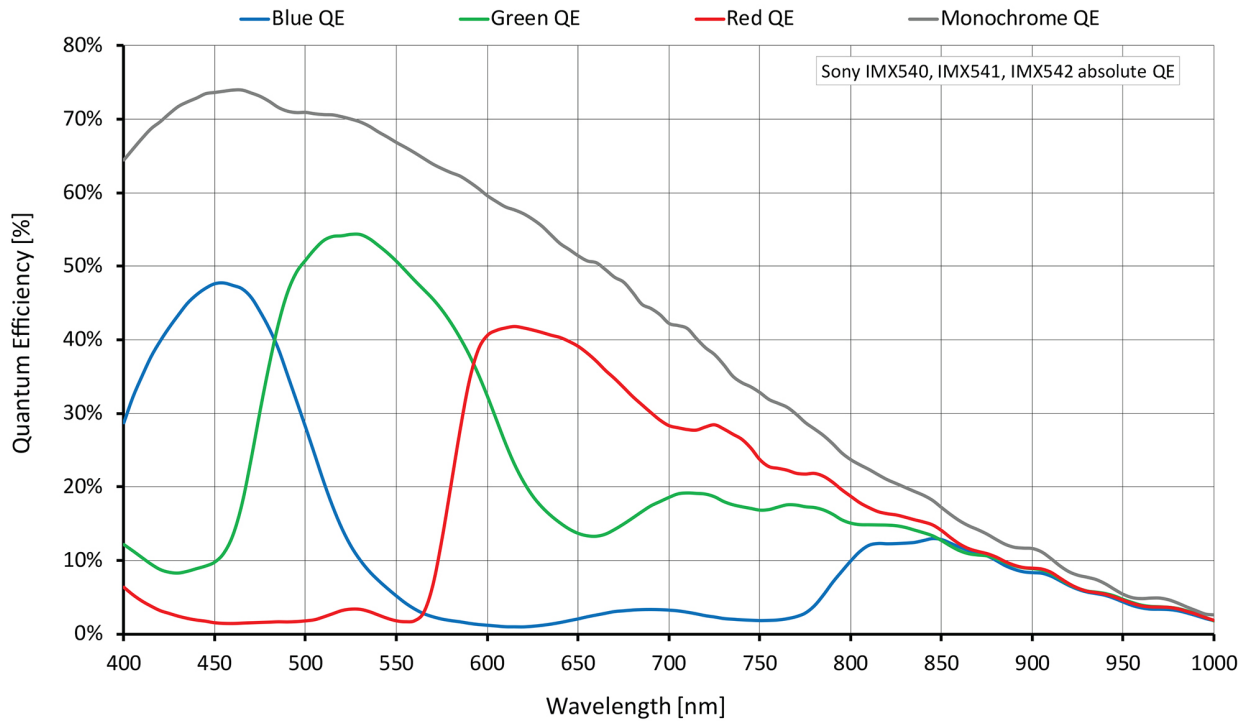
See the **Alvium Cameras Hardware Options** for lens mount and housing options, as well as the **Customization and OEM Solutions webpage** for additional options.

性能参数

Alvium 1800 U-2040	
接口	USB3 Vision
分辨率	4512 (H) × 4512 (V)
Spectral range	300 to 1100 nm
传感器	Sony IMX541
传感器类型	CMOS
快门种类	Global shutter

Alvium 1800 U-2040	
传感器尺寸	Type 1.1
像元尺寸	2.74 μm $\times$ 2.74 μm
Lens mounts (available)	C-Mount
最大满帧帧率	17 fps at $\geq$ 375 MByte/s, Mono8
ADC	12 Bit
缓存 (RAM)	256 KB
非易失性内存 (Flash)	1024 KB
输出	
Bit 位数	Max. 12 Bit
黑白像素格式	Mono8, Mono10
YUV 彩色像素格式	YCbCr411_8_CbYYCrYY, YCbCr422_8_CbYCrY, YCbCr8_CbYCr
RGB 彩色像素格式	BayerRG8, BayerRG10, BayerRG10p, BayerRG12, BayerRG12p, BGR8, RGB8 (default)
通用输入输出 (GPIOs)	
TTL I/Os	4 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)	Power over USB 3.1 Gen 1 External power 5.0 V
功耗	USB power: 3.9 W (typical) Ext. power: 4.1 W (typical)
重量	15 g (bare board)
尺寸 (L $\times$ W $\times$ H in mm)	14 $\times$ 26 $\times$ 26 (bare board, standard), 14 $\times$ 30 $\times$ 26 (bare board, 90 $^{\circ}$)
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)
- Auto features regions control
- Auto features algorithms control

Other image controls

- Black level
- Contrast

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

Camera control

- Sync out modes: Trigger ready, input
- Temperature monitoring (sensor board)
- LED luminance control
- Firmware update

外形尺寸



Camera hardware options

