

Allied Vision Alvium 1800 U-2050c, 1" 20.2MP, USB 3.0 Color Camera (Board Level)

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Stock #14-902 [CONTACT US](#)

- 1 + **£488^{.00}**

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Allied Vision Alvium Camera, Board Level (Front)



Volume Pricing	
Qty 1+	£488.00 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads	
Spec Sheets:pdf	Software
EO Spec Sheet	

Spectrum: Color

General

Type: Color Camera	Model Number: 1800 U-2050c
Manufacturer: Allied Vision	Camera Series: Alvium

Physical & Mechanical Properties

Dimensions (mm): 13 x 26 x 26 (includes connectors)	Weight (g): 15
Housing: Board Level	

Sensor

Image Buffer: 256KB	Sensor Format: 1"
Resolution (Megapixels): 20.20	Frame Rate (fps): 17.00
Pixels (H x V): 5,496 x 3,672	Pixel Size, H x V (µm): 2.4 x 2.4
Sensing Area, H x V (mm): 13.1 x 8.8	Imaging Sensor: Sony IMX183
Type of Sensor: Progressive Scan CMOS	Shutter Type: Rolling
Pixel Depth: 8/10 bit	Exposure Time: 17µs - 10s
Machine Vision Standard: USB3 Vision v1.0, GenICam	

Electrical

Power Consumption (W): 3.2

Hardware & Interface Connectivity

Interface: USB 3.0 Gen 1

Connector: USB 3.0 Gen 1, Micro-B

Power Supply: Power over USB or via GPIO

GPIOs: 4 Programmable TTL GPIOs

Synchronization: Hardware Trigger (GPIO) or Software Trigger

Interface Port Orientation: Back Panel

GPIO Connector Type: 7-pin JST

Threading & Mounting

Mount: No Lens Mount

Mounting Threads: No Mounting Threads/Tripod Adapter

Environmental & Durability Factors

Operating Temperature (°C): -20 to +85 (mainboard temperature)

Storage Temperature (°C): -20 to +85

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: **View**

Reach 240: **Compliant**

Product Details

Sony IMX183

- Compact, Low Cost, High Performance Design for Machine Vision and Embedded Applications
- ALVIUM® System on Chip (SoC) Technology with Onboard Imaging Preprocessing
- Up to 24.60 MegaPixels, 1.2" Sensor Format
- **Allied Vision Alvium Right Angle USB 3.1 Cameras** Also Available

Allied Vision Alvium USB 3.0 Cameras feature a lightweight compact form factor with ALVIUM® System on Chip (SoC) technology, offering a comprehensive image processing library for advanced onboard image correction and preprocessing functions to relieve host computer and processor workload. In addition to smart camera operations, the unique SoC design also allows for low power consumption and ease of integration, making them ideal for next generation machine vision, robotics and embedded vision applications. The cameras feature a variety of popular Sony Pregius and On Semi CMOS sensors with high image quality, fast frame rate and USB3 Vision interface standard. The actively aligned lens mount minimizes inconsistency and variation. Allied Vision Alvium USB 3.0 Cameras feature a USB port on the back panel and are available in a variety of monochrome, color, and NIR configurations, including C-Mount, CS-Mount, and S-Mount. Full housing versions are best suited for prototyping, development and end user uses. Partial housing and board level configurations have exposed image sensor PCB without heat sinks to reduce space and facilitate system integration making them ideal for OEM embedded design.

Note: Board level versions do not have a lens mount.

Accessories

Note: Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us [here](#).

	Title	Compare	Stock Number	Price	Buy
MORE+	C-Mount to M12 Lens Adapter w/Oring		#59-241	£37.40 Request Quote	3 In Stock <input type="text" value="1"/>
MORE+	C-Mount to M12 Lens Adapter		#53-675	£26.20 Request Quote	20+ In Stock <input type="text" value="1"/>
MORE+	C-Mount to M12 Adapter for UCi Lens		#12-879	£38.40 Request Quote	20+ In Stock <input type="text" value="1"/>

	Title	Compare	Stock Number	Price	Buy
MORE+	5mm Spacer to convert CS-Mount Cameras to C-Mount		#03-618	£23.20 Request Quote	20+ In Stock <input type="text" value="1"/>
MORE+	AVT Type-A to Micro-B, USB 3.0 Locking Cable, 3m		#14-903	£33.00 Request Quote	20+ In Stock <input type="text" value="1"/>
MORE+	Type-A to Micro-B, USB 3.0 Locking Cable, 8m		#34-212	£74.00 Request Quote	17 In Stock <input type="text" value="1"/>
MORE+	JST 7-pin Cable without Screw Lock, 0.4m Length		#14-154	£10.00 Request Quote	CONTACT US <input type="text" value="1"/>
MORE+	JST 7-pin Cable with Screw Lock, 5m Length		#14-155	£23.00 Request Quote	20+ In Stock <input type="text" value="1"/>
MORE+	M6 and ¼-20 Mounting Plate for Alvium		#14-156	£14.00 Request Quote	20+ In Stock <input type="text" value="1"/>

Related Products



Imaging Lenses



Machine Vision Lighting

Imaging Lens Selector

Imaging

- Factory Automation
- Telecentric
- M12

- Custom Sensor
- Camera Model

Number of Horizontal Pixels:

1

Number of Vertical Pixels:

2

Pixel Size (µm):

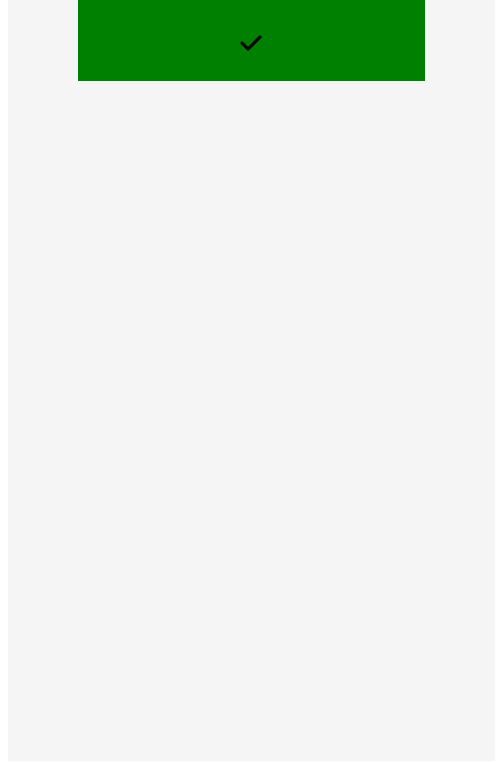
3

Working Distance (mm):

4

Horizontal Field of View (mm):

5



Disclaimer: Values represent theoretical values from lens design software. Actual lens performance varies due to manufacturing tolerances.

Frequently Purchased Together



#14-903 - AVT Type-A to Micro-B, USB 3.0 Locking Cable, 3m
£33.00

Qty



#14-901 - Allied Vision Alvim 1800 U-2050m, 1" 20.2MP, USB 3.0 Monochrome Camera (Board Level)
£480.00

Qty



#14-155 - JST 7-pin Cable with Screw Lock, 5m Length
£23.00

Qty

Resources

Media Type

- Application Note
- Video
- Published Article
- FAQ
- Glossary
- Technical Tool

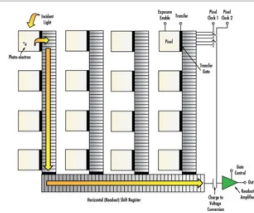
Figure 1a: An illustration of how spot size changes by wavelength from 470nm (blue) to 880nm (IR) at f/2.8.

Figure 1b: How the pixels of a sensor interpret the spot sizes in Figure 1a.

APPLICATION NOTE
Sensor Performance and Limitations

APPLICATION NOTE
Imaging Electronics 101: Basics of Digital...

APPLICATION NOTE
Imaging Electronics 101: Camera Resolution fo...



APPLICATION NOTE

**Imaging Electronics
101: Understandi...**



VIDEO

**How Do Cameras
Work?**



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