Allied Vision

// WELCOME TO EMBEDDED VISION

This is Alvium!

The Allied Vision Alvium Camera Series is an innovative camera platform that addresses the limitations associated with current camera and sensor modules for embedded applications, and offers system designers a previously unknown level of freedom. Powered by the revolutionary ALVIUM Technology, a unique System-on-chip designed by Allied Vision, the camera series delivers industrial performance to embedded vision.
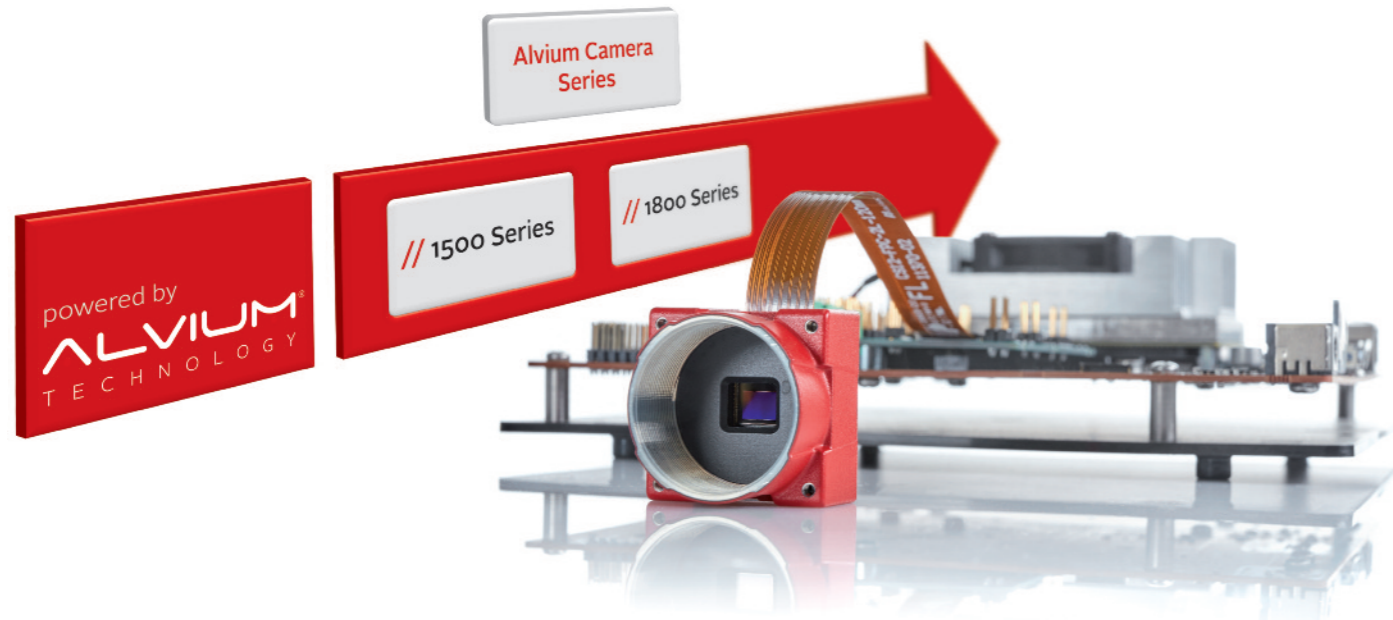
Benefits at a glance:
- Integrated on-board image processing
- Single board design
- Easy hardware and software integration
- Broad range of state-of-the-art sensors
- Intelligent power management
- Cost optimized design

One platform, infinite solutions

The two Alvium Camera Series provide interface, lens mount, and feature set options to allow you to find the right camera model for your application. From basic features to advanced functionalities in challenging conditions, the Alvium Camera Series will be the platform of choice to exactly meet your requirements.

Additionally, driver support for a range of embedded boards, such as the **NXP i.MX 6/8** and the **Nvidia Jetson boards** is provided and developed in close partnerships for all Alvium MIPI CSI-2 cameras. The platform approach of the Alvium series makes it very easy to replace or upgrade Alvium cameras with other models of the series.

Alvium Camera Series

powered by ALVIUM® TECHNOLOGY

// 1500 Series   // 1800 Series

// The Alvium 1500 Series – Embedded vision made easy
The perfect camera to provide easy vision for embedded applications. The 1500 Series provides a simple and basic feature set and all models come with a MIPI CSI-2 interface which is the most popular interface for embedded vision application development.

Available interface: MIPI CSI-2
Functionality level: **
Camera control: Video4Linux2 (V4L2) / Direct Register Access (DRA)

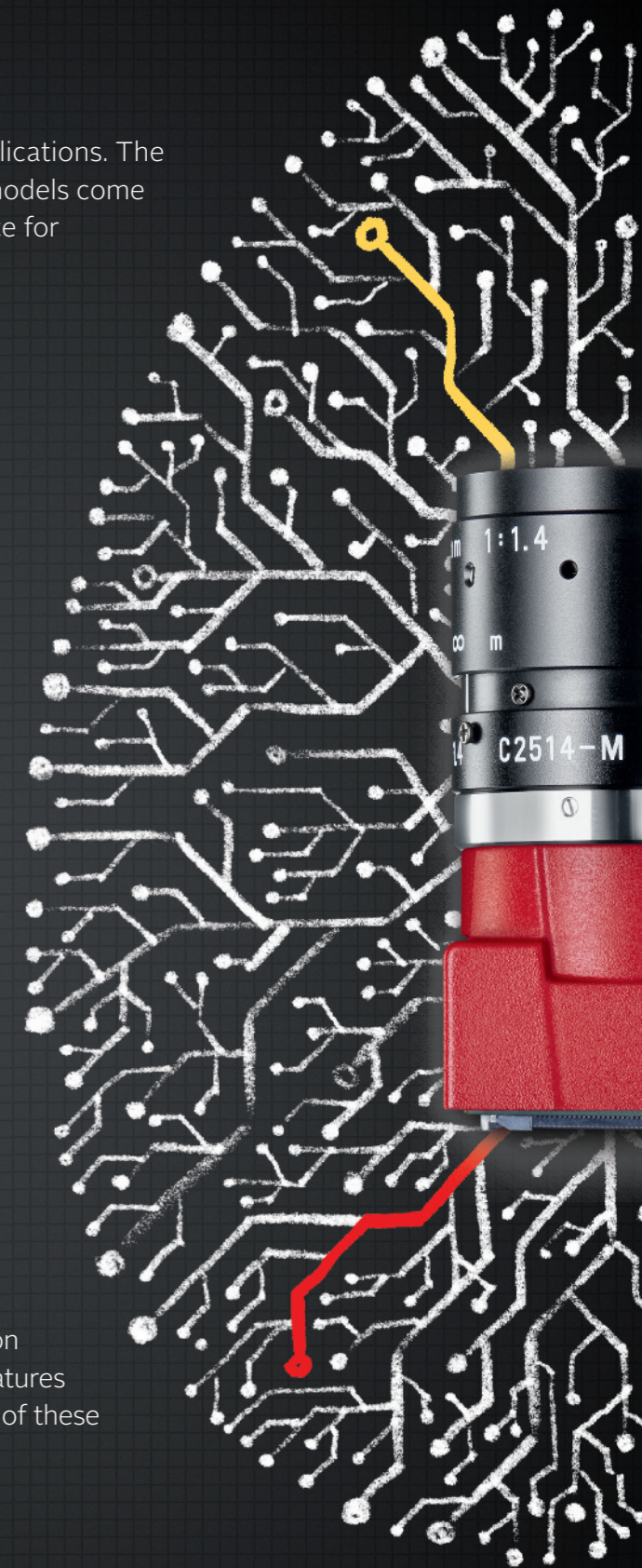|	Mounts	Interfaces	Housings
Options 1500 Series	C-Mount CS-Mount S/M12-Mount	mipi®	
Options 1800 Series	C-Mount CS-Mount S/M12-Mount	mipi®	
		USB3 VISION™	

// The Alvium 1800 Series – Best of both worlds
Following all MIPI CSI-2 and USB3 Vision standards, the 1800 Series is an easy connector of the embedded and machine vision world. It provides sophisticated image control and triggering features and is a perfect solution to connect simple applications to both of these worlds.

Available interfaces: USB3 Vision / MIPI CSI-2
Functionality level: ****
Camera control: GenICam / Video4Linux2 (V4L2) / Direct Register Access (DRA)

// FIRST CAMERA RELEASES

The new Alvium Series

Allied Vision will soon release the first models of this exciting new cameras series. But this is just the beginning of this innovative camera platform. The medium-term release of further sensors, series and interface options is already being planned. The Alvium platform will have regular driver updates to support both current and future hardware. In close cooperation with many well-known embedded board manufacturers, our aim is to deliver a future-proof platform to the market, that represents a benchmark for the machine vision and embedded vision worlds.

Alvium 1500 C Series

mipi

Model	Sensor	Sensor Size	Shutter	Pixel Size	Resolution	Frame Rate
1500 C-050	ON Semi PYTHON 480	Type 1/3.6	Global	4.8 µm²	808 × 606	120 fps
1500 C-120	ON Semi AR0135CS	Type 1/3	Global	3.7 µm²	1280 × 960	54 fps
1500 C-210	ON Semi AR0230CS	Type 1/2.7	Rolling	3.0 µm²	1928 × 1088	60 fps
1500 C-500	ON Semi AR0521	Type 1/2.5	Rolling	2.2 µm²	2592 × 1944	60 fps

Alvium 1800 U Series

US3 VISION

Model	Sensor	Sensor Size	Shutter	Pixel Size	Resolution	Frame Rate
1800 U-500	ON Semi AR0521	Type 1/2.5	Rolling	2.2 µm²	2592 × 1944	60 fps

Curious? Learn more about the Alvium Series and stay informed about latest releases of new models, sensors, features, and interfaces!

Rethink embedded vision at alliedvision.com/alvium

Allied Vision

TKH GROUP member of the TKH Group