|  |  |
| --- | --- |
| **Press release** | **July 11, 2019** |
|  |  |

Out now: First Alvium camera series models from Allied Vision

Allied Vision starts series production of Alvium 1500 C and 1800 U *Stadtroda, Germany, July 11, 2019* – The first series models of the Alvium camera series powered by ALVIUM® Technology from Allied Vision are available. Allied Vision starts the camera series with the release of three 1500 series models with a MIPI CSI-2 interface and one 1800 series model with USB3 Vision interface. To coincide with the launch of the release, the new production facility, specially designed and built for Alvium production, was inaugurated in Stadtroda on June 21st. In the following months, the range of Alvium cameras will be continuously expanded with further models and sensors.

**Unique ASIC for Industrial Embedded Vision**The Alvium camera series is an innovative camera platform that combines the advantages of embedded sensor modules with the performance of industrial cameras for image processing: extensive functions for image correction and optimization, a large selection of state-of-the-art sensors, intelligent energy management, and a cost-optimized and compact design. The camera series is based on ALVIUM® technology, an Application-Specific Integrated Circuit (ASIC) with integrated Image Signal Processor (ISP) and Image Processing Library (IPL).

**The Alvium 1500 Series - Embedded vision made easy**The Alvium 1500 series is the perfect camera for easy hardware and software integration in embedded applications. All models are equipped with a MIPI CSI-2 interface, which is particularly suitable for embedded vision applications as it can address the dedicated hardware of the embedded boards. The Alvium 1500 Series offers a basic feature set. Software integration can be done via Video4Linux2 (V4L2) to Gstreamer and OpenCV, or direct register access. Open source drivers for selected processor architectures are provided for V4L2 support, enabling easy integration and fast go-to-market on the customer side. This drastically reduces development time for customers. The image pre-processing functionalities can be configured directly on the ISP in the camera.

**1500 series models at a glance**

|  |  |  |  |
| --- | --- | --- | --- |
| **Camera model** | **1500 C-050** | **1500 C-120** | **1500 C-500** |
| Sensor | ON Semi PYTHON 480 | ON Semi AR0135CS | ON Semi AR0521 |
| Resolution | 0.5 Megapixel | 1.2 Megapixel | 5.0 Megapixel |
| Pixel | 800 × 600 | 1280 × 960 | 2592 × 1944 |
| Pixel size (µm) | 4.8 × 4.8 | 3.75 × 3.75 | 2.2 × 2.2 |
| Optical format | Type 1/3.6 | Type 1/3 | Type 1/2.5 |
| Shutter | Global Shutter | Global Shutter | Rolling Shutter |
| Framerate  (Frames per second) | 116 fps | 50 fps | 67 fps |
| Interface | MIPI CSI-2 D-PHY with 1, 2 or 4 lanes and 1,5 GBps per lane | | |

**The Alvium 1800 Series - The Best of Both Worlds**The first model of the 1800 series is equipped with USB3 Vision interface. Models with MIPI CSI-2 are planned. The 1800 series can be used for both industrial embedded vision and machine vision applications. With an extended range of functions for image correction and optimization as well as various trigger functions, the camera series combines the advantages of classic industrial cameras with the advantages of integrated sensor modules. It opens new possibilities for the user to switch from PC-based image processing applications to embedded systems.

**1800 series models at a glance**

|  |  |
| --- | --- |
| **Camera model** | **1800 U-500** |
| Sensor | ON Semi AR0521 |
| Resolution | 5.0 Megapixel |
| Pixel | 2592 × 1944 |
| Pixel size (µm) | 2.2 × 2.2 |
| Optical format | Type 1/2.5 |
| Shutter | Rolling Shutter |
| Framerate (Frames per second) | 67 fps |
| Interface | USB3 Vision |

**Easy integration**The ALVIUM® Technology ASIC supports all common sensor interfaces and is designed for a wide range of current and future image sensors with resolutions from VGA to 21 megapixels. For the CSI-2 models, a single driver directly supports all camera models. With minimal development effort, different cameras can be tested with different sensors, different resolution variants of a system can be developed, or existing systems can be converted to new sensors. This not only saves developers time, but also significantly reduces their development costs.

In close partnerships Allied Vision develops Vimba CSI-2 drivers for Alvium cameras. A number of embedded boards, such as NXP i.MX 6/8-based boards and the Nvidia Jetson boards, are initially supported. The USB variants can be easily integrated with the established Vimba Suite on Windows, Linux and Linux arm platforms.

**Allied Vision company profile**For 30 years, Allied Vision has been helping people to reach their goals focusing on what counts. Allied Vision supplies camera technology and image capture solutions for industrial machine and embedded vision applications. With a deep understanding of customers’ needs, Allied Vision finds individual solutions for every application, a practice which has made Allied Vision one of the leading camera manufacturers worldwide in the machine vision market.   
The company has nine locations in Germany, Canada, the U.S., Singapore, China, France, and the UK, and is represented by a network of distribution partners in over 30 countries.   
Allied Vision is member of the TKH Group.  
  
www.alliedvision.com

**Contact (Company Headquarters):**Allied Vision Technologies GmbH, Taschenweg 2a, 07646 Stadtroda, Germany  
T// +49 36428 677-0, E// [info@alliedvision.com](mailto:info@alliedvision.com)

**Media contact:**

Nathalie Többen

Allied Vision Technologies GmbH, Klaus-Groth-Str. 1, 22926 Ahrensburg, Germany

T// +49 4102 6688-194, E// [nathalie.toebben@alliedvision.com](mailto:nathalie.toebben@alliedvision.com)

Francis Obidimalor

Allied Vision Technologies Inc., 102 Pickering Way - Suite 502, Exton, PA 19341, USA

T// +1-484-881-3398, E// [francis.obidimalor@alliedvision.com](mailto:francis.obidimalor@alliedvision.com)