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| **Press Release** | **15.1.2019** |

Allied Vision showcases camera innovations in embedded vision, ultra-high-resolution imaging and polarized sensor technology at Photonics West 2019

**Allied Vision will present the revolutionary Alvium camera series for embedded vision, new Prosilica GT8000 and GT10000 models with up to 50 Megapixels and Mako G-508 POL with polarized sensor**

San Francisco, California, January 15, 2019 – Allied Vision will be exhibiting at SPIE Photonics West 2019 in San Francisco, California at the Moscone Center from February 5-7, 2019. With a presence in both halls, attendees can discuss their project camera needs with Allied Vision staff. In the South Hall, attendees can find Allied Vision at **booth #2369.** In the North Hall, Allied Vision can be found in **booth #5545**.

**The Alvium Camera Series: Rethink Embedded Vision**The all-new Alvium camera series is a new camera platform developed by Allied Vision that opens the gates of industrial machine vision to embedded system designers. Alvium offers a full range of digital cameras designed on an innovative platform which offers three configurations (board level, open-housing and closed housing) utilizing MIPI CSI-2 and USB3 Vision interfaces.

At the core of Alvium is the unique ALVIUM® technology. ALVIUM® Technology is a proprietary System-on-chip (SoC) designed by Allied Vision which completes on-board image processing through a comprehensive image processing library (IPL). ALVIUM® Technology also provides intelligent power management as power is used only for the image processing features enabled. Integration into systems from the software prospective is made easier as one driver is needed for each platform to operate all Alvium camera models. Furthermore, designers/integrators can control the camera via Video4Linux, GStreamer, Direct Register Access, and GenICam.

Models from the 1500 Series and the 1800 Series will be the first to be made available. Below is a comparison between the two series:

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| **Model** | **Alvium 1500** | **Alvium 1800** |
| **Interface** | MIPI CSI-2 | MIPI CSI-2; USB3 |
| **Feature Set** | Basic feature set | Advanced feature set |
| **Camera Control** | Video4Linux2 (V4L2), Direct Register Access (DRA) | GenICam, Video4Linux2 (V4L2), Direct Register Access (DRA) |
| **Housing Options** | Bare board, Open housing | Bare board, Open housing, Closed housing (USB3 only) |

Alvium supports sensors with resolutions ranging from VGA to 21 Megapixels and the ALVIUM® SoC supports all common sensor interfaces, allowing for quick integration of current and future sensors. Alvium will also support various embedded boards beginning with the NXP i.MX6/8 and NVIDIA Jetson platforms. In the future, support will extend to the i.MX8, i.MX8M and the new NVIDIA Jetson AGX Xavier platforms.

 **Prosilica GT8000 & GT10000: Ultra-high-resolution imaging**Two new models in the Prosilica GT camera family will be showcased during Photonics West 2019. The Prosilica GT8000 & GT10000 are ultra-high-resolution models utilizing two CCD sensors from ON Semiconductor. Both models are equipped with Gigabit Ethernet (GigE) interfaces and numerous features such as Power over Ethernet (PoE), Trigger over Ethernet (ToE), IEEE 1588 Precision Time Protocol (PTP), defect pixel correction (DPC), and shading correction.

The 43 Megapixel Prosilica GT8000 uses the ON Semiconductor KAI-43140 Global shutter CCD sensor. The 50 Megapixel Prosilica GT10000 is equipped with the On Semiconductor KAI-50140 large-format CCD sensor. Display inspection, aerial photography and optical metrology are a few applications these new models can be used in.

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| **Model** | **Prosilica GT8000** | **Prosilica GT10000** |
| **Resolution** | 43 MP (8040 x 5360) | 50 MP (10400 x 4800) |
| **Sensor** | On Semi KAI-43140 CCD sensor | On Semi KAI-50140 CCD sensor |
| **Shutter** | Global Shutter | Global Shutter |
| **Sensor Size** | 43.48 mm diagonal | 51.71 mm diagonal |
| **Pixel Size** | 4.5 µm x 4.5 µm | 4.5 µm x 4.5 µm |
| **Frame Rate** | 2 fps | 2 fps |

 **Mako G-508 POL: Polarized imaging for improved visibility**Allied Vision has developed a new Mako model, the Mako G-508 POL, that utilizes Sony’s PolarsensTM 5.0 Megapixel IMX250MZR/MYR (monochrome or color) CMOS global shutter sensor. This sensor incorporates the latest four-directional polarization filter technology by Sony. The on-chip nanowire polarizing layer supports four orientations (0°, 45°, 90°, and 135°) and each pixel of the sensor captures polarized light in relation to its specific wire-grid axis. Four pixels build a calculation unit to determine for each pixel the intensity and angle of polarization, similar to the debayering of an RGB or color sensor. Imaging with the Mako G-508 POL can help relieve the difficulties of inspecting reflective surfaces, detecting material properties (stress, composition, or surface structure) and detecting shapes in lowlight conditions. The Mako G-508 POL is equipped with a GigE interface and has a speed of 23.7 frames per second.

**SPIE Photonics West 2019
February 5-7, 2019
Booth #2369, South Hall
Booth #5545, North Hall
Moscone Center, San Francisco, California, USA**

**About Allied Vision**For over 25 years, Allied Vision has been helping people to see the bigger picture. Allied Vision supplies camera technology and image capture solutions for industrial inspection, science, medicine, traffic monitoring and many more application areas in digital imaging. 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 eight locations in Germany, Canada, the United States, Singapore and China and is represented by a network of sales partners in over 30 countries. [www.alliedvision.com](http://www.alliedvision.com)

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