



## PRESS RELEASE

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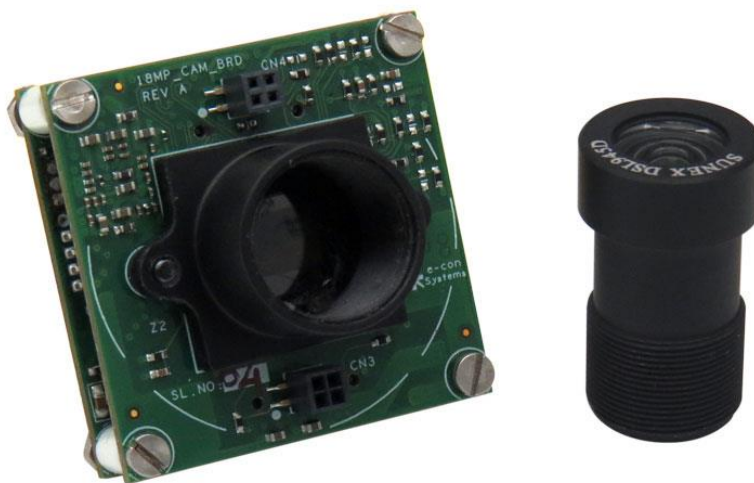
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### For Immediate release

#### **e-con Systems Launches Ultra HD 13 Megapixel camera**

*See3CAM\_CU130 – 13MP USB UVC Camera, Ultra HD Streaming @ 30fps in MJPEG, 1/2.3" Optical format AR1820HS Sensor*

ST. LOUIS and CHENNAI, India — Feb 18<sup>th</sup> 2015 - **e-con Systems Inc.**, a leading embedded design services company specializing in the development of advanced camera solutions announces the launch of the [See3CAM\\_CU130](#), part of the See3CAM family of USB3.0 UVC-compliant cameras. The See3CAM\_CU130 is based on AR1820HS CMOS Image sensor from Aptina Imaging and is provided with the S-mount (M12) lens mount that enables customers to choose a lens of their choice. The See3CAM\_CU130 houses a high-performance Image Signal Processor chip that performs Auto functions (Auto Exposure, Auto White Balance, etc) in addition to the complete image signal processing pipeline that provides best-in-class images and video along with the optional MJPEG compression. In addition, this USB 3.0 camera supports Ultra HD (3840x2160) video streaming at 30fps in MJPEG over USB3.0 interface. The still image capture is supported at full 13MP resolution in both uncompressed BMP and compressed JPEG format. This UVC compliant camera is plug-and-play in both Windows and Linux. In Windows, the camera is exposed as a DirectShow device and in Linux, as a V4L2 capture source.



**Fig: See3CAM\_CU130 CMOS USB 3.0 camera with M12 Lens holder**

“We are excited to bring the 13MP camera with Ultra-HD video streaming capability to mass market with the flexibility of interchangeable lenses as part of our highly popular See3CAM family of USB3.0 UVC cameras. The 13MP still image capture and 13MP video streaming over USB3.0 interface are the features that we have not heard of in a USB UVC cameras, and e-con has brought these capabilities in the mass market USB3.0 UVC cameras.” said Mr. Ashok Babu, President, e-con Systems Inc. “The flexibility to use M12 lenses, external hardware trigger



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signal, and Zero-Shutter-Lag still image capture capability will enable our customers to explore in to new product areas and enhance their current product capabilities”, he added.

The compact See3CAM\_CU130 camera measures 30mm x 30mm in size is constructed as a two-PCB solution. The camera has the S-Mount (also known as M12 lens mount) enabling the customers to use any off-the-shelf lenses for different applications demanding different lenses. The USB3.0 base board contains the USB3.0 connector, an indication LED and the GPIO header. Customers can also use the TRIGGER signal available on the GPIO connector to provide external TRIGGER signal for still image capture. The STROBE signal of the GPIO connector can be used to enable the LED Flash for external illumination.

See3CAM\_CU130 is ideal for customer applications where high resolution 13MP still images or video are required. With S-mount lens holder, the See3CAM\_CU130 is ideal for Medical applications such as digital microscopy, Document Scanning cameras, Optical Character Recognition applications, Quality/Inspection applications, high-resolution Microscopic/Magnification applications, etc. The See3CAM\_CU130 also highly suitable for high-quality video streaming, video conferencing and surveillance applications, thanks to its support for compressed Ultra HD streaming and uncompressed HD video streaming.

The See3CAM\_CU130 is a 13MP UVC-compliant USB3.0 SuperSpeed camera with a built-in Image Signal Processor chip. This camera is based on 1/2.3” optical format AR1820HS image sensor from Aptina with a pixel size of 1.25micron. The See3CAM\_CU130 can stream Ultra HD (3840x2160) also sometimes referred as 4K2K resolution at 30fps over USB3.0 interface in MJPEG format. This can also stream Full HD (1080p) at 30fps and HD (1280x720) at 60fps in MJPEG format and uncompressed YUV422 format. The full 13MP resolution streaming is supported at 5fps in uncompressed format and 13fps in MJPEG format over USB3.0. The full 13MP Still image capture is supported in both uncompressed and JPEG formats. The external GPIO for Still Image Trigger and LED STROBE feature can be leveraged to build high-resolution camera for various demanding applications. The See3CAM\_CU130 is also backward compatible with USB2.0 although at limited frame rates and fewer resolutions. Above all, this camera is a USB Video Class (UVC Class) compliant and works without any additional device drivers.

The [See3CAM\\_CU130](#) supports various camera controls such as exposure (auto and manual), gain, white balance (auto and manual), brightness, contrast, saturation etc. In addition, the on-board ISP supports various scene modes and effects which can be useful for various application requirements. For example, there is a separate Document Mode where the contrast is enhanced by default and makes it suitable for OCR kind of applications. There is also a separate noise reduction level feature that can also be manually adjusted. All these additional features are exposed as UVC Extension Controls.

One important feature of this camera is the Zero-Lag-Shutter image capture. The preview to 13MP still image capture time is very fast and can be completed within 700ms for 13MP image in JPEG format. This is beneficial for applications where high-speed snapshots at full 13MP



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resolutions are to be captured instantly while previewing the low resolution, high-frame rate preview.

e-con Systems' sample Linux and Windows applications uses the standard UVC protocol to access the camera controls. The e-CAMView, a DirectShow based video viewer application from e-con Systems enables controls such as supports Gain, Exposure, Saturation, Brightness, Contrast and various other controls. The Exposure time can be adjusted manually and noise reduction level can also adjusted manually.

### Availability

The See3CAM\_CU130 is readily available. Customers interested in evaluating the See3CAM\_CU130 can order samples from e-con Systems' [online store](#). Customers have the option to buy the See3CAM\_CU130 with or without the lens.

### Customization services

Customers, who are interested in customizing See3CAM\_CU130 can contact e-con Systems directly with their requirements. Customers who have a lens and would need lens correction services while using the See3CAM\_CU130 can also contact e-con Systems. For further enquiries, please write to [sales@e-consystems.com](mailto:sales@e-consystems.com).

For more information, please visit the [13-MegaPixel USB Camera](#) page.

### About See3CAM

[See3CAM](#) is the new series of UVC compliant USB 3.0 Cameras from e-con Systems, that are "plug and play" on Windows and Linux. See3CAM USB 3.0 Camera does not require additional device drivers and work with the standard Windows (DirectShow) and Linux (V4L2) software.

The See3CAM's USB 3.0 SuperSpeed connectivity enables it to capture images at 720p (HD) @60fps and 1080p (Full HD) @30fps. These simple and cost-effective USB 3.0 Camera series solves the problem of implementing high quality video and image capture in applications such as Machine vision, barcode detection on moving objects and object tracking. e-con Systems provides customization services around these cameras to meet specific customer requirements. See3CAM are also backward compatible with USB 2.0 host

For more information, please visit [www.e-consystems.com/See3CAM-USB-3-Camera.asp](http://www.e-consystems.com/See3CAM-USB-3-Camera.asp)

### About e-con Systems

e-con Systems specializes camera solutions with offerings like camera modules, USB camera modules, camera Device driver development services on Operating systems like Android/WinCE, Camera reference design, Software ISP, camera customization services and camera tuning services.



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