

#### e-con Systems' new USB Camera captures image in near darkness

See3CAM\_CU30 based on AR0330 sensor from OnSemi™. Superior low-light performance - pixel size of 2.2µm. Streams 1080p@60fps and 3MP@30fps

**ST. LOUIS and CHENNAI, India – February 22, 2016** - e-con Systems Inc., a leading embedded camera solution company, today announced the launch of <u>See3CAM\_CU30</u>, an ultra-low light camera with a USB 3.0 interface. See3CAM\_CU30 is based on the 1/3-inch <u>AR0330</u>, a 3.4 megapixel image sensor from OnSemi<sup>™</sup>. This OEM camera can capture images at 0.1Lux, ideal for low light surveillance applications.

The See3CAM\_CU30 streams video at 60 frames per second (FPS) in 720p high definition (HD) and 1080p Full HD at 60fps in both uncompressed (UYVY) and compressed (MJPEG) formats. In addition to high-end digital video performance, the See3CAM\_CU30 makes it possible to capture a 3.4MP still image due to its unique multi-aspect ratio format. At its full resolution of 3.4 megapixels (2304x1536), the See3CAM\_CU30 can stream at 30fps over USB3.0 in MJPEG format and 25fps in UYVY format. On the optic side, See3CAM\_CU30 features the S-mount (M12) lens holder, allowing customers to use lenses, based on their application requirements.



Fig: See3CAM\_CU30 USB 3.0 Camera with M12 Lens

"With the excellent image quality, the See3CAM\_CU30 is an ideal camera for low-light applications such as home-surveillance, in-car security cameras, webcams, day-night cameras etc. The high-performance on-board ISP provides not just excellent image quality, but also allows customers to adjust all the camera parameters to meet their application requirements" said **Ashok Babu**, President of **e-con Systems Inc**.

See3CAM\_CU30 is based on 1/3" AR0330 Image sensor with an on-board high-performance Image Signal Processor chip (ISP) that performs all the Auto functions (Auto White Balance, Auto Exposure control) in addition to complete Image Signal Processing functions and MJPEG encoding. This 2.2micron pixel size AR0330 sensor with the ISP provides best-in-class image quality and superior low light performance. The AR0330 sensor has very good responsivity in Near Infra-red wavelengths and that allows the See3CAM\_CU30 camera to be used in NIR imaging applications and day-night applications.



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Light Source: Visible Light - 0.5lux



Light Source: Infrared

### Fig: 3.4 MP Images captured using See3CAM\_CU30 with different light sources

The compact See3CAM\_CU30 camera with form factor 30mm x 30mm 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 along with or without any optical filters such as IR cutoff, IR pass, or dual band-pass filters for day-night imaging applications. 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.

The See3CAM\_CU30 camera also supports Zero Shutter Lag feature, where the 3.4MP still images can be captured at any time during low resolution preview video within 0.3 seconds. The next generation low-power surveillance cameras can leverage this feature to perform motion analysis in the low-power preview mode and when motion is detected, a high resolution still image can be captured instantaneously for further image analytics.

See3CAM\_CU30, a UVC-compliant camera is plug-and-play in both Windows and Linux without requiring additional drivers. In Windows, the camera is exposed as a DirectShow device, and in Linux as a V4L2 capture source. e-con Systems' sample Linux (QtCAM) application and Windows applications use the standard UVC protocol to access the camera controls. The e-CAMView, Windows DirectShow based sample video viewer application enables controls such as Brightness, Contrast, Sharpness, Saturation, Gamma, Gain, Exposure (Manual and Auto) and White Balance (Manual and Auto).

## Availability

The See3CAM\_CU30 streaming 720p and 1080p video at 30 fps is currently available for evaluation. Customers interested in evaluating the See3CAM\_CU30 can order samples from e-con Systems' <u>online webstore</u> with option to buy with or without the lens. The See3CAM\_CU30 streaming 720p@60fps and 1080p@60fps shall be available for purchase in 8 weeks. For more information, please write to <u>sales@e-consystems.com</u>.

For more information, please visit <u>3.4MP Low light USB 3 Camera</u>. Also watch demo video at <u>https://www.youtube.com/watch?v=bpaArU3NqAg</u>



# **Customization Services**

Customers interested in customizing See3CAM\_CU30 can contact e-con Systems directly with their requirements. Customers who need lens correction services for the See3CAM\_CU30 can contact e-con Systems. For further inquiries, please write to <u>sales@e-consystems.com</u>.

## About See3CAM

<u>See3CAM</u> is the new series of UVC-compliant USB 3.0 cameras from e-con Systems that are "plug and play" on Windows and Linux. The See3CAM USB 3.0 Camera does not require additional device drivers, and works with the standard Windows (DirectShow) and Linux (V4L2) software.

The See3CAM's USB 3.0 SuperSpeed connectivity enables it to capture video using the full throughput of USB3.0 standard. This 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 for these cameras to meet specific customer requirements. See3CAM is also backwards compatible with USB 2.0 host.

For more information, please visit <u>www.e-consystems.com/See3CAM-USB-3-Camera.asp</u>

## About e-con Systems

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

## For more information please contact:

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