For Immediate release

e-con Systems Launches Monochrome USB 3.0 camera with changeable lenses
See3CAM_CU51 - 5MP MT9P031 1/2.5” Optical format. Shutter features Global Reset release (GRR)

ST. LOUIS and CHENNAI, India — Nov 11th 2014 — e-con Systems Inc., a leading embedded design services company specializing in the development of advanced camera solutions announces the launch of the See3CAM_CU51, part of the See3CAM family of USB3.0 SuperSpeed cameras. The See3CAM_CU51 is based on MT9P031 Monochrome CMOS Image sensor from Aptina and is provided with the S-mount (M12) lens mount that enables customers to choose a lens of their choice. The See3CAM_CU51 supports video streaming at resolutions of up to 1080p@30fps and full resolution (2592x1944) @14fps with 12bits per pixel resolution. In addition, the See3CAM_CU51 also has a fast video capture capability of VGA @ 120fps. The 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_CU51 CMOS USB 3.0 camera with M12 Lens

The See3CAM_CU51 is ideal for customer applications where monochrome images are required along with the flexibility for choosing a lens of their choice is required. See3CAM_CU51 can be used in Scanning applications, Medical Equipment, Measurement devices, Quality Inspection, Industrial Automation and Pattern recognition.

“The See3CAM_CU51 is a 5 MP USB3.0 UVC camera with advanced features targeted for demanding applications from our customers. With its 12bits per pixel resolution, high speed preview of 120fps in VGA, Zero Shutter Lag during still capture and other features, e-con's See3CAM_CU51 shall help our customers to meet their challenging demands” said Mr. Ashok Babu, President, e-con Systems Inc. “e-con also offers the customization of See3CAM_CU51 to meet customer requirements for special requirements and also sells the camera sensor module alone for use with various application processors”, he added.
The See3CAM_CU51 is a 5.0 MP UVC-compliant USB 3.0 Super Speed Monochrome camera with the S-mount (M12 board) lens holder. It is based on the 1/2.5” MT9P031 Monochrome CMOS image sensor from Aptina. The See3CAM_CU51 can stream monochrome video at HD @60fps (720p60) and Full-HD @30fps (1080p30) in uncompressed Y16 mode, through the USB 3.0 interface which supports about 5Gbps bandwidth. The Y16 format has 12bits of valid greyscale information per pixel packed in a 16bits per pixel format. This 12-bit resolution per pixel makes it suitable for applications where high resolution is very important. See3CAM_CU51 can stream the full 5MP resolution uncompressed Y16 video streaming at around 15fps for high resolution imaging applications. See3CAM_CU51 is also backward compatible with USB 2.0 High Speed host ports.

The See3CAM_CU51 supports normal Electronic Rolling Shutter (ERS) operation on the preview video and can switch to Global Reset Release (GRR) mode for the 5MP still image capture. In the GRR mode, all the pixels of the image sensor are reset simultaneously and exposed at the same until the pixels are read out sequentially. GRR mode reduces the image distortion while capturing moving objects, compared with the regular Electronic Rolling Shutter mode. This mode is a good fit for applications where, a quasi-global shutter mode is required in a cost-effective fashion. And the GRR still image capture can be triggered with an external Trigger signal.

The preview to 5MP still image capture time is very fast and almost Zero-Shutter lag. This is beneficial for applications where high-speed snapshots at full 5MP 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, sample Windows DirectShow based sample video viewer application enables controls such as supports Gain and Exposure control. The Exposure time is adjusted from 1millisecond to 15seconds in bulb exposure mode.

Availability

The See3CAM_CU51 is readily available. Customers interested in evaluating the See3CAM_CU51 can order samples from e-con Systems’ online Webstore. Customers have the option to buy the See3CAM_CU51 with or without the lens.

Customization services
Customers, who are interested in customizing See3CAM_CU51 can contact e-con Systems directly with their requirements. Customers who have a lens and would need lens correction services while using the See3CAM_CU51 can contact e-con Systems. For further enquiries, please write to sales@e-consystems.com.

For more information, please visit the 5-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. 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

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.

For more information please contact:
Harishankkar
sales@e-consystems.com
e-con Systems Inc., +1 314 732 1152
e-con Systems India Pvt. Ltd., +91 44 42033600
Website: http://www.e-consystems.com

Note: References to corporate, product or other names may be trademarks or registered trademarks of their respective owners.