



PRESS RELEASE

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For Immediate Release

e-con Systems Launches Ultra HD 13MP Camera for NVIDIA® Tegra X1

e-CAM130_CUTX1 - 13MP Camera for NVIDIA® Jetson Tegra X1, Uncompressed image streaming (Full HD) 1080p@60fps and UltraHD @ 30fps, 1/2.3" Optical format AR1820HS Sensor

ST. LOUIS and CHENNAI, India — January 18, 2017 — **e-con Systems Inc.**, a leading embedded camera solution company specializing in the development of advanced camera solutions announces the launch of the much awaited MIPI camera board for NVIDIA® Jetson Tegra X1 development kit - [e-CAM130_CUTX1](#). e-CAM130_CUTX1 is a 13MP 4 lane MIPI CSI-2 camera board based on AR1820 CMOS Image sensor from ON Semiconductor® and an integrated Advanced Image Signal Processor(ISP) for NVIDIA® Jetson Tegra X1 development kit. The e-CAM130_CUTX1 streams 720p(HD) and 1080p(FullHD) @72fps, 4K or Ultra HD (3840 x 2160) @30fps and 13MP@ 20 fps in uncompressed YUV format.

The e-CAM130_CUTX1 solution is ideal for customers who wish to leverage the 4-lane high-speed MIPI CSI-2 interface of Tegra X1 CPU. The camera driver is a standard V4L2 driver and any V4L2 compatible application can access this camera. e-con Systems distributes a sample viewer application that demonstrates the video preview and still capture application. This viewer application runs on the Ubuntu distribution of Jetson development board. The 13MP camera module along with the adapter board allows the developer to incorporate this camera in to their designs immediately.

e-con Systems has pioneered in bringing out various cameras for NVIDIA Jetson kit. Earlier, e-con Systems had launched 13MP UltraHD camera, 4MP RGB-IR camera and 3.4MP low light sensitive camera boards for NVIDIA Jetson TK1.

“Taking forward our camera solution leadership with NVIDIA Tegra K1, we are happy to launch our ready-to-deploy camera solutions for NVIDIA Tegra X1 platform. Our 13MP camera module with direct 4-lane MIPI CSI-2 interface to Tegra X1 is poised to become a de-facto camera solution for deep-learning applications such as smart parking solutions, smart surveillance, drones, smart baby-sitting etc,” said **Mr. Ashok Babu, President, e-con Systems Inc.** “Customers can leverage our expertise and experience in customizing our off-the-shelf 13MP camera for their requirements and e-con can also customize our other cameras for TX1 platform”, he added.



Fig: e-CAM130_CUTX1 on NVIDIA® Jetson TX1 development kit



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The e-CAM130_CUTX1 is based on e-con Systems' [e-CAM130_CUMI1820_MOD](#) - 13 MP Camera Module and interfaces with the Tegra X1 processor over 4-lane MIPI CSI-2 interface. e-con Systems has developed the V4L2 media-controller sensor kernel driver API based camera driver on top of JetPack 2.3 version from NVidia. JetPack 2.3 features new APIs for efficient low-level camera and multimedia streaming with Jetson TX1, alongside updates to Linux for Tegra (L4T) R24.2 with Ubuntu 16.04 aarch64 and Linux kernel 3.10.96. The e-CAM130_CUTX1 comes with the integrated ISP it can be used with the standard V4L2 API. The camera driver also exposes the standard camera controls such as exposure, brightness, contrast, saturation, white balance, gamma, gain, sharpness, etc. through the V4L2 interface.

The e-CAM130_CUTX1 is provided with the S-mount (M12) lens mount that enables customers to choose a lens of their choice. This camera module houses a high-performance ISP chip that performs Auto functions (Auto Exposure, Auto White Balance, etc.) in addition to the complete ISP pipeline that provides best-in-class images and video. The e-CAM130_CUTX1 supports 4-lane MIPI CSI-2 interface for video transport and the standard I2C interface for camera control. Through the 4-lane MIPI CSI-2 interface, this camera supports Ultra HD (3840x2160) video streaming in addition to Full-HD and HD video streaming in uncompressed YUV422 formats. The still image capture is supported at full 13MP resolution in uncompressed BMP.

Availability

The e-CAM130_CUTX1 is readily available from e-con Systems. Customers interested in evaluating e-CAM130_CUTX1 can order samples from [online store](#)

For more information, please visit the product page of [13MP MIPI Camera for NVIDIA® Jetson TX1](#) or watch demo of e-CAM130_CUTX1 at <https://www.youtube.com/watch?v=uxyldTQnNaw>

About e-con Systems

e-con Systems specializes camera solutions with offerings like Software ISP, camera modules, USB camera modules and offers camera drivers for Operating systems like Linux/Android.

NVIDIA® has included e-con Systems to its Embedded Ecosystem. This official recognition comes as a result of major boost in e-con Systems' product building activities in the embedded domain especially in areas pertaining to Jetson Tegra K1 & Tegra X1. For more information, please visit <https://developer.nvidia.com/embedded/community/ecosystem>

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