e-con Systems™ Launches Multi-camera Solution for NVIDIA Jetson AGX Orin Based on Sony STARVIS IMX485

NVIDIA Jetson AGX Orin | Sony STARVIS IMX485 | 1/1.2" sensor | Large pixel size | 4K resolution | Multi-camera solution

San Jose and Chennai (June 21, 2022) – e-con Systems™, a leading embedded OEM camera company and an NVIDIA Elite Partner, today launched the e-CAM82 CUOAGX – a 4K ultra-low-light camera powered by the NVIDIA® Jetson AGX Orin™ system-on-a-module and based on the Sony STARVIS IMX485 sensor. The product will be officially launched at Embedded World 2022, to be held at the

Exhibition Centre in Nuremberg, Germany, from June 21st to 23rd.



This large sensor camera (1/1.2") can be readily integrated with NVIDIA Jetson AGX Orin and is designed to address the rising processing needs of AI-based embedded vision applications such as <u>autonomous mobile robots</u> and agricultural vehicles. This large sensor size will also enable

e-CAM82_CUOAGX to capture high-resolution images with more detail and clarity.

In addition, this low-light camera houses the <u>Sony STARVIS</u> <u>IMX485</u> sensor with a large pixel size of $2.9\mu m$ (H) x $2.9\mu m$

(V), which is double the size of most 4K sensors available in the market today. This, in turn, will ensure high sensitivity even in absolute darkness.

e-CAM82_CUOAGX is a multi-camera solution that can connect up to 6 cameras to have an extended field of view for building 360-degree surround-view systems. Further, e-con Systems will support any customization required on NVIDIA Isaac ROS to reduce the camera integration efforts for robotic vision systems.

"NVIDIA Jetson platforms are powerful AI computers for energy-efficient autonomous machines. Being an elite camera ecosystem partner of NVIDIA, e-con Systems designs and manufactures numerous Jetson-based vision solutions to help machines see the world with high-quality cameras. e-CAM82_CUOAGX is a Sony STARVIS IMX485-based ultra-low light 4K camera solution specially designed for NVIDIA Jetson AGX Orin. This large sensor camera and the AGX Orin development kit are the ideal combo for edge AI-enabled systems like autonomous machines and Intelligent Transport Systems.", said Gomathi Sankar, Senior Product Manager at e-con Systems™

"NVIDIA Jetson AGX Orin complements e-con's multi-camera solutions to deliver high-quality, 4K vision-based applications for autonomous machines," said Durga Peddireddy, Jetson partner ecosystem and camera solutions lead at NVIDIA. "This multi-camera offering also supports the widely adopted GMSL interface that extends connectivity for areas such as industrial robotics."

<u>e-CAM82_CUOAGX</u> in combination with NVIDIA Jetson AGX Orin (the latest system-on-a- module from NVIDIA that offers 8x the performance of its previous generation) is set to revolutionize edge-based AI analytics applications, offering a maximum performance of 275 TOPS. It is a high-resolution camera that is capable of streaming Full HD @ 90fps and 4K UHD @ 72fps.

Key features and benefits of e-CAM82 CUOAGX

- **Ultra-low-light camera:** Housing the Sony STARVIS IMX485 camera and having a sensor with a large optical format and pixel size, e-CAM82_CUOAGX is ideal for low-light applications.
- Readily integrated with NVIDIA Jetson AGX Orin: Makes the camera suitable for applications that need heavy processing.
- 4K resolution: Enables e-CAM82_CUOAGX to capture more details and a large field of view.
- Large sensor and pixel size: Helps to collect more details of the scene with superior clarity even in absolute darkness.

These key features make e-CAM82_CUOAGX suitable for applications such as:

- Autonomous mobile robots like service robots, warehouse robots, delivery robots, etc.
- Autonomous tractors and other agricultural vehicles
- People detection and crowd analytics systems
- Telehealth devices

Have a look at the introduction video of e-CAM82_CUOAGX to learn more about the features and applications of the camera.

https://www.youtube.com/watch?v=ZfIIAVucjrQ

To help the developers of camera-based embedded devices that use Jetson AGX Orin, e-con Systems is extending the support for all its camera modules to this future-ready processor. This means all of e-con's camera solutions — spanning global shutter, IP67 rated cameras, 2MP to 18MP resolution, GMSL2 cameras, multi-camera solutions, 3D time of flight and stereo cameras, etc. — can now be readily evaluated with NVIDIA Jetson AGX Orin.

Availability of e-CAM82_CUOAGX

Customers interested in evaluating <u>e-CAM82_CUOAGX</u> – the Sony STARVIS IMX485-based 4K ultra-low-light camera – can purchase the product from e-con Systems' online store. You can also learn more about e-CAM82_CUOAGX by visiting the product page.

For other cameras supporting the NVIDIA Jetson AGX Orin, please visit the <u>Jetson Orin camera hub</u> page.

Customization and integration support

With a proper understanding of customers' pain points, e-con Systems also offers customization services that reduce efforts on prototyping, product integration, and product deployment. Please write to camerasolutions@e-consystems.com for any customization or integration support.

About e-con Systems™

e-con Systems™ is a leading OEM camera manufacturer with 18+ years of experience and expertise in embedded vision. It focuses on delivering vision and camera solutions to industries such as retail, medical and industrial. The company's wide portfolio of products includes MIPI camera modules, GMSL cameras, USB 3.1 Gen 1 cameras, time of flight cameras, stereo cameras, etc with both rolling and global shutter sensors.

e-con Systems™ strives to become a global leader in the embedded vision space through continuous innovation and helping its customers accelerate product development and reduce time to market. It has built over 250+ product solutions and shipped over 2 million cameras around the globe. What sets the company apart is its deep expertise in building customized product designs to ensure rapid prototyping through custom modifications in camera hardware as well as software which include form factor modifications, ISP tuning, carrier board development, lens calibration, and much more. Click here to know more about e-con's suite of customization services.

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