e-CAM25_CUONX

Release Notes



Version 1.7 e-con Systems 3/29/2025





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Introduction

e-CAM25_CUONX is a 2.3 MP MIPI CSI-2 camera from e-con Systems, a company with over two decades of experience in designing, developing, and manufacturing OEM cameras. It is a new MIPI camera board which helps to interface AR0234 sensor in either 4-lane mode or 2-lane mode depending upon the port's lane support and the user-defined configuration to the Jetson Orin™ Nano and Orin NX™. The prebuilt driver for this camera along with the camera board is provided by e-con Systems.

e-CAM25_CUONX is 2.3 MP custom lens camera module based on 1/2.6" AR0234CS CMOS image sensor from onsemi[™]. It is a color camera that supports UYVY image format and provided with S-mount (also known as M12 board lens) lens holder. The S-mount is small form-factor lens mounts for board cameras. e-con Systems provides sample applications that demonstrate the features of this camera. e-CAM25_CUONX camera is interfaced to J20 connectors of the Orin Nano[™] development kit using the ACC-RB-WTB-ADP board. However, this camera can also be utilized by any Video for Linux version 2 (V4L2) application.



Release Details

This section describes about identifying the deliverable.

Release Version: R04_RC3
Release Date: 29-MAR-2025
Product: e-CAM25_CUONX

Description Jetson Orin NX/Orin Nano		
Host machine version required for flashing	Ubuntu 22.04 (64-bit) or Ubuntu 20.04 (64-bit	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 22.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obuntu 22.04 (darcho4)	
JetPack Version.	JetPack 6.1.0	
L4T version.	L4T_R36.4.0	
Kernel version.	5.15.148-tegra	
ecam_tk1_guvcview version.	1.7.2-g81ddbfb	
MCU Firmware Version.	1125CUONXXXXX01110dfe152cXXXXXXX	

Change log: Updated the MCU firmware version

Release Version: R04_RC2
Release Date: 25-Feb-2024
Product: e-CAM25_CUONX

Description	Jetson Orin NX/Orin Nano	
Host machine version required for flashing	Ubuntu 22.04 (64-bit) or Ubuntu 20.04 (64-bit)	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 22.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obulitu 22.04 (aarcii04)	
JetPack Version.	JetPack 6.1.0	
L4T version.	L4T_R36.4.0	
Kernel version.	5.15.148-tegra	
ecam_tk1_guvcview version.	1.7.2-g81ddbfb	
MCU Firmware Version.	1125CUONXXXXX011100301f6eXXXXXXX	

Change log: Application bug is fixed

Release Version: R04_RC1
Release Date: 13-Dec-2024
Product: e-CAM25_CUONX



Description Jetson Orin NX/Orin Nano		
Host machine version required for flashing	Ubuntu 22.04 (64-bit) or Ubuntu 20.04 (64-bit).	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Hhuntu 22 04 (parch64)	
on Jetson Orin NX/Orin Nano™.	Ubuntu 22.04 (aarch64)	
JetPack Version.	JetPack 6.1.0	
L4T version.	L4T_R36.4.0	
Kernel version.	5.15.148-tegra	
ecam_tk1_guvcview version.	1.7.2-g5d361af	
MCU Firmware Version.	1125CUONXXXXX011100301f6eXXXXXXX	

Change log: Updated to L4T36.4.0 with Jetpack 6.1.0

Release Version: R03_RC2
Release Date: 29-JUL-2024
Product: e-CAM25_CUONX

Description Jetson Orin NX/Orin Nano		
Host machine version required for flashing	Ubuntu 22.04 (64-bit) or Ubuntu 20.04 (64-bit).	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 22.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obuntu 22.04 (aarcho4)	
JetPack Version.	JetPack 6.0.0	
L4T version.	L4T_R36.3.0	
Kernel version.	5.15.136-tegra	
ecam_tk1_guvcview version.	1.7.2-g5d361af	
MCU Firmware Version.	1125CUONXXXXX0111022d8d7dXXXXXXX	

Change log: Fix for vi-capture corruption in L4T36.3.0 in JetPack 6.0.0

Release Version: R03_RC1
Release Date: 24-MAY-2024
Product: e-CAM25_CUONX

Description Jetson Orin NX/Orin Nano		
Host machine version required for flashing	Ubuntu 22.04 (64-bit) or Ubuntu 20.04 (64-bit).	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 22.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obuntu 22.04 (aarch04)	
JetPack Version.	JetPack 6.0.0	
L4T version.	L4T_R36.3.0	
Kernel version.	5.15.136-tegra	
ecam_tk1_guvcview version.	1.7.2-g5d361af	
MCU Firmware Version.	1125CUONXXXXX0111022d8d7dXXXXXXX	

Change log: Updated to L4T36.3.0 with Jetpack 6.0.0



Release Version: R02_RC2
Release Date: 06-DEC-2023
Product: e-CAM25_CUONX

Description	Jetson Orin NX/Orin Nano	
Host machine version required for flashing	Ubuntu 20.04 (64-bit) or Ubuntu 18.04 (64-bit	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 20.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obulitu 20.04 (aarcii04)	
JetPack Version.	JetPack 5.1.2	
L4T version.	L4T_R35.4.1	
Kernel version.	5.10.120-ga43fec18c	
ecam_tk1_guvcview version.	1.7.2-g5d361af	
MCU Firmware Version.	1125CUONXXXXX0111022d8d7dXXXXXXX	

Change log: Fix for device tree not updated in Jetson Orin Nano development kit.

• Release Version: **R02**

Release Date: 10-NOV-2023Product: e-CAM25_CUONX

Description	Jetson Orin NX/Orin Nano	
Host machine version required for flashing	Ubuntu 20.04 (64-bit) or Ubuntu 18.04 (64-bit)	
software onto Jetson Orin NX/Orin Nano™.		
Sample rootfs Ubuntu operating system to run	Ubuntu 20.04 (aarch64)	
on Jetson Orin NX/Orin Nano™.	Obulitu 20.04 (aarcii04)	
JetPack Version.	JetPack 5.1.2	
L4T version.	L4T_R35.4.1	
Kernel version.	5.10.120-ga43fec18c	
ecam_tk1_guvcview version.	1.7.2-g5d361af	
MCU Firmware Version.	1125CUONXXXXX0111022d8d7dXXXXXXX	



Download Release Package

In this section, you can get the FTP next cloud server credentials for downloading release package

Download Link: https://spaces.e-consystems.com/nextcloud/index.php/s/Ciybmwa46oR8qeR

Password: e-CAM25_CUONX



Troubleshooting

In this section, you can view the list of commonly occurring issues and their troubleshooting steps.

In lower exposure value, setting a higher gain value causes a blue noise in higher resolutions.

This a known issue. You need to either reduce the gain or increase the exposure to recover from this issue.

How to recover if black screen appears in ecam_tk1_guvcview camera window?

This is known issue. If this issue occurs, it will auto recover in few seconds and if still not able to recover in few second, please restart the application.



1. How can I get the updated package if any?

Please login to the $\underline{\text{Developer Resources}}$ website and download the latest release package.



What's Next?

After understanding the Release Notes, you can refer to the following documents to understand more about e-CAM25_CUONX.

- e-CAM25_CUONX Getting Started Manual
- e-CAM25_CUONX Release Package Manifest
- e-CAM25_CUONX Linux App User Manual



Support

Contact Us

If you need any support on e-CAM25_CUONX product, please contact us using the Live Chat option available on our website - https://www.e-consystems.com/

Creating a Ticket

If you need to create a ticket for any type of issue, please visit the ticketing page on our website - https://www.e-consystems.com/create-ticket.asp

RMA

To know about our Return Material Authorization (RMA) policy, please visit the RMA Policy page on our website - https://www.e-consystems.com/RMA-Policy.asp

General Product Warranty Terms

To know about our General Product Warranty Terms, please visit the General Warranty Terms page on our website - https://www.e-consystems.com/warranty.asp



Revision History

Rev	Date	Description	Author
1.0	18-Apr-2023	Initial draft	Camera Dev Team
1.1	10-Nov-2023	Updated to L4T35.4.1 and support given to 2 lane	Camera Dev Team
1.2	06-Dec-2023	Install binaries script updated in Release Package	Camera Dev Team
1.3	24-May-2024	Updated to L4T36.3.0	Camera Dev Team
1.4	26-Jul-2024	Updated Release Package to fix vi-capture corruption issue	Camera Dev Team
1.5	29-Jan-2025	Updated to L4T36.4.0	Camera Dev Team
1.6	25-Feb-2025	Application bug fixed	Camera Dev Team
1.7	29-Mar-2025	Updated the MCU firmware version	Camera Dev Team