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| Overview |
| This driver is for IMX477 camera kit with Nvidia Jetson Xavier CPU module (SOM).  This driver supports up to four IMX477 cameras.  This driver supports 3840x2160@60fps.  This driver is based on R34.1.1 (Jetpack 5.0.1). |
| Hardware list |
| 1 ~ LI-IMX477-MIPI V1.0  1 x LI-JXAV-MIPI-ADPT 4CAM V1.0 |
| Fpga version(no) |
| Sensor board fpga:  Carrier board fpga: |
| Hardware connection |
| 978abff62bcc84cbb81e669581bd977 |

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| Rework infor |
| Need mount an eeprom in the red circle |
| Setup Procedure |
| **Hardware:**  1. Nvidia Jetson AGX Orin Developer Kit x 1  2. E3653-A03 x 1  3. LI-AR0234CS-GMSL2-OWL x 4  4. 4-in-1 Fakra cable x 1  5. USB 3.0 Type-C cable x 1 (for flashing OS image)  6. Monitor with HDMI cable x 1  7. Keyboard and Mouse (with USB hub) x 1  **Driver installation:**  1. Download the R34.1.1 OS Image (from link below) to your Ubuntu OS on Intel x64 Host PC (we are using Ubuntu 18.04, virtual machine is fine) and follow the l4t\_quick\_start\_guide to install the Jetpack to Orin.  R34.4.1 OS Image: <https://www.dropbox.com/sh/xkn3e0gp9q5mm4x/AABpxtWnWY9lVJBIGcUpjFKna?dl=0>  2. Copy the tegra234-p3701-0000-p3737-0000.dtb to the /boot/dtb/kernel\_tegra234-p3701-0000-p3737-0000.dtb in your Orin platform.  cp tegra194-p2888-0001-p2822-0000.dtb /boot/dtb/kernel\_tegra194-p2888-0001-p2822-0000.dtb  2.1. Copy the tegra194-p2888-0001-p2822-0000.dtb to the /boot/dtb/kernel\_tegra194-p2888-0001-p2822-0000.dtb in your Orin platform.  cp tegra194-p2888-0001-p2822-0000.dtb /boot/dtb/kernel\_tegra194-p2888-0001-p2822-0000.dtb  3. Reboot AGX Orin/Xavier kit.    4. Open a terminal and do below commands. The 2 .ko files can be downloaded from the link in first page.  insmod imx477 .ko  5. Then do below command to get live video output.  nvgstcapture-1.0 |
| Special software configuratiion |
| * + - 1. IMX477 camera module need mount eeprom.       2. If eeprom is empty, need flash sample eeprom file. Reference the sample\_eeprom\_flash\_tool |

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| History infor | | |
| Revision | Description | Release Date |
| 20210826 | First release based on R32.6.1 | 20210826 |
| 20211013 | Only support 1 camera | 20211013 |
| 20220323 | Support 32.7 | 20220323 |
| 20220609 | Support 34.1.1 | 20220609 |
| Known bug | | |
| Orin cannot support 4056x3120 | | |
| Author | | |
| Feiyu Miao | | |
| Tester | | |
| Feiyu Miao | | |