BOARD SUPPORT PACKAGE
For Connect Tech NVIDIA Jetson Nano Carriers

BSP Version:	Nano-32.4.2 V001
Last Updated:	2020/06/05

Introduction

This Board Support Package adds support for Connect Tech Jetson Nano family of carrier boards to Linux4Tegra. It includes any extra files required to use all the features of the carriers. Please check the "Product Specific Details" section for what features for your board is supported with this BSP release and the "Changes" section for the changes made between versions. You can check which version of the BSP you have installed by running: cat /etc/cti/CTI-L4T.version

Check for the Latest Version of the CTI-L4T BSP at:
https://connecttech.com/resource-center/l4t-board-support-packages/

Requirements

- o   x86 based host machine running Ubuntu 16.04 or Ubuntu 18.04
- o   Jetpack 4.4 installed via Nvidia SDK Manager (from Nvidia Embedded Download Center)
- o   Nano module
- o   Connect Tech Nano Family Carrier
- o   USB Cable for flashing

*L4T version can be found in /etc/nv_tegra_release and will look like this:
R32 (release), REVISION: 2.0

Installation

1. Before Installing the BSP you will need to install Jetpack 4.3 on the x86 host system using the Nvidia SDK Manager

2. Copy the CTI-L4T-NANO-32.4.2-V001.tgz package into
    ~/nvidia/nvidia_sdk/JetPack_4.4_Linux_GA_P3448-0020/Linux_for_Tegra/

3. Extract the BSP:
    tar -xzf CTI-L4T-NANO-32.4.2-V001.tgz

4. Change into the CTI-L4T directory:
    cd ./CTI-L4T

5. Run the install script (as root or sudo) to automatically install the BSP files to the correct locations:
    sudo ./install.sh

    cd ..

6. The CTI-L4T BSP is now installed on the host system and it should now be able to flash the Nano.

7. To flash on the Nano use the following (do not add ".conf"):
   CTI Assisted Flashing: ./cti-flash.sh
   Manual Flash: ./flash.sh cti/nano/photon mmcblk0p1

Flashing Instructions

1. Connect the Nano and Carrier to the computer via USB, following the instructions in the appropriate manual

2. Put the system to be flashed into recovery mode, following the instructions in the appropriate manual

3. Run ./flash.sh <board> mmcblk0p1 from Linux_for_Tegra directory

4. Once the flashing has completed, the Nano will reboot

5. To switch between different boards, you will need to repeat these steps

6. There is currently no run time support for switching profiles on the Nano

Product Specific Details

NGX003 (Photon)

- USB 2.0 and 3.0 Support
- Camera Support
- Display(HDMI)
- Fan
- SD Card
- NVMe
- PoE
- Wireless Expansion (WiFi/LTE with SIM)

NGX004 (Quark)

- USB 2.0 and 3.0 Support
- Raspberry Pi Camera Support
- Fan
- SD Card
  - Ethernet
  - SPI
  - PWM (Note, as of this revision, only works on pin 38 of the I/O header)

Changes

Version NANO-32.4.2 V001, June 05, 2020
- Initial release on Jetpack 4.4

Version NANO-32.3.1 V005, May 29, 2020
- Fixed login loop issue
- Added deb packages

Version NANO-32.3.1 V004, May 06, 2020
- Previous release is broken
- Quark is not supported.
- NVME issue is resolved.
  - Fixed install script.

Version NANO-32.3.1 V003, Apr 15, 2020
- Added support for Quark

Version NANO-32.3.1 V001, Feb 28, 2020
- Initial release on Jetpack 4.3

Version NANO-32.2.1 V001, Jan 09, 2020
- Initial release on Jetpack 4.2.2

Version 300, September 11, 2019
- Initial Release for the Nano

Contact Connect Tech

If you have any problems, questions or suggestions regarding the Board Support Package and hardware, please feel free to contact Connect Tech Inc.

Contact Information	
Support	Please go to the Connect Tech Resource Center for product manuals, installation guides, device drivers, BSPs and technical tips. Submit your technical support questions to our support engineers. Technical Support representatives are available Monday through Friday, from 8:30 a.m. to 5:00 p.m. Eastern Standard Time.
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