



Jetson Nano FastFlash User Guide



Parts Needed

- NVIDIA® Jetson™ Nano SoM
- Jetson Nano FastFlash from Gumstix®
- USB Type-A to USB Micro-B cable
- Desktop or Laptop PC running or emulating Linux (host machine)

Setup

1. Download a recent Jetson Nano disk image from Gumstix:
<https://gumstix-yocto.s3.amazonaws.com/2020-01-27/jetson-tx2/warrior/gumstix-xfce-image-jetson-tx2.tegraflash.zip>
and extract it onto the host machine.
2. Insert the metal contacts of the Jetson Nano's edge connection into the FastFlash's SODIMM connector and apply pressure down until the connector's arms lock the SoM in place.
3. Connect the USB cable to a USB port on the host machine.
4. Press and hold the pushbutton labelled RECOVERY on the FastFlash and connect the other end of the USB cable to its USB port.
5. Once the POWER LED has activated, release the recovery button.
6. To verify that the board is connected properly enter the following command into the host machine's terminal:

```
$ lsusb | grep -i nvidia
```

Something resembling the following line should appear:
Bus 001 Device 013: ID 0955:7c18 NVidia Corp.

NOTE For Geppetto-designed boards, AutoBSP-generated device tree and EEPROM binaries may be required during the flashing process. Ensure you have downloaded the AutoBSP package for your expansion board.

Flashing

Flashing the Disk Image

1. On the host machine, navigate to the folder to which you extracted the tegraflash.zip file in the terminal.
www.gumstix.com



2. Copy the appropriate device tree binary to this folder as `tegra210-p3448-0002-p3449-0000-b00.dtb`, overwriting the existing DTB file.
3. Enter the following command:

```
$ sudo ./doflash.sh
```

and enter your administrator password if prompted.

4. Wait for the installation process to complete and then disconnect the USB cable.
5. Remove the Jetson Nano SoM from the FastFlash board by pushing the connector's metal tabs outward until the Nano pops up.
6. Connect The Jetson Nano to your carrier board as you did for the setup steps.

Flashing the EEPROM

1. If your carrier board is from a Geppetto design and has CSI2 cameras or a DSI display it may be necessary to flash the carrier board's EEPROM module.
2. Copy or download the AutoBSP archive you have obtained from the Geppetto interface onto the Jetson Nano's filesystem and extract it.
3. Navigate to the folder that contains `jetson-nano_flash_eeprom.py` and run the following command:

```
$ sudo ./jetson-nano_flash_eeprom.py Geppetto*.bin
```

4. Reboot the Jetson.
5. If your AutoBSP DTB is installed correctly and the EEPROM has successfully been flashed, the Plugin Manager overlay for your Geppetto board will have loaded.