Device Tree Overlay Creation Guide

This guide will walk you through the steps necessary to create Device Tree Overlays for the PocketBeagle and BeagleBone family of products.

The current Device Tree files are located in the /lib/firmware folder. If you have not done so already, update and upgrade to verify you have the most current version available. If you receive any errors regarding permissions, try pre-facing the command with sudo.

At the debian@beaglebone:/ prompt:

1. Change directories to /opt/git\_repo and clone bb.org-overlays from GitHub:

opt/git\_repo$ git clone <https://github.com/beagleboard/bb.org-overlays>

1. Change to the newly cloned directory:

cd ./bb.org-overlays/

1. Create the new .dts file using nano:

nano src/arm/EBB-GPIO-Example.dts

1. <copy your code block in> [Did they copy from somewhere and are pasting it here or ??]
2. Make the .dtbo file by running the following command:

make src/arm/EBB-GPIO-Example.dtbo

If completed correctly you should receive the following output.

DTC     src/arm/EBB-GPIO-Example.dtbo

1. Display the two new files:

ls -lh src/arm/EBB-GPIO-Example.dt\*

-rw-r--r-- 1 voodoo voodoo  881 May 2 22:22 src/arm/EBB-GPIO-Example.dtbo

-rw-r--r-- 1 voodoo voodoo 1.6K May  2 22:21 src/arm/EBB-GPIO-Example.dts

1. Place the new files in the same location as the current overlays, or make sure you point to the correct directory in the uEnv.txt file when enabling the overlay (**Figure 1**):

sudo nano /boot/uEnv.txt

![](data:application/txt;base64,)

Figure : uEnv.txt using nano editor.

1. Do we need to save and exit or ?