

Downloading Xinu Onto A BeagleBone Black (BBB)

Quick Instructions (Expect a better writeup when we have time)

You will need a USB-TTL cable (the kind of cable commonly used to connect the serial console on embedded boards, such as Raspberry Pi, to a serial console emulator).

0. Download the Xinu tarball (the one for BBB) from the Xinu web site onto your computer (e.g., your laptop), and untar it.
1. Connect the USB-TTL cable to the BBB and plug the USB end into your computer
2. Run minicom (a terminal emulator) on your computer to communicate over the serial cable to the BBB.
3. Power on the BBB, either using a power cube, or using the mini-USB cable.
4. As soon as the BBB powers up, start pressing 'Return' key, because you need to interrupt the boot process and trap into the U-boot shell.
5. Once you are in the U-boot shell, enter command "loady" (without the quotes).
6. This step is a bit complicated. Press Ctrl+A then Press S. (It might take you a couple of tries, but be sure not to press A before control). If you do it correctly, a box will open and display a list of modem protocols. Select ymodem from the list, and press Return.
7. Now you have to select an image to download. Navigate to the compile directory of Xinu (press Space-bar twice to go into a directory). Once in the compile directory, navigate to file "xinu.boot", select the file by pressing Space-bar and then press Return key.
8. You will now see a box which will show you the progress of the download. Once the download is complete, press Return to go back to the shell.
9. In the shell, type the command "bootm" (without quotes), and the BBB boot the Xinu image you just downloaded.

Alternatively, one can set uEnv.txt to contain boot commands

```
bootfile=xinu.boot
boot_mmc=fatload mmc 0 0x82000000 ${bootfile}; bootm
uenvcmd=run boot_mmc
```
