

Building U-boot for pandaboard

- Export Cross-compiler path for Cortex-A9
PATH=\$PATH:\$(PATH_OF_CORTEX-A9)
- Configure u-boot for pandaboard
veda@linux # make omap4_panda_config
- Building u-boot for pandaboard
veda@linux # make CROSS_COMPILE=arm-linux-
- After a successful compilation, you should get the following U-Boot images.
 1. **MLO**
 2. **u-boot.img**

Building Linux Kernel for pandaboard

- Export Cross-compiler path for Cortex-A9
PATH=\$PATH:\$(PATH_OF_CORTEX-A9)
- Configure Linux kernel for pandaboard
veda@linux # make ARCH=arm omap2plus_defconfig
- Building Linux Kernel for pandaboard
 - **make ARCH=arm CROSS_COMPILE=\$(CROSS_PATH) uImage**
LOADADDR=0x80008000
 - **make ARCH=arm CROSS_COMPILE=\$(CROSS_PATH) modules**
 - **make ARCH=arm CROSS_COMPILE=\$(CROSS_PATH) modules_install**
INSTALL_MOD_PATH=\$(PANDABOARD_ROOTFS_PATH)
 - **make ARCH=arm CROSS_COMPILE=\$(CROSS_PATH) omap4-panda-es.dtb**

Rootfs for pandaboard

- **vim etc**
 - # Startup the system
null::sysinit:/etc/init.d/rcS
 - # Start shell on serial
ttyO2::respawn:-/bin/sh
 - # Stuff to do before rebooting
null::shutdown:/bin/umount -a -r

Booting pandaboard

- Create 2 partions on SD card (BOOT, ROOTFS)
 - BOOT partion should be fat32**
 - ROOTFS partion can be any linux filesystem**

- Copy following file to BOOT Partition
cp MLO u-boot.img uImage omap4-panda-es.dtb
- Create uEnv.txt in BOOT partition
vim uEnv.txt
bootargs=root=/dev/mmcblk0p2 console=ttyO2,115200
bootcmd=mmc rescan; setenv bootargs \${bootargs};fatload mmc 0:1
0x81000000 uImage; fatload mmc 0:1 0x82000000 omap4-panda-es.dtb;
bootm 0x81000000 - 0x82000000
uenvcmd=boot
- Copy pandaboard rootfs to ROOTFS partition
- Boot pandaboard with SD Card