LPC3250 – Changes to NAND partition table

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1 Introduction

NXP has changed the NAND partition table in the Linux port to be more consistent with the v2.0 S1L release. The default values in the u-boot environment related to the NAND flash has however not been updated and therefore the instructions in the BSP manual aren't correct.

More information about the NAND partitions is available at NXPs community site

http://www.lpclinux.com/LPC32xx/LPC32x0UbootNANDParts

1.1 Instructions file system

1. Boot into the u-boot console.

```
U-Boot 2009.03-rc1 (Sep 27 2009 - 14:27:25)

DRAM: 64 MB
NAND: 128 MiB
*** Warning - bad CRC or NAND, using default environment

In: serial
Out: serial
Err: serial
Hit any key to stop autoboot: 0
uboot>
```

2. Update the nand_rootfs_off variable

```
uboot> setenv nand_rootfs_off 0x013E0000
```

3. The file system should be stored in a new partition, i.e., new MTD block so the mtdboot variable must also be updated

```
uboot> setenv mtdboot setenv bootargs root=/dev/mtdblock4 rw
rootfstype=jffs2 ip=\$(ipaddr) ea_ethaddr=\$(ethaddr)
console=ttyS0,115200n8\; run loadkernel\;bootm \$(loadaddr)
```

Now save your changes done to the environment.

```
uboot> saveenv
```

5. You can now update the NAND flash with your file system

1.2 Instructions kernel

If you also store the Linux kernel in NAND flash you have to do the following changes

1. Still in the u-boot console update the nand_kernel_off variable

```
uboot> setenv nand_kernel_off 0x00FE0000
```

2. Save the changes

```
uboot> saveenv
```

3. You can now update the NAND flash with the kernel image

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