

**APP NOTE 20070208**  
**NAND FLASH DRIVER FOR GX-LINUX AND I.MX21 ADS/ADSE BSP**

**Files Needed for this Task**

1. mtd-utils-1.0.0-jtm.tar.gz -- the NAND flash code
2. flash\_eraseall -- NAND flash erase utility script

**Assumptions**

- Basic build instructions for the GX-Linux BSP are the same as printed in the user guide.
- GX-Linux source tree is untarred in a user directory.
- Must have an i.MX21 ADS/ADSE board with NAND flash daughter card plugged in.

**Make / Install MTD tools**

Copy files in a temporary user directory

Start a Bash / xterm shell and issue commands:

```
$ cd <to/temp/directory>
$ tar xvzf mtd-utils-1.0.0-jtm.tar.gz
$ cd mtd-utils-1.0.0-jtm
$ make CROSS=arm-linux- DESTDIR=<GX-LINUX dir>/rootfs
$ make CROSS=arm-linux- DESTDIR=<GX-LINUX dir>/rootfs install
```

**Here's how to mount a NAND partition as JFFS2**

Before mounting it the first time, it should be erased, so put the 'flash\_eraseall' utility into your rootfs before starting Linux on the target board:

```
erase
$ flash_eraseall /dev/mtd5
mount
$ mount -t jffs2 /dev/mtdblock5 /mnt
```

Note: There are 3 partitions that are large enough for JFFS2 - 5, 6, and 7.

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