



PureSoftware

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1. Upgrading to SPI NOR flash (U-boot flash)

The U-boot flashing is done on Genevisio board and the board Bonnyrigg was used as TFTP server. The image was available on Bonnyrigg board and later on was transferred to Genevisio board using TFTP server. This operation is carried out at the boot loader 'U-boot' stage. To perform this operation 2 utilities are required i.e, 'sf' and 'tftp'.

1.1 Stop the boot loader

Press the 'enter' or any other key to stop automatic booting into Linux in 10 seconds.

1.2 Configure Ethernet connectivity

Configure the ethernet connectivity using the following step:

```
=> setenv ipaddr <<your ip address>> (IP assigned to Genevisio board)
```

```
=> setenv serverip <<your tftp server ip address>>
```

```
=> setenv ethact DPMACx@xgmii
```

```
=> ping <<your tftp server ip address>>
```

1.3 Download the image from the TFTP server

Download the image using following command:

```
=> tftp 0xa0000000 <<path to image/image file name>>
```

1.4 Flash

Follow the below specified steps in order to flash:

```
=> sf probe 1
```

```
=> sf update 0xa0000000 0x0 $filesize
```

[Alternative] Using 'erase' and 'write'.

```
=> sf erase 0x0 +$filesize && sf write 0xa0000000 0x0 $filesize
```

2. Upgrading eMMC

In this process Genevisio board was connected to board Bonnyrigg in order to download images from the server 192.168.3.42 as the board Genevisio was unable to connect to the server. This has to be performed at at Yocto Tiny Distro environment where the eMMC storage was not occupied by Linux during run time. In order to complete this operation, some pre-built utilities are required which includes 'flex-installer' and 'scp'.

2.1 Boot into Yocto Tiny Linux

Enter into Yocto Tiny manually by stopping the auto boot procedure by the following procedure.

at uboot console:

Hit any key to stop autoboot: 0

=> run xspi_bootcmd

2.2 Configure Ethernet connectivity

Enable the ethernet port as required using the command,

ifconfig eth1 <<your IP assignment>>

alternatively,

use:

#ls-addni dpmac.x

#ifconfig <<eth instance>> <<your IP assignment>> up

2.3 Arranging pre-built image from GENEViSiO file share server

The images were downloaded from the server 192.168.3.42 to the board Bonnyrigg and then from Bonnyrigg these images were copied to gen7 board using "scp".

2.4 Flashing

```
#flex-installer -b bootpartition_LS_arm64_Its_4.19.tgz -r rootfs_lsdk2004_ubuntu_devel_arm64.tgz -d /dev/mmcblk1
```

