Restoring a File Using the Bootloader

The RCE bootloader (U-Boot) can read and write DOS formatted FAT partitions located on the SD card.

This feature can be used in an emergency to restore a file.

The RCE serial console must be used for this operation.

The bootloader countdown must be enabled in order to enter the bootloader shell.

Reboot the RCE and press any key to enter to enter the bootloader shell.

To list the contents of a partition:

```
zynq-uboot> fatls mmc 0:1
13706024 boot.bin
13321506 fpga.bit
131072 uboot.env
3 file(s), 0 dir(s)
zynq-uboot> fatls mmc 0:7
9984 devicetree.dtb
9988 devicetree_ramdisk.dtb
3678504 uimage
5289509 uramdisk.image.gz
4 file(s), 0 dir(s)
```

To restore a file, first load the backup from the SD card into memory at 0x700000

```
zynq-uboot> fatload mmc 0:7 0x700000 image.backup
reading image.backup
3678504 bytes read in 629 ms (5.6 MiB/s)
```

(A backup file may also be loaded into memory using NFS)

Now write the in memory file to the SD card

```
zynq-uboot> fatwrite mmc 0:7 0x700000 uimage $filesize
writing uimage
3678504 bytes written in 770 ms (4.6 MiB/s)
zynq-uboot>
```

Execute reset to reboot RCE in the OS.