How can i use uniflash to load the uboot with uart on board?

1. Using UART to load the U-boot binaries

Preconditions: Irzsz packet is installed

1. Using x & y modem protocols

|  |
| --- |
| Steps to be followed using UART x&y modem protocols:$ sb --xmodem $OUT\_R5/tiboot3.bin > $UART\_BOOT\_MCU\_UART < $UART\_BOOT\_MCU\_UART$ sb --ymodem $SYSFW\_ITB > $UART\_BOOT\_MCU\_UART < $UART\_BOOT\_MCU\_UART$ sb --ymodem $OUT\_AXX/tispl.bin > $UART\_BOOT\_MAIN\_UART < $UART\_BOOT\_MAIN\_UART$ sb --xmodem $OUT\_AXX/u-boot.img > $UART\_BOOT\_MAIN\_UART < $UART\_BOOT\_MAIN\_UART |

The picture 1 shows using the UART using x & x modem protocol to load files to boot the board into U-Boot.



Picture1

1. Using OSPI device

Below commands can be used to download tiboot3.bin, tispl.bin and u-boot.img over tftp and then flash it to OSPI at respective addresses.

Assumption – The u-boot files are loaded from SD Card.

|  |
| --- |
| => sf probe=> tftp ${loadaddr} tiboot3.bin=> sf update $loadaddr 0x0 $filesize=> tftp ${loadaddr} tispl.bin=> sf update $loadaddr 0x80000 $filesize=> tftp ${loadaddr} u-boot.img=> sf update $loadaddr 0x280000 $filesize=> tftp ${loadaddr} sysfw.itb=> sf update $loadaddr 0x6C0000 $filesize |

To boot kernel from OSPI, at the U-Boot prompt:

|  |
| --- |
| => setenv boot ubi=> boot |

1. Using QSPI
2. When using QSPI\_1 build with dra7xx\_evm\_config🡪

|  |
| --- |
| U-Boot # mmc rescanU-Boot # fatload mmc 0 ${loadaddr} MLOU-Boot # sf probe 0U-Boot # sf erase 0x00000 0x100000U-Boot # sf write ${loadaddr} 0x00000 ${filesize}U-Boot # fatload mmc 0 ${loadaddr} u-boot.imgU-Boot # sf write ${loadaddr} 0x40000 ${filesize} |

change SW2[5:0] = 110110 for qspi boot.

1. Booting from QSPI from u-boot

|  |
| --- |
| U-Boot # sf probe 0U-Boot # sf read ${loadaddr} 0x1e0000 0x800000U-Boot # sf read ${fdtaddr} 0x140000 0x80000U-Boot # setenv bootargs console=${console} root=/dev/mtdblock19 rootfstype=jffs2U-Boot # bootz ${loadaddr} - ${fdtaddr} |