(1) uboot source code & tool chain:

http://cadinfo.realtek.com.tw/svn/col/DVR/branches/phoenix/bootcode/

(2) build uboot

● choose configs: uboot/boards.cfg or uboot/include/configs/target.h

Ex: target = rtd1195_qa (spi boot)

target = rtd1195_qa_nand (nand boot)

target = rtd1195_qa_emmc (emmc boot)

(3) compile:

cd uboot

make target_config

make

(4) output file:

● uboot only:

uboot/uboot

uboot/uboot.bin

● uboot & hw setting

uboot/examples/flash_writer_u/ dvrboot.exe

uboot/examples/flash_writer_u/ dvrboot.exe.bin

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(5) binary release:

http://cadinfo.realtek.com.tw/svn/col/DVR/branches/phoenix/bootcode/

uboot/release/

- 1195_spi.bin : BGA , SPI boot

- 1095_spi.bin : QFN, SPI boot

- 1195_nand.bin : BGA , nand boot

- 1095_nand.bin : QFN, nand boot

- 1195_emmc.bin : BGA , emmc boot

(6) update bootcode
- by uart

  Reatek> loady 0x1500000 115200

  (load binary….ex: uboot/examples/flash_writer_u/ dvrboot.exe.bin)

  Reatek> go 0x1500000
- by tftp

  Reatek> tftp 0x1500000 filename

  (load binary….ex: uboot/examples/flash_writer_u/ dvrboot.exe.bin)

  Reatek> go 0x1500000

(7) set eth

  Realtek> env set ipaddr x.x.x.x   (board ip)
  Realtek> env set gatewayip x.x.x.x   (board gateway)

Realtek> env set serverip x.x.x.x (tftp server)

Realtek> env save

(8) tftp command

Please make sure item(7) is ready.

Reatek> tftp destination_addr filename

(9) nand cmd:

Reatek> nand erase start_add size(page aligned!)

Reatek> nand write source_add destination_add size(page aligned!)

Reatek> nand read destination_add source_add size(page aligned!)

SLC page size:2K , 2M/MLC page size:8K

Ex:

tftp 1500000 fw_desc_table.bin

nand erase 0x7C00000 0x2000

nand write 0x1500000 0x7C00000 0x2000

(10) Update uboot on eMMC under SPI-booting console.

● Modify config & build binary for eMMC boot.

ex: rtd1195_qa.h

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Index: include/configs/rtd1195_qa.h

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--- include/configs/rtd1195_qa.h   (revision 639443)

+++ include/configs/rtd1195_qa.h   (working copy)

@@ -28,9 +28,9 @@

 /* Flash type is SPI or NAND or eMMC*/

-#define CONFIG_SYS_RTK_SPI_FLASH

+//#define CONFIG_SYS_RTK_SPI_FLASH

 //#define CONFIG_SYS_RTK_NAND_FLASH

-//#define CONFIG_SYS_RTK_EMMC_FLASH

+#define CONFIG_SYS_RTK_EMMC_FLASH

 #if defined(CONFIG_SYS_RTK_EMMC_FLASH)

 #define CONFIG_FLASH_WRITER_SETTING

- **Update uboot**

 Load eMMC binary to DDR address 0x1500000 by uart or tftp.

 Set SWITCH from SPI to eMMC !!! then run binary on ddr address 0x1500000.

 Ex:

     Reatek> tftp 0x1500000 filename

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(load binary….ex: uboot/examples/flash_writer_u/ dvrboot.exe.bin)

(set Switch)

Reatek> go 0x1500000