

RTX-VSMS-SB

Start-Up Guide with Net

V0.0.1

Introduction

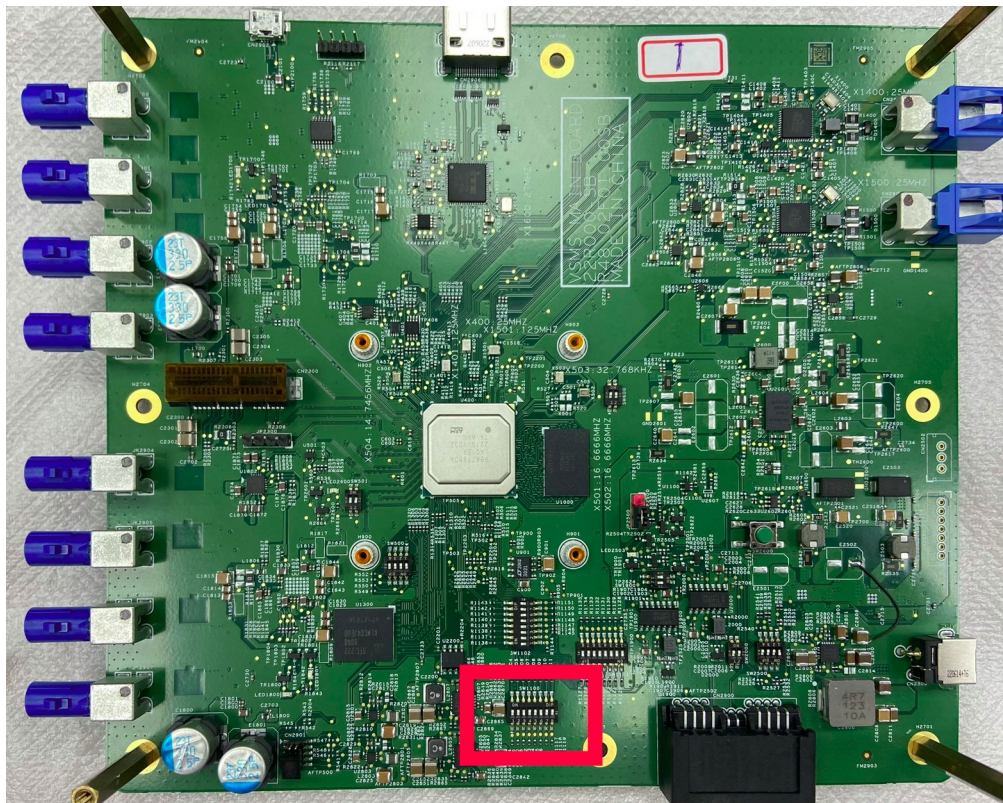
此文件說明 VSMS 電路板生產完後,如何燒錄必要 bin 檔及進入 NFS Rootfs 中。

OS : Ubunru

1. Enter Download Mode

Dip switch configuration for download mode

SW Number	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
SW1100	OFF	OFF	OFF	OFF	ON	OFF	ON	ON



2. Clone RTX Auto Write Tool

將 Tool clone 下來

```
git clone https://github.com/RetronixTechInc/rcar-bsp.git -b main_sb
```

```
jerry@jerry-TravelMate-P215-53:~/Renesas_SV/Git/test/rcar-bsp/Rtx_AutoWriteFlashAndEmmc$ ls
bl31-condor.srec      dummy_rtos.srec      r8a77980-es2-condor.dtb  urandisk-recovery-SVM.img
bootparam_sa0.srec    ICUMXA_Flash_writer_SCIF_DUMMY_CERT_EB200400_condor_SVM.mot  Rtx_AutoWriteFlashAndEmmc.sh
cert_header_sa6.srec  icumxa_loader_SVM.srec  rtx-uboot-env-default.bin
dummy_fw.srec         Image                 u-boot-elf-condor.srec
```

3. 插上電源及 Debug 線

4. 開始燒錄

進到 Rtx_AutoWriteFlashAndEmmc 資料夾執行下面指令, **燒錄時間約莫 5 分 45 秒**.

```
$ ./Rtx_AutoWriteFlashAndEmmc.sh all
```

5. Enter Boot Mode

Dip switch configuration for Boot mode

SW Number	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
SW1100	ON	ON	OFF	ON	ON	OFF	ON	ON

6. 調整 NFS Server IP

進設定 U-Boot 參數畫面

```
baudrate=115200
bootargs=init=/sbin/init root=/dev/mmcblk0p2 rootwait rw ov10635.dvp_order=1
bootargs_ram=setenv bootargs root=/dev/ram0 rdinit=/sbin/init eth_type=${eth_type} geth_ms=${geth_ms}
bootargs_sys_nfs=setenv bootargs rw root=/dev/nfs nfsroot=${nfs_server}:/export/rfs lp=dhcp cma=560M nfsvers=3 ov10635.dvp_order=1 eth_type=${eth_type} geth_ms=${geth_ms}
bootargs_sys_p2=setenv bootargs init=/sbin/init root=/dev/mmcblk0p2 rootwait rw ov10635.dvp_order=1 eth_type=${eth_type} geth_ms=${geth_ms}
bootcmd=run bootcmd_nfs
bootcmd_mmc=run bootargs_sys_p2 load_mmc_p1; booti ${loadaddr} - ${dtb_loadaddr}
bootcmd_nfs=run bootargs_sys_nfs load_mmc_tftp;booti ${loadaddr} - ${dtb_loadaddr}
bootcmd_ram=run bootargs_ram storage_r_kernel r_dtb r_randisk;booti ${loadaddr} ${rd_loadaddr} ${dtb_loadaddr}
bootdelay=2
bootn_size=0x10000000
dtb_loadaddr=0x48000000
eth_type=avb
ethaddr=2E:09:0A:06:DE:EE
fdtcontroladdr=bf71fc28
file_name_dtb=r8a77980-es2-condor.dtb
file_name_kernel=Image
geth_ms=2
load_mmc_p0=run storage_r_kernel r_dtb
load_mmc_p1=run storage; ext4load mmc 0:1 ${loadaddr} ${file_name_kernel}; ext4load mmc 0:1 ${dtb_loadaddr} ${file_name_dtb}
load_mmc_tftp=dhcp; tftp ${loadaddr} ${file_name_kernel};tftp ${dtb_loadaddr} ${file_name_dtb}
loadaddr=0x48000000
nfs_server=192.168.0.1
platform=r8a77980
r_dtb=mmc read ${dtb_loadaddr} 0x6400 0x400
r_kernel=mmc read ${loadaddr} 0x6800 0xF000
r_randisk=mmc read ${rd_loadaddr} 0x18000 0x8000
rd_loadaddr=0x52000000
rtx_args=ov10635.dvp_order=1 eth_type=${eth_type} geth_ms=${geth_ms}
serverip=192.168.0.1
stderr=serial@e6e60000
stdin=serial@e6e60000
stdout=serial@e6e60000
storage=mmc dev 0
usb_pgood_delay=2000
ver=U-Boot 2020.01 (Sep 01 2022 - 10:01:58 +0000)
```

假設

NFS Server ip 為 192.168.3.127,

TFTP Server ip 為 192.168.3.127,

設定如下面指令, 並儲存

```
=> setenv serverip '192.168.3.127'  
=> setenv nfs_server '192.168.3.127'  
=> saveenv
```

ps :

- * NFS Server 預設路徑為/export/rfs

- * Default Kernel 檔名為 Image

- * Default DTB 檔名為 r8a77980-es2-condor.dtb

7. 完成

重開機後, 即會進入 NFS Server 中.