

# **RTX-VSMS-SB**

## **Start-Up Guide with Net**

V0.0.2

# Introduction

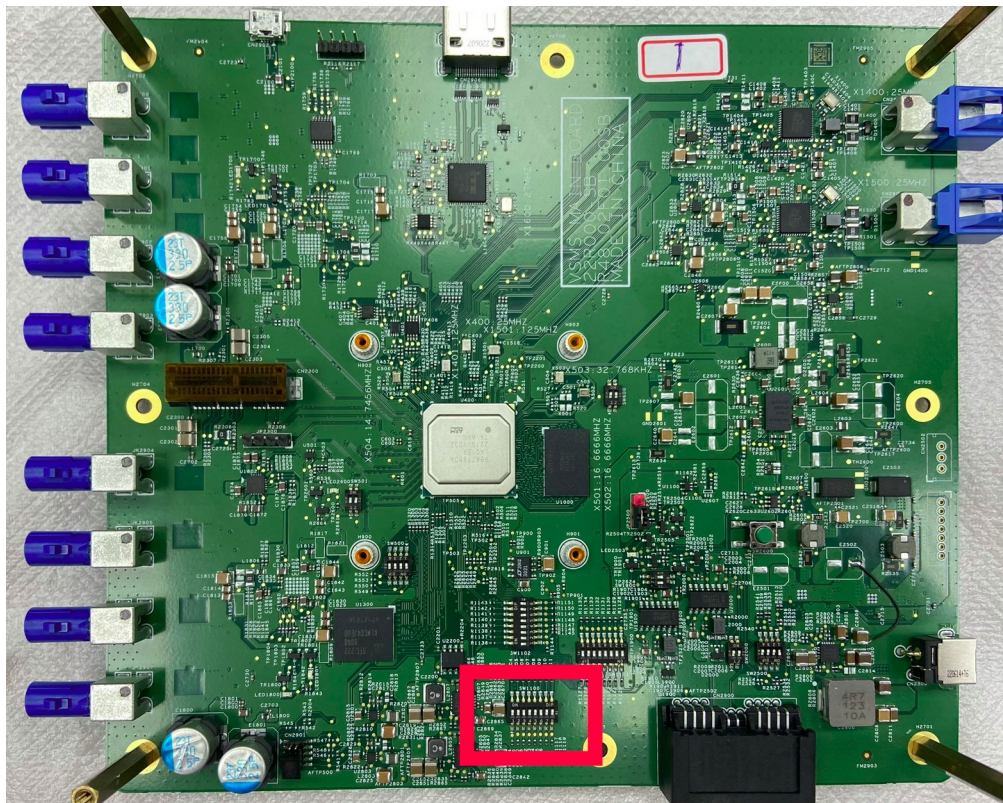
此文件說明 VSMS 電路板生產完後,如何燒錄必要 bin 檔及進入 NFS Rootfs 中。

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

將網路線插入 **CN2904**, 重開機後, 即會進入 NFS Server 中.

ps: CN2904 預設是 **Master Mode**, 所以如使用 1000Base-T1 Converter 須設成 **Slave Mode**.