

SIMCom_SIM800H_EAT_flash_Tool _User Manual_V1.01





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1 Introduction

This chapter describes how to use this tool, including Options, Parameters Configuration, Downloading Operation, etc;

1.1 Options

Click and run the application "SIMCom_SIM800H_EAT_flash_Tool.exe" as diagram 1, if some windows show up, just click OK, the tool run like diagram 2;

| META_DLL. dll | 3,524 KB | 应用程序扩展 | 2013-2-4 19:29 |
|--|----------|-------------|-----------------|
| 🔊 Microsoft. VC90. CRT. manifest | 1 KB | MANIFEST 文件 | 2012-1-16 16:39 |
| Smiodll. dll | 152 KB | 应用程序扩展 | 2012-1-16 16:39 |
| Smsvcm90. dll | 220 KB | 应用程序扩展 | 2012-1-16 16:39 |
| Smsvep90. dll | 556 KB | 应用程序扩展 | 2012-1-16 16:39 |
| Smsver90. dll | 641 KB | 应用程序扩展 | 2012-1-16 16:39 |
| MTK_AllInOne_DA.bin | 5,792 KB | BIN File | 2013-5-23 17:34 |
| 📋 null. txt | 0 KB | 文本文档 | 2012-1-16 16:39 |
| 🗐 scat. txt | 1 KB | 文本文档 | 2012-1-16 16:39 |
| <pre>SIMCom_SIM800H_EAT_flash_Tool.exe</pre> | 2,828 KB | 应用程序 | 2013-6-28 14:53 |
| SIMCom_SIM800H_EAT_flash_Tool.INI | 4 KB | 配置设置 | 2013-8-27 14:44 |
| SLA_Challenge. dll | 24 KB | 应用程序扩展 | 2012-1-16 16:39 |
| 💁 USBSwitchDLLibrary. dll | 42 KB | 应用程序扩展 | 2013-2-4 20:26 |
| 🛅 USBSwitchTool. exe | 84 KB | 应用程序 | 2013-3-14 17:56 |
| USBSwitchTool.ini | 1 KB | 配置设置 | 2013-3-14 17:27 |

| | Picture 1: Application Program | |
|----------------------------|--------------------------------|------------|
| gptions 1 Download | 0 | |
| Scatter/Config File | | |
| Scatter File 0 | | Footsigter |
| Name Regionaddess Beginadd | est Endladdess Locadon | |
| | | |
| | | |
| | | |
| | 6 + | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 3 | | / 2000 B |
| | 0% | 7 + |
| NOF 8 Search | ing 921600 bps 9 | |

Picture 2: Tool Interface



| Table 1: | | | | |
|----------|---------------------|---|--|--|
| Item | Description | Note | | |
| | | 1) Baudrate: setting the baudrate; | | |
| 1 | Ontions | 2) Com Port: choose COM port; | | |
| 1 | Options | 3) USB Download/Readback: Use USB to download; | | |
| | | 4) Format FAT(Disable): Formatting Option | | |
| 2 | Scatter/Config File | Choose the file to download | | |
| 3 | Download | Start to Download | | |
| 4 | Stop | Stop Downloading | | |
| 5 | Scatter File | Indicate the folder of scatter file located; | | |
| 6 | Download file list | List the file which is chosen to download; | | |
| 7 | Progress bar | Indicate the current progress | | |
| 8 | Com port | Indicate the current COM port; if USB used, it will | | |
| | | show "Searching" | | |
| 9 | Baud Rate | Indicate the current baud rate | | |

1.2 Parameters Setting

Click the "Option" button, then you will see four options as picture 3,

| SINCom_SIN800H_EAT_flash_Tool_V1.01 | | | | | |
|-------------------------------------|----------------|--------------------|-------------|------------|--|
| Options | | | | | |
| Baudrate | + I | | | | |
| COM Port | • | 0 | | | |
| USB Download/Read | dback | Stop | | | |
| Format FAT (Disa) | bled) | | | | |
| Name | Decise address | Density and denses | | Lange Carr | |
| Name | negion address | Begin address | End address | Location | |
| Name | negion address | begin address | End address | Location | |
| Nalle | negion audress | begin address | | Location | |
| Name | | begin address | | Location | |
| Name | | begin address | | Location | |
| Name | | begin address | | Location | |
| Name | | begin address | | Location | |

Picture 3 Options

1.2.1 Download Option

Click the "USB Download/Readback", it means that you choose the USB download mode, at this time, "Baudrate" and "COM Port" will be disabled; otherwise, it will use UART mode; as picture 4;



| SINCom_SIN800H_EAT_flash_Tool_V1.01 | | | | | |
|-------------------------------------|-------------|---------------|-------------|----------|--|
| Options | | | | | |
| Baudrate | | | | | |
| COM Port | + | 0 | | | |
| VSB Download/Readback | | Stop | | | |
| Format FAT (Disabled) | | | | | |
| Name Reg | ion address | Begin address | End address | Location | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Picture 4:Download Mode

1.2.2 Baud Rate

Click the "Baudrate" to choose the baud rate, be noted that, for now we could support 460800 maximum; as picture 5

| SINCom_SIN800H_EAT_flash_Tool_V1.01 | | | | | | |
|-------------------------------------|----------|-------------|----------|--|--|--|
| Options | | | | | | |
| Baudrate 🕨 🕨 | 921600 | | | | | |
| COM Port 🕨 | 460800 | | | | | |
| USB Download/Readback | 230400 | | | | | |
| Format FAT (Disabled) | 115200 | | | | | |
| format fAT (prisoleta) | 57600 | | | | | |
| Name Region addres | \$ 38400 | End address | Location | | | |
| | 19200 | | | | | |
| | 9600 | | | | | |
| | | _ | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Picture 5: Baud Rate

Note: Only UART mode needs to set the baud rate; for USB mode, this option is disabled, no need to care;

1.2.3 COM Port

According to the machine mange to decide the com port, then set it as picture 6;



| 🛃 SIECom_SIE80 | OH_EAT_flas | h_Tool_V1. | D1 | |
|-------------------|----------------|---------------|-------------|----------|
| Options | | | | |
| Baudrate | • <u> </u> | | | |
| COM Port | | COM1 | | |
| USB Download/Read | lback | Stop | | |
| Format FAT (Disa) | oled) | | | |
| Name | Region address | Begin address | End address | Location |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Picture 6: Com Port

Note: Only UART mode needs to choose the COM port; for USB, this option is diabled;

1.2.4 Format FAT

Click the "Format FAT(Disable)", then you could find the window as picture 7;

| F | ormat Options | | × |
|---|-----------------------------|---|---------------|
| | Oo Not Format FAT | | ОК |
| | The FAT area is not format | ted after the download | Cancel |
| | Format FAT | | |
| | FlashTool automatically for | mats the FAT area. The format begin address and format length need no | ot to be set. |

Picture 7: Format FAT Option

1.3 Download software

This chapter mainly describes how to use this tool to download the software; there are two kinds of software: standard version and EAT version;

1.3.1 Standard Version Software

Click the "Scatter/Config File" on the main interface, then you will see the "Open Scatter File", find the software what you want to download and choose the ".cfg" file, as picture 8;



| Options Open Scatter File | a . | _ |
|--|---|------------|
| | <u>ر ۲</u> | |
| | ← 🗈 📩 📰 - | |
| Scatter/Config File Down | | Rootlandar |
| Scale File Name Rec 系面 系的文档 文型 我的支档 | | |
| 文件名(图): 1308B02SIM800H32.cfg 文件类型(I): Scatter/Config File (*.txt, *. | ▼ 打开 (0) cfg) ▼ 取消 | |

Picture 8: standard software file

1.3.2 EAT Version Software

The main difference between standard and EAT version is the file need to be chosen as picture 9;

| Scatter/Config File C Scatter File 0 Name | | NSOOKS2_MIIC_EMBEDUEDAT | | Bootinijer |
|---|-------------------------------------|---|-------|------------|
| <u>. </u> | #20文档 第30世紀 交件名 文件名 文件名 | (g): [130880151M8000K32_EAT.c 型(1): Scatter/Config File (4 | ifę 💌 | 打开@ |

Picture 9: EAT software files

1.3.3 Choose file to download

No matter what version of software to be downloaded, you need to choose the software you want to download (txt or cfg format), and the files will be listed in the window to indicate which is chosen or not, the default state is chosen;

1) Standard Version: in standard version, in the download file list, there are four kinds of files



| "ARM_ | BL"、"ARM | I_EXT_B | L"、"PI | RIMART_MAUI" and "VIVA" as picture 10; |
|---------------------|---------------------|------------------|----------------|---|
| <i>⊯</i> ⊂ | 2 | Ø | | |
| Scatter/Config File | Download | Stop | | |
| Scatter File | E:\SIMCOM\SIMCom \$ | Server\2.1 GSM N | 4odule\33 SIM8 | 00H&SIM800L\FW\1308B02SIM800H32\1308B02SIM800H32\1308E |
| Name | Region address | Begin address | End address | Location |
| ARM_BL | 0x70006600 | 0x70006600 | 0x700081F3 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\FW\1308B02SIM80 |
| ARM_EXT_BL | 0x10002800 | 0x10002800 | 0x10007073 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\FW\1308B02SIM80 |
| PRIMARY_MAU | JI 0x1000B000 | 0x1000B000 | 0x10075B4F | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\FW\1308B02SIM80 |
| | 0x10075F50 | 0x10075F50 | 0x10334533 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 |

Picture 10: file list in the window

- 2) **EAT Version**: EAT version has two kinds of software package: one is only core file; another one with core file and app file;
 - a) when choose EAT version which only contain Core file, it will indicate the following five files "ARM_BL", "ARM_EXT_BL", "PRIMART_MAUI", "THIRD_ROM" and "VIVA" as picture 11 shows;

| catter/Config File | Ca Download | 0 | | | |
|-------------------------|----------------|---------------|--------------|--|------------------|
| catter File | | | | | |
| CONTRACTOR OF THE OWNER | 下载软件\MTK\SIN | 4800H\SIM800H | 32_MXIC_EMBE | DDEDAT\1308B01SIM800H32_EAT_noly_core.cfg | Bootlander |
| Name | Region address | Begin address | End address | Location | |
| ARM_BL | 0x70006600 | 0x70006600 | 0x700081F3 | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDA | ISIM800H32_EAT_B |
| ARM_EXT_BL | 0x10002800 | 0×10002800 | 0x10006DCF | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDA | VEXT_BOOTLOADER |
| PRIMARY_MAUL | 0x1000B000 | 0x1000B000 | 0x10060DB3 | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDA | I'VROM |
| THIRD_ROM | 0x10070000 | 0x10070000 | 0x100701EF | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDA | I\COREAPI |
| VIVA | 0x100705F0 | 0x100705F0 | 0x101B5AA7 | F:\下载软件\MTK\SIM800H\SIM800H32_MMC_EMBEDDEDA | AVIVA |
| | | | | | |
| 21 | | | | | |

Picture 11: EAT version only with core file

b) with download the EAT version contains Core file and App file, it will show five core files and one app file as picture 12;



| Scatter/Config File | C≇ Download | 0 Stop | | |
|---------------------|----------------|---------------|--------------|---|
| catter File | \下载软件\MTK\SIN | 4800H\SIM800H | 32_MXIC_EMBE | DDEDAT\1308B01SIM800H32_EAT.cfg Bootlander |
| Name | Region address | Begin address | End address | Location |
| ARM_BL | 0x70006600 | 0x70006600 | 0x700081F3 | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\SIM800H32_EAT_I |
| ARM_EXT_BL | 0x10002800 | 0x10002800 | 0x10006DCF | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\EXT_BOOTLOADE |
| PRIMARY_MAUL | 0x1000B000 | 0x10008000 | 0x10060DB3 | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\ROM |
| THIRD_ROM | 0x10070000 | 0x10070000 | 0x100701EF | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\COREAPI |
| VIVA | 0x100705F0 | 0x100705F0 | 0x101B5AA7 | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\VIVA |
| ☑ app | 0x10200000 | 0x10200000 | 0x10200BCB | F:\下载软件\MTK\SIM800H\SIM800H32_MXIC_EMBEDDEDAT\app |
| | | | | |
| | | | | |
| <[| | | | |
| <[| | | | 0% |

Picture 12: EAT version with App and Core file

Note: if you just need to download the app file, just choose the app file, and leave the other five files alone;

1.4 Downloading

After finish all the setting, now you could press the download button;

1) press the "Download" button, then power on the module; if the COM port or USB communicates normally, you will see the progress bar keep going, as picture 13;

| SINCon_SIN800H_EAT_flash_Tool_V1.01 | | | | | |
|-------------------------------------|-----------------|------------------|-----------------|---|--|
| Options Download | | | | | |
| Scatter/Config File | ∩≃ Download | 0 Stop | | | |
| Scatter File E:V | SIMCOM\SIMCom S | ierver\2.1 GSM M | fodule\33 SIM80 | 800H&SIM800L\Fw\1308B02SIM800H32\1308B02SIM800H32\1308E | |
| Name | Region address | Begin address | End address | Location | |
| ARM_BL | 0x70006600 | 0x70006600 | 0x700081F3 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 | |
| ARM_EXT_BL | 0x10002800 | 0x10002800 | 0x10007073 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 | |
| PRIMARY_MAUI | 0x1000B000 | 0x1000B000 | 0x10075B4F | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 | |
| | 0x10075F50 | 0x10075F50 | 0x10334533 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 | |
| | | | | | |
| | | | | | |
| | | | 100% (| % (Download DA now) | |
| 148496 Butes / O Bos | NOR | C0M51 | 460800 bps | s 0:00 sec | |

Picture 13: Begin to download

2) wait for some while, then "OK" will come out, meanwhile, a green "○", it indicates that the download procedure is successful as picture 14;



| 51ECom_S1 | M800H_EAT_ | flash_ | Tool_V1.0 | 1 | | | | - 🗆 × |
|---|---|-------------------------------|---|-----------------------------|-------------|------------|--|--|
| Options Download | | | | | | | | |
| Scatter/Config File | Ca Download | | Ø Stop | | | | | |
| Scatter File E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM800H32\1308B02SIM800H32\1308B | | | | | | | | |
| Name | Region ad | ldress E | egin address | End address | Location | | | |
| ☑ ARM_BL ☑ ARM_EXT_BL ☑ PRIMARY_MA ☑ VIVA | 0x700066 0x100028 UI 0x10008C 0x10075F | 00 C 00 C 100 C 50 C |)x70006600 x10002800 x10008000 x100075F50 | 0 OX 0 0 Lastactic | on was done | × | ver\2.1 GSM Module\33 SIM800H&SIM800 ver\2.1 GSM Module\33 SIM800H&SIM800 ver\2.1 GSM Module\33 SIM800H&SIM800 ver\2.1 GSM Module\33 SIM800H&SIM800 | L\Fw\1308B02SIM8C L\Fw\1308B02SIM8C L\Fw\1308B02SIM8C L\Fw\1308B02SIM8C |
| | | | | | | | | |
| 100% (Download software to flash now) | | | | | | | | |
| 3313972 Bytes / | 154.11 KBps | NOR | COM51 | 460800 bps | 0:39 sec | NOR: (32M) | 6+32Mb) [MX] MX25U3235E | |
| MT6260_S0000 | 32Mb SRAM | Project | : SIM800H32 | | | N/A | | 1 |

Picture 14: Download Successfully



2 Common Errors

This chapter mainly describes the common errors which could meet while downloading the software;

2.1 Different Flash Types

When you choose the wrong file, for example, another type flash downloads into current flash, the tool will warn with the following message "Flashtool Error:S_DL_MAUI_FLASH_ID_NOT_Matched_With_Target(5095)" as picture 15



Picture 15: Flash Type not matched Error

2.2 Download No Reaction

When you press the "Download" button, and after a long time, the progress bar still remains in "Waiting" state; as picture 16



| SINCom_SIN8 | 00H_EAT_flas | n_Tool_¥1.(|)1 | - 🗆 🗙 | | |
|--|--|--|--|--|--|--|
| Options Download | | | | | | |
| C Scatter/Config File | ⇔ Download | Ø Stop | | | | |
| Scatter File E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM800H32\13 | | | | | | |
| Name | Region address | Begin address | End address | Location | | |
| ☑ ARM_BL ☑ ARM_EXT_BL ☑ PRIMARY_MAUI ☑ VIVA | 0x70006600 0x10002800 0x10008000 0x10075F50 | 0x70006600 0x10002800 0x1000B000 0x10075F50 | 0x700081F3 0x10007073 0x1007584F 0x10334533 | E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 E:\SIMCOM\SIMCom Server\2.1 GSM Module\33 SIM800H&SIM800L\Fw\1308B02SIM80 | | |
| I. | | | | | | |
| | | | | 0% (Waiting) | | |
| O Bytes / O Bps | NOR | Searching | 460800 bps | 0:00 sec | | |

Picture 16: Download no reaction

Normally, there should be two reasons caused this problem:

- 1) the wrong download mode: for example, you use Serial Port while choosing USB mode; or choose USB but with serial line;
- 2) choose the wrong COM port:



3 Hardware Preparation

As for now, SIM800H only could support USB to download the software, when you use our EVB-Kit to download the software, you need to prepare the following stuff;



1) Install MTK_USB_Driver,

;after you finished the driver

installing, you will see the following "MTK USB Port(Comxx)";



2) Connect the EVB-Kit as the following picture 17 shows;



Picture 17: connection for downloading

3) After you finish all this preparation, you should run the tool as introduced above, then switch on the POWER Key, then you could wait until the download procedure finished;



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