GSM Module Upgrading Manual

1. Steup RemoteCom mode:

Default IP:	172.16.99.1	Versions	Modules	IP Address
		VS-GW1200-4G	1 * 4G	172.16.99.1
Username:	admin	VS-GW1600-8G	2 * 4G	172.16.99.1-2
Password :	admin	VS-GW1600-12G	3 * 4G	172.16.99.1-3
		VS-GW1600-16G	4 * 4G	172.16.99.1-4
		VS-GW1600-20G	5 * 4G	172,16,99,1-5

GSM Module COM For x												
← → C ⋒ 🗋 172.16.9	← → C f [172.16.99.1/cgi-bin/php/system-com.php											
Remote COM Mode	SIM840W> N0											
Power Down No Pulse:	● No ○ Yes											
Entry Remote COM:	Entry Remote COM											
Leave Remote COM:	Leave Remote COM After finished, dick this											
Power for Modules:	Power On Power Off											
Copyright © 2012 OpenVox All Rights Reserved. TEL:+86-755-82535461 FAX:+86-755-83823074												

Click "Entry Remote COM" to activate Flashing Mode, you will see there is a circle running, once it is stopped, means RemoteCom is ready.



2.Run RemoteCom and connect Gateway:

Fill in IP of gateway and click "Connect", then waiting for COM list shows up:

RemoteCom			
172.10.33.1		Connect	xit
Local Virtual COM COM20 COM21 COM22 COM23	Remote GSM COM GSM-1 GSM-2 GSM-3 GSM-4	List real ports Connect to the remote server List exist virtual com ports com2tcpbaud 115200ignore-dsr \\.\CNCB4 172 16.99 com2tcpbaud 115200ignore-dsr \\.\CNCB5 172 16.99 com2tcpbaud 115200ignore-dsr \\.\CNCB7 172 16.99 com2tcpbaud 115200ignore-dsr \\.\CNCB7 172 16.99	1 500 1 500 1 500 1 500 1 500
		× [•
		Clear Message	
Power Off Remote G	SSM Modules Power	On Remote GSM Modules Refresh Virtual Com L	ist

3.Run Flash_tool



Click "Scater/Config File" and choose the following file "scat1224B02SIM840W16.txt", then you will see the window looks like above.



Then choose baudrate "115200" and COM port "20":

NOR COM23 115200 bps

Download R	Baudrate	•	921600				
Download Age Download Age Scatter File Authentication Certificate File	COM Port USB Download/Readback USB Download/Readback Send RootCert Fordbly USB Download Without Eastery Operation Methods Transmission Options Baseband Chip Options	•	460800 230400 115200 57600 38400 19200 9600	RootCert File	Format	CM Download	Simp Simp ISIMB: USB Downla USB Downla
Name Mame BOOTLOA ROM ZIMAGE	Format FAT (Disabled) Backup and Restore (No Action) Upload (No Upload) Multi-Load (No Action) FAT Range Check Before Download	•	nd address 08010453 080BC513 0818D6E9	Location E:\sim840\1116B01S E:\sim840\1116B01S E:\sim840\1116B01S	IM840W16_MXIC IM840W16_MXIC IM840W16_MXIC	_OPENVOX\SIMCOM _OPENVOX\SIMCOM _OPENVOX\SIMCOM	152_MOD_1632_10A 152_MOD_1632_10A 152_MOD_1632_10A

Download R	Baudrate	•	921600				
Download Ag	COM Port USB Download/Readback	•	460800 230400	RootCert File	C Format	C≊ Download	
Download Age	Send RootCert Forcibly	X	57600			170070 001 111000	Bootload
Scatter File Authentication Certificate File	USB Deveload Without Battery Operation Methods Transmission Options Baseband Chip Options	, F	38400 19200 9600	52_MUD_1632_104	A_PCB01_gprs_N	416252_501.111680	ISIM8 ² Downloa BootR0 ⁴ USB Downloa
BootCert File Besebarin Chip Options Name Badup and Restore (No Action) Ø B00TLD4 Upload (No Upload) Ø R0M Multi-Load (No Action) ✓ ZIMAGE FAT Range Check Before Download		• 10 • 0 • 0	1 address 8010453 808C513 818D6E9	Location E:\sim840\1116B01SIN E:\sim840\1116B01SIN E:\sim840\1116B01SIN	1840W16_MXIC 1840W16_MXIC 1840W16_MXIC	_OPENVOX\SIMCOM _OPENVOX\SIMCOM _OPENVOX\SIMCOM	52_MOD_1632_10A_I 52_MOD_1632_10A_I 52_MOD_1632_10A_I

Download R	Baudrate	+	-			
	COM Port	COM1	1	0	2	
Download Ac	USB Download/Readback	COM10	RootCert File	Format	Download	
	USB Download/ReadBack (Data Card)	COM11				Pootlan
Jownioad Age	Send RootCert Forcibly	COM12		0.0000000000000000000000000000000000000		Lieb
Scatter File		COM13	152_MOD_1632_1	UA_PCB01_gprs_I	MT6252_S01.1116B01	SIM8 ² Downlo
Authentication	Operation Methods	, <u>COM20</u>				Deat
Certificate File	Transmission Options	▶ COM21				LISR
	Baseband Chip Options	COM22				Downlo
HootCert File	Format FAT (Disabled)	COM23				
Name	Backup and Restore (No Action)	nd address	Location			
BOOTLOA	Upload (No Upload)	x08010453	E:\sim840\1116B01S	IM840W16_MXIC	_OPENVOX\SIMCOM	52_MOD_1632_10A_
ROM	Multi-Load (No Action)	• 080BC513	E:\sim840\1116B01S	IM840W16_MXIC	_OPENVOX\SIMCOM	52_MOD_1632_10A_
	FAT Range Check Before Download	30818D6E9	E:\sim840\1116B015	IM840W16_MXIC	UPENVUX\SIMCUM	52_MUD_1632_10A_

Click "Download" to to be ready for writing new firmware to GSM-1 module:

<u>6</u>	the second second		FlashTool	(Test Mode)	a service of the		× . ×
Elle Actions Op Download Read	tions <u>W</u> indow <u>H</u> elp Back Memory Test						
Download Agent	Scatter/Config File	Auth File	Cert File	RootCert File		Download	Ø Stop
Download Agent Scatter File Authentication File Certificate File RootCert File	E.\sin840\FlashTod	_~51209.00*MTK,	Allröne, DA bin	DDM52_MOD_1632_	104_PC801_gpr	_MT6252_S01.1116801	SIMD Bootloader USB Download Download Download
1			7				3
0 Butec / 0 Boc	NO	P COM20	#15200 bog	U% [Waiting]			
o bytes / 0 bps	NO	n COMZU	\$1,2200 005	0.00 Sec			

Follow the same steps above to open other 3 Flash_tool windows to upgrade GSM-2, GSM-3 and GSM-4:

				<u>6</u>				FlashTool (Test Mode)			
(ite	0 (2310)		Biencell (Ale	Ele Actions Opt	tions <u>W</u> indow	Help						
				Download Agent	Scatter/Config	y Test File Aul	n File	Cert File	RootCert File			Ø Stop
300	Ellipentie Ver 101.1.	Cipi-allon	Elle Action	Download Agent	E:\sim840\Fl	ashTool_v5.12	09.00\MTK_AI	nOne_DA.bin				Bootloader
			Download	Scatter File Authentication File	E:\sim840\11	16B01SIM840	W16_MXIC_OF	PENVOX\SIMC	DM52_MOD_1632_1	0A_PCB01_gprs	MT6252_S01.1116E	101SIM8/ USB Download
W02	etoni selto:	Elle Action	Download A	Certificate File								USB
		Download	Scatter File	RootCert File	<u> </u>							Dowmoad
-	6	Download	Authenticatio									-
	Downloa	Download A	Certificate Fil									
		Scatter File	Name									
140	Downlo	Authenticati										
	Scatter E	RootCert File	ZIMAGE									
fit	Authentic	Name										
	Certificate	BOOTL ROM										
	RootCert	ZIMAGI										
(
				1					12 (Waiting)			*
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			4									
-		0% (Wating)										
			0 Bytes / 0 B	DS	NOR	COM22	115200 bps	0:00 sec				
		4					140					
							0% (Waiting)					
		0 Bytes / 0 B	ps	NOR	COM21	115200 bps	0:00 sec					les Pow
3 m.					_	0% (Wai	ting)					
	0 Bytes /	0 Bps		NOR COM20	115200	bps 0:00 :	sec					

4. Turn to RemoteCom window and start to upgrade processes

172.16.99.1	Connect
Local Virtual COM Remote GSM COM COM20 GSM-1 COM21 GSM-2 COM22 GSM-3 COM23 GSM-4	List real ports Connect to the remote server List exist virtual com ports com2tcpbaud 115200ignore-dsr \\\CNCB4 172.16.99.1 500 com2tcpbaud 115200ignore-dsr \\\CNCB5 172.16.99.1 500 com2tcpbaud 115200ignore-dsr \\\CNCB7 172.16.99.1 500 com2tcpbaud 115200ignore-dsr \\\CNCB7 172.16.99.1 500
1 Power Off Remote GSM Modules	Clear Message

Power off the GSM modules then Power on, the downloading process will be actived.

	1.													
					46% (Downlo <mark>ad software to flash now)</mark>									
	881000 Byte	es / 8.04 Ki	Bps	NOR	COM23	115200	bps 2:10 sec	NOR:(16Mb+32Mb) [MX] MX25U1635E					
4	MT6252_S0101 32			Project: SI	MCOM52_M	OD_1632_10	A							
					45% (Do	<mark>own</mark> load softw	ware to flash now.)						
868712 B	tes / 8.00 KBp	s	NOR	COM22	115200	bps 2:10	2:10 sec NOR:(16Mb+32Mb) [MX] MX25U1635E							
MT6252_	50101 32	Mb SRAM	Project: SI	MCOM52_MC	DD_1632_10	A	N/A							
				45% (D	<mark>own</mark> load soft	tware to flasł	n now)							
640 Bytes / 7.90	KBps	NOR	COM21	115200	bps 2:1	10 sec NC	R:(16Mb+32Mb)	[MX] MX25U1635E						
6252_S0101	32Mb SRAM	Project:	SIMCOM52_M	10D_1632_1	0A	N/A	A			1				
40 Bytes / 2.70 K	Bps	NOR	COM20	115200	bps 0:	32 sec								

It will take about 4 minutes to finish downloading process. Then you will see green circuts on your deskop after the downloading finished.

Downloa Downloa Scatter Fil Authentic Certificate RootCert I Name Ø BOO Ø ROM	Authenticat Certificate F Name BBOTI ROM ZIMAG							OK (N Dest action was done at 17:11
		-				100% (Downlo	ad software t	o flash now)
		1623870 Bytes / 7.7	4 KBps	NOR	COM23	115200 bps	3:48 sec	NOR:(16Mb+32Mb) [MX] MX25U1635E
	3	MT6252_S0101	32Mb SRAM	Project: SI		_1632_10A		N/A
					100% (Dowr	load software t	o flash now)
	1623870 By	tes / 7.70 KBps	NOR	COM22	115200 bps	3:50 sec	NOR:(16M	b+32Mb) [MX] MX25U1635E
	MT6252_S	0101 32Mb SRAM	Project: Si		OD_1632_10A		N/A	
4	57				102			

Click the green circles and start Format process:

<u>6</u>	A States	-1 . S. 24	Flas	shTool		18.222	No and X A X			
File <u>A</u> ctions <u>Op</u> Download Read	tions <u>W</u> indow <u>H</u> elp Back Memory Test									
Download Agent	Scatter/Config File	Auth File	Cert File	<mark>⊯</mark> RootCert File	Format	C≇ Download				
Download Agent E:\sim840\FlashTool_v5.1209.00\MTK_AllInOne_DA.bin										
Scatter File E:\sim840\1116B01SIM840W16_MXIC_0PENV0X\SIMC0M52_M0D_1632_10A_PCB01_gprs_MT6252_S01.1116B01SIM84										

Click "Format" and leave the settings as below



After click "OK", the format process is ready, apply the steps to all 4 Flash_tool windows. Then power off and power on the GSM Modules to active format process:

172.16.99.1		Connect
Local Virtual COM COM20 COM21 COM22 COM23	Remote GSM COM GSM-1 GSM-2 GSM-3 GSM-4	List real ports Connect to the remote server List exist virtual com ports com2tcp -baud 115200 -ignore-dsr \\\CNCB4 172.16.99.1 500 com2tcp -baud 115200 -ignore-dsr \\\CNCB5 172.16.99.1 500 com2tcp -baud 115200 -ignore-dsr \\\CNCB7 172.16.99.1 500
		Clear Message
Power Off Remote G	SM Modules Power	2 Con Remote GSM Modules Refresh Virtual Com List

	1					22% (D	ownload DA now.	.)	
⊀ Param	20332 Bytes	/ 9.93 КВр	os	NOR	COM23	115200 bps	0:02 sec		
OT 203	32 Bytes / 9.93 KBps		NOR	COM22	22% (Download DA n 0:02 sec	ow)		
			iicit	CONTE	22% (D				
0332 Bytes	/ 9.93 KBps	NOR	COM21	115200	bps 0:02	sec			

After Format process finished, you will see the window as below. You need to reboot the gateway to finished upgrading GSM Modules.

<u>n</u>	The second	- Calls - Eller	Fla	shTool	An You R		and support	× *
Ele Actions Opt	ions Window Help Back Memory Test							
Download Agent	Scatter/Config File	Auth File	Cert File	RootCert	File F	😨 ormat	Download	
Download Agent Scatter File	E:\sim840\FlashTool_ E:\sim840\1116B01S	√5.1209.00\MTK_ IM840W16_MXIC	_AllInOne_DA.bin _OPENV0X\SIM	COM52_MOD_	1632_10A_PC	B01_gprs_M	MT6252_S01.1116B01	ISIM8 ⁴ Bootloader USB Download
Authentication File Certificate File RootCert File	I							BootROM USB Download
Name SOOTLOADER ROM ZIMAGE	Region address 0x08000000 0x08011000 +0x00000400	Begin address 0x08000000 0x08011000 0x080BC914	End address 0x08010453 0x080BC513 0x0818D6E9	Location E:\sim840\11 E:\sim840\11 E:\sim840\11	16801SIM840 16801SIM840 16801SIM840	w16_MXIC w16_MXIC w16_MXIC ок		52_MOD_1632_10A_PC6 52_MOD_1632_10A_PC6 52_MOD_1632_10A_PC6
Parameters	Information addr(0x0000000	0), len(0), 0TP_W	RITE,		Lastactic	n was do	ne.at17:21	
		100% (For	mat NOR flash	ADDR[0x001C	8000), LEN(0xi	00025000).	0.1	
38540 Bytes / 8.65 H	KBps NOI	COM23	115200 bps	0:13 sec	NOR:(16Mb+	OKP) [WX] N	MX25U1635E	
MT6252_S0101	RAM: N/A				N/A			

5. Confirmation

VoxStack	SYSTEM GSM SIP ROUTING SMS NETWORK
GSM DETAILS	GSM Settings Call Forwarding DTMF Toolkit
Name:	
Speaker Volume:	70
Microphone Volume:	1
SIM IM SI:	460025440209098
GSM Module IMEI:	860041020970367 Modify
GSM Module Revision:	Revision:1224B02SIM840W16
Carrier	CHINA MOBILE
Signal	19
BER	0
Status	READY

Follow the picture above to check current version of firmware on GSM module.

The tag "Revision:1224B02SIM840W16" is the version number of firmware you just upgrade. If not, means upgrading failed.

Notice:

If you have more than 1 GSM board (4 ports), then you need to upgrade those boards one by one, the steps are all the same as above.

Related Files:

RemoteCOM: http://downloads.openvox.cn/pub/firmwares/GSM%20Gateway/tools/RemoteCom_Setup.zip

Flash_tool: http://downloads.openvox.cn/pub/firmwares/GSM%20Gateway/tools/FlashTool_v5.1209.00.zip

Firmware for GSM modules: http://downloads.openvox.cn/pub/firmwares/GSM%20Gateway/tools/SIM840W_firmware_current.zip

Latest firmware for VoxStack GSM Gateway: http://downloads.openvox.cn/pub/firmwares/GSM%20Gateway/wg400-current.img

Warning:

The firmware file "SIM840W_firmware_current.zip" must be decompressed under path without SPACES like "E:\myfiles\", if it is "E:\my files\", the files will be broken after unzipped. Please take this note seriously!

All steps above MUST be carried on under windows XP or windows 7 32bit system.