





1 SpyTracer set up file

setup_SpyTracerV2-v2.8.0_Patch.exe



setup_SpyTracerV2_v2_8_0_Patch.rar

2 Hardware Configuration

Before using the debug tool, you should connect the serial port to the PC correctly. The SIM900 provides two unbalanced asynchronous serial ports. The main serial port is the normal port that can use the AT command, the debug serial port is the debug port. The **debug serial port** supports the Trace function.

The GSM module is designed as a DCE (Data Communication Equipment), following the traditional DCE-DTE (Data Terminal Equipment) connection, the module and DTE are connected through the following signal. Under normal circumstance, connect the **debug serial port** to your PC serial directly while you are using the EVB of SIMCOM.

Note: When you are not using the EVB of SIMCOM, you should notice that module only supports the TTL level. You should add the level converter IC between the DCE and DTE, if you connect it to the PC.

3 STEP BY STEP

1 Run "SpyTracerV2" and you will see the interface:



LE Spy	/IracerV2 -	v2.8.0_Patch				
Iracer	<u>Lonfiguration</u>	Tool2 Helb				EXIT
		کسیل Config file : <defaul< td=""><td>t> - Link type = Serial</td><td>(COM15) - Ready - Not</td><td>Running</td><td></td></defaul<>	t> - Link type = Serial	(COM15) - Ready - Not	Running	
S	tart		Clear			Save
	<u> </u>		Board: 721	O Mode: Only acquisit:	ion Link: Not Co	nnected

NOTE: When you firstly use this software, above green color bar is red because of absence of configuration files.



Firstly, load the definition file and structure file. Secondly, set the corresponding COM port on your PC and 'Speed' to 115200. You will see picture as followed:

SIM900 SpyTracer_UGD_V1.00

SIM900 SpyTracer User Guid	e			SIM Com A company of SIM Tech
SpyTracerV2 -	v2.8.0_Patch			1
Tracer <u>C</u> onfiguration	<u>T</u> ools Help	29 - 30 -		
투한	¥.			EXIT
₹ 53 £	- Config file : <default></default>) - Link type = Serial (CO)	M15) - Ready - Not Runr	ling
Link configuration		? 🛛	3	
Definition file D:/fax/fax/0x3	700001000000115.def			
Structure file D:/fax/fax/0x37	00001000000115.str			
Serial 💌				
Serial configuration Port COM15 💌		Speed 115200 💌		
Ok		Cancel		Sa

Note: Definition file and structure file are different from firmware build version. Be sure the right definition file and structure file are loaded according to the firmware version in module.



3 Click the

for "Mobile configuration". Load the signal filter. Normally, SIMCom

provides '*.enc' file to be loaded as the signal filter configuration defining the types of signal to be captured.



Lobile configura	tion						
Processes & Messages	L1 trace]					
-Processes list	ı f	-Traced pro	cesses —				
ACC		Process	Input	Output	Appli On		
ACC1		COMIDI					
ACCVIR		GAUDIO					
ACCVIR1 -		HAII					
APPTCP		זעע					
ASNAS							
ATUB		MEL					
AICL		MUM					
AILS							
ATDR							
ATDI							
ATGN							
ATNT							
ATP							
ATPP							
ATSC							
ATSM							
ATSS 🐷							
< > >				Ad	wanced setting	5	
Ok Add Load Save Cancel							

Note: type of trace can be found at the end of the doc

4 Click the "Start" button on the left part, you will see picture as followed:

🛃 Spy	Tracer¥2 - v2.8.	0_Patch			
Tracer	<u>C</u> onfiguration <u>T</u> ools	Help			
	平 日	¥			
		fig file · (defe	ult) - Link type = Seriel	(COM15) - Ready - Ruppin	
			Acquiring		
S	top		Clear		Save
			Board: 7210	Mode: Only acquisition	Link: Conecting



5 Power on SIM900, SpyTracer will start to capture the log

6 Click the "Stop", and "Save", and we will save the captured log file. You will see picture as followed:

E Spy	Tracer¥2 - v	v2.8.0_Patch			
Tracer	Configuration	Iools Help 米国			EXIT
-	11	تېسىلە Config file : <default></default>	- Link type = Serial (C) - Ready - Not Ru	nning
					~
		LE Save		? 🛛	
		File name p	refix: /zanz_chen/貞面/acd2		
		Storage f	iles		
		Spy bi	nary file	Crew 1	
				Cancer	
					0
S	tart		Clear		Save
			Board: 7210	Mode: Only acquisition	n Link: Not Connected

4 type of trace

Voice call	
MO/MT call failure	ATCL ATP SPC CC CMM MMM RR CMR
Call forwarding failure	ATCL ATSC ATP ATSS SPC CC CMM MMM RR SSCMR
Multiparty call failure	ATCL ATSC ATP ATSS SPC CC CMM MMM RR SSCMR

Network	
Cannot register	ATNT ATP SPN MMM GMM CMM RR
Mobility	ATNT ATP SPN MMM GMM CMM RR
PLMN selection	ATNT ATP SPN MMM GMM CMM RR



SIM SIM detection failure

SMCPROC EEPROM SAP

SMS	
SMS MO/MT failure	ATSM ATP SPM CC CMM MMM RR SMS
List/read SMS failure	ATSM ATP SPM SMCPROC EEPROM SAP SMS
Fail to save message into	ATSM ATP SPM SMCPROC EEPROM SAP SMS
SIM or ME	

Phonebook	
Initiate phonebook	ATDR ATP SPD SMCPROC EEPROM SAP ACC
failure	
Phonebook operation	ATDR ATP SPD SMCPROC EEPROM SAP ACC
failure (read, write &	
erase)	

Fax	
Operation failure	ACL ATP ATCL SPC DCM DSL FAX CC CMM MMM RR

SIM Tool Kit	
Operation failure	ATCS ATP SPS STK

CMUX	
DLC init failure	MUX MIS ATP AGN

Data call (CSD)	
Fail in CSD call	DCM SPC CMR CC MMM CMM L2M L1A L1S DSM RLP MIS ATP
establishment	ATDT DSL RR
Call drops	DCM SPC CMR CC MMM CMM L2M L1A L1S DSM RLP MIS ATP
	ATDT DSL RR
transfer rate	DCM SPC CMR CC MMM CMM L2M L1A L1S DSM RLP MIS ATP
	ATDT DSL RR

GPRS		
Fail in GPRS attachment	ATGN ATNT ATP SPN SPG MMM GMM SM SMR SMM	
Fail in PDP context	ATGN ATNT ATP SPN SPG MMM GMM SM SMR SMM	
activation		
Download speed	SPN SPG SM SMR SMM DADASVC SN RLD RLP RLU MAC	



I2C

NO message change

TCP IP	
TCP data transmission	ATCS ATP DATASVC IPSTACK MIS DSL PPP PPPS DNR
UDP data transmission	ATCS ATP DATASVC IPSTACK MIS DSL PPP PPPS DNR

Flow Control	
Hardware flow control	ATGN ATP MIS DSL
Software flow control	ATGN ATP MIS DSL

Audio	
Echo	GAUDIO HAU ATP
Rx/Tx Gain	GAUDIO HAU ATP
Side Tone	GAUDIO HAU ATP

Contact us:

Shanghai SIMCom Wireless Solutions Ltd.

Add: Building A, SIM Technology Building, No.633, Jinzhong Road, Changning District, Shanghai,P. R. China 200335 Tel: +86 21 3235 3300 Fax: +86 21 3235 3301 URL: www.sim.com/wm