

A7670E_TE KIT User Guide

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SCOPE

THIS DOCUMENT DESCRIBES HOW TO TEST WITH A7670E_TE. WITH THIS DOCUMENT, USER CAN GET USEFUL INFO ABOUT OUR SIMCOM-EVB QUICKLY.

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.

NOTE

For testing, customer needs SIMCOM_EVB and TE KIT together. Therefore, customer should refer this document together with the SIMCOM_EVB KIT User Guide







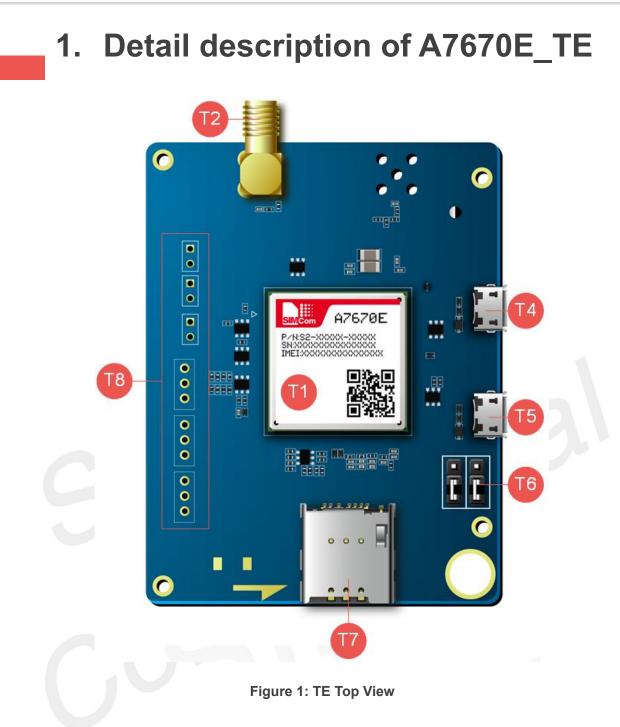






Figure 2: TE Bottom View

Attachment Label	Description
T1	Module
T2	Main Antenna Connector
T4	Micro USB Connector
T5	Micro USB Connector
T6*	UART Switch
77	SIM Card Holder
T8	Test Point
B1	Connector (Connect to SIMCOM-EVB)
B2	Connector (Connect to SIMCOM-EVB)

NOTE

If UART Switch connected to above two pins by jumper, the debug UART will connect to EVB; If UART Switch connected to below two pins by jumper, the UART3 will connect to EVB.



2.TE Accessory

This TEKIT does not contain accessory. The main antenna is provided by the SIMCom EVB kit.



3.Installing TE on SIMCom EVB Board

TE Kits are designed to work with the EVB board and they are fitted like the following Figure 3.



Figure 3: TE and SIMCOM-EVB Accessory



4.TE KIT USB Driver Installation

Users can manually install USB driver by the following steps:

1. Use USB cable to connect your PC to the Micro-USB port on the TE board. There should be several SimTech A7670E devices listed under other devices in Device manager like the following Figure 4.



Figure 4: A7670E Devices Recognized by the Operating System

- 2. Right click each of the "Mobile AT Interface" devices and select "Update driver".
- 3. Select "Browse my computer for driver software".
- 4. Click "Browse" and manually search from the driver folder provided, then click "Next".

	X X
◎ 更新驱动程序软件 - Mobile AT Interface	选择包含您的硬件的驱动程序的文件夹。
浏览计算机上的驱动程序文件	Document
在以下位置搜索驱动程序软件:	SX07_USB_Driver SX07_USB_Driver
C:\Users\Y0078\Desktop\Document\9X07_USB_Driver ▼ 浏览(R)	🖌 🌽 Windows7
团包括子文件夹(I)	i386 ⊑
→ 从计算机的设备驱动程序列表中选择(L) 此列表积显示与该设备推荐的已安装的驱动程序软件,以及与该设备处于同一类则下的 所有驱动程序软件。	> ▲ ndis > ▲ qdss > ▲ cerial > ▲ 2025_10025L USB Driver_2018C > ▲ PPT > ▲ Quectel * < * 文件未设: 9007_USB_briver
下 一 步(N)	取消 确定 取消

Figure 5: Browse for the drivers



- 5. Repeat same procedure for each of the listed "Mobile AT Interface" devices under "Other devices" until Device Manager lists three SimTech devices under "Ports (COM & LPT)
- 6. Finally there are one SimTech device under Modems and two SimTech devices under Network Adapters as shown on Figure 6.

▲ CQV0078 ● DE ATA/ATAPI 控制器 ● 安全设备 ● 处理器 ● 数点驱动器 ● 第二 (COM 和 LPT) ● 第二 (COM 和 LPT) ● 第二 (COM 和 LPT) ● 第 (COM 和 LPT) ● 第 (COM 1) ● 第 (COM 1) ● 第 (COM 1) ● 第 (COM 1) ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
Figure 6: All drivers installed	32

Figure 6: All drivers installed

After install driver, the ports can be used for following defined functions:

USB Ports	Description
SimTech HS-USB AT Port 9011	AT Command Communication Port
SimTech HS-USB Diagnostics 9011	Software Debug and FW Update Port
SimTech HS-USB Modem 9011	Modem Port for PPP



5.Using SIMCom Serial Port Tool

SIMCom has a serial port tool to test modules with AT Commands. Serial Port Tool can communicate with modules after opening COM Ports on list. On the following figure, every section of serial tool can be seen.

SIMCom Serial Port Tool_V2.6						- 🗆 X
	Sel	ect All 🗌 Round Send Round	Tin	es:	1	
OK A			Hex	Run	Delay(ms)	Note
2020-04-24 13:21:02:288[Send->]AT+CSQ	1:	AT		1		
2020-04-24 13:21:02:318[Recev(-]AT+CSQ +CSQ: 99.99	2:	AT+CSQ		2		Antenna Strength
OK	3:	AT+CGREG?		3		Attach 0,2 not , 0,1 atteche
2020-04-24 13:21:19:346[Send-)]AT+CSQ	4:	AT +CMNB?		4		1-CATM1 , 2 MBiot , 3-MBiot
2020-04-24 13:21:19:390[Recv<-]kT+CS9	5:	AT +CHINB=2		5		1-CATM1 , 2 MBiot , 3-MBiot
+CSQ: 99,99	6:	AT+CBANDCFG="NB-IOT", 20		6		Band Selections
OK	7:	AT+CNACT?		7		PDP Active
2020-04-24 13:21:28:330[Send->]AT+CS9	8:	AT+CNACT=1, "internet"		8		PDP Active
2020-04-24 13:21:28:362[Recr<-]AT+CSQ +CSQ: 99.99	9:	AT +CBAND?		9		Preferred Band
0K	10:	AT +CBAND="ALL_MODE"		10		Preffered Band
	11:	AT+CGMR		11		FW Inquire
2020-04-24 13:21:44:268[Send->]AT+CSQ	12:	AT +CBANDCFG?		12		
2020-04-24 13:21:44:288[Recv<-]AT+CSQ +CSQ: 99.99	13:	AT+CGECONT?		13		PDP Context Define
OK	14:	AT +CPIN?		14		SIMCard Detection
2020-04-24 13:21:52:441[Send->]AT+CSQ	15:	AT+CSIT="stream.co.uk", "stream		15		Connect Internet
2020-04-24 13:21:52:477[Reov(-]AT+CSQ +CSQ: 99.99	16:	AT+CIICR		16		
1.54. 30, 99	17:	AT+CIFSR		17		IP Adress
0A v	18:	AT+COPS?		18		Operator Selecton
	19:	AT +CHMP?		19		Preffered Mode 2- Automatic
PortNum: (COM10) SimTech HS-USB AT Port 9001 V Hex Display Show Time Clear Data <<	20:	AT+CFUN=0		20		
	21:	AT +CFUH=1		21		
	22:	AT +CIMI		22		
RTS DTR MAtLog Signal Save Log File Path D:\Google Drive\Simcon Belgeler'	23:	AT+CCID		23		
Hex Send Clear Send	24:			24		
	25:			25		
Beleti me Borne Beletera. Bend File Exit		List 1 OCad List 2 OCad				
STATUSA"COMIO OPENEDA-115200, N. 8, 1 RX:156 TX:51 Count cleared		Load CMD List Save CMD List	: (lear C	MD List	

Figure 7: SIMCom Serial Port Tool Introduction

NOTE

Driver: USB driver and Serial Port Tool can be obtained from local agents or SIMCom FAE.