SIM7600-PCIE Series

SIMCom LTE Cat 1 Module

- Multi-Band
- Cat 1
- mini-PCIE
- VoLTE
- Compact Size
- FOTA
- TCP/IP
- USB 2.0
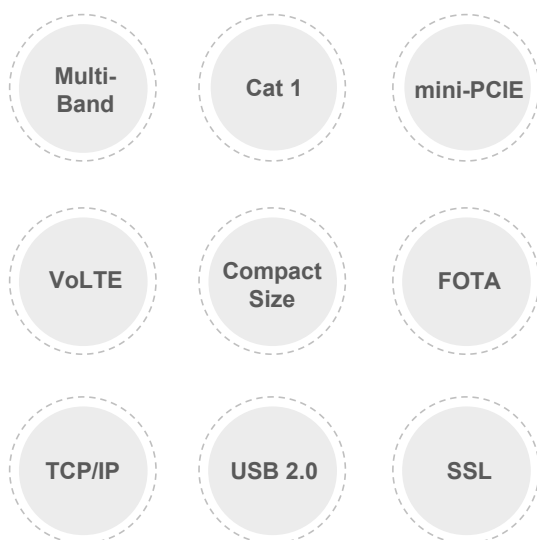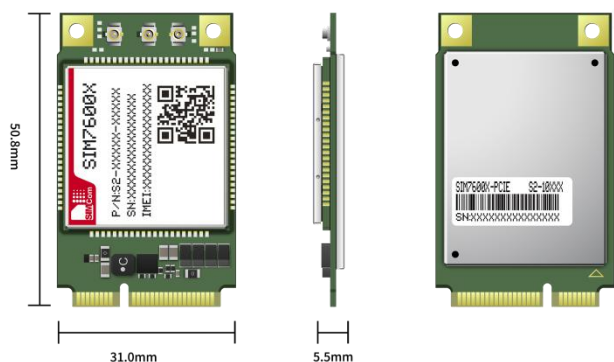- SSL

Product Description

The SIM7600-PCIE series is the LTE Cat 1 module which supports wireless communication modes of LTE-TDD/LTE-FDD/HSPA+/GSM/GPRS/EDGE etc. It supports maximum 10Mbps downlink rate and 5Mbps uplink rate.

The SIM7600-PCIE series adopts mini PCIE form factor and consists of a SIM7600 series module and a mini PCIE adapter board. It is easy for customers to integrate.

The SIM7600-PCIE series integrates multiple satellite high accuracy positioning GNSS systems, with multiple built-in network protocols, supports drivers for main operation systems (USB driver for Windows, Linux and Android etc.) and software function, AT commands are compatible with SIM7500/SIM7600-H series modules. Meanwhile the SIM7600-PCIE series integrates main industrial standard interfaces, with powerful expansibility, including abundant interfaces such as UART, USB, GPIO, which is suitable for main IoT applications such as telematics, surveillance devices, CPE, industrial routers, and remote diagnostics etc.

Key Benefits

- ◆ Mini-PCIE interface with strong compatibility
- ◆ Suitable for LTE, UMTS and GSM networks with global coverage
- ◆ Abundant software functions: FOTA, LBS, TLS, VoLTE
- ◆ Multi-constellation GNSS receiver support
- ◆ AT commands of the SIM7600-PCIE series are compatible with the SIM7500/SIM7600-H series modules

Product	SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
Form Factor	Mini PCIE	Mini PCIE	Mini PCIE	Mini PCIE
Dimensions(mm)	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35

Frequency Bands		SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
	LTE-FDD	B2/B4/B12	B1/B2/B3/B4/B5/B7/B8/B28/B66	B1/B3/B5/B7/B8/B20	B1/B3/B7/B8/B20
	LTE-TDD		B40	B38/B40/B41	
	WCDMA	B2/B5	B1/B2/B5/B8	B1/B5/B8	B1/B8
	GSM		850/900/1800/1900MHz	900/1800MHz	900/1800MHz
GNSS		o	o	o	o
Temperature		-40℃ ~ +85℃	-40℃ ~ +85℃	-40℃ ~ +85℃	-40℃ ~ +85℃

Electrical Features

		SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
Supply Voltage(V)		3.0~ 3.3	3.0~ 3.3	3.0~ 3.3	3.0~ 3.3
Power Consumption (mA)	LTE	2.3	2.3	2.3	2.3
	WCDMA, DRX=9	3.3	3.3	3.3	3.3
	GSM,BS_PA_MFRMS=2	2.8	2.8	2.8	2.8

Data Transfer

	SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
LTE(Mbps)	10(DL)/5(UL)	10(DL)/5(UL)	10(DL)/5(UL)	10(DL)/5(UL)
HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
GPRS/EDGE(Kbps)		236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)

Software Features

	SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
Protocol	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/HTTPS/DNS	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/HTTPS/DNS	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/HTTPS/DNS
TLS	●	●	●	●
File System	●	●	●	●
Audio Record/Play	o	o	o	o
TTS	o	o	o	o
DTMF	o	o	o	o
LBS	●	●	●	●
FOTA	●	●	●	
Jamming Detection	●	●	●	●
Android RIL	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0
USB Driver	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android
WWAN (RNDIS)	●	●	●	●
ECM	●	●	●	●
MBIM	Win8/Win10	Win8/Win10	Win8/Win10	Win8/Win10
NDIS	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10
Firmware Upgrade	USB/FOTA	USB/FOTA	USB/FOTA	USB

Interfaces

	SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
SIM Card	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V
UART	●	●	●	●
USB	●	●	●	●
PCM	o	o	o	o
Analog Audio	o	o	o	o
Embedded SIM card socket	o	o	o	o
I2C	●	●	●	●
Diversity Receiver	●	●	●	

Certification

	SIM7600A-PCIE	SIM7600SA-PCIE	SIM7600E-PCIE	SIM7600E-L1C-PCIE
Regulatory	FCC/PTCRB/IC/RoHS/REACH	CE-RED/ACMA/FCC/RoHS/REACH/Anatel	CE-RED/RoHS/REACH/IMDA/GCF	CE-RED/RoHS/REACH
Carrier	AT&T/Rogers	Telstra	DTAG/Vodafone	

●: support　　o: optional　　* : on going

Product	SIM7600G-PCIE		SIM7600NA-PCIE
Form Factor	Mini PCIE		Mini PCIE
Dimensions(mm)	50.8*31*5.35		50.8*31*5.35
Frequency Bands	LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66	B2/B4/B5/B12/B13/B14/B25/B26/B66/B71
	LTE-TDD	B34/B38/B39/B40/B41	B41
	WCDMA	B1/B2/B4/B5/B6/B8/B19	
	GSM	850/900/1800/1900MHz	
GNSS	o		o
Temperature	-40℃ ~ +85℃		-40℃ ~ +85℃

Electrical Features			
Supply Voltage(V)	3.0~ 3.3		3.0~ 3.3
Power Consumption (mA)	LTE	2.3	2.3
	WCDMA, DRX=9	3.3	
	GSM,BS_PA_MFRMS=2	2.8	

Data Transfer		
LTE(Mbps)	10(DL)/5(UL)	10(DL)/5(UL)
HSPA+(Mbps)	42(DL)/5.76(UL)	
WCDMA(Kbps)	384(DL)/384(UL)	
GPRS/EDGE(Kbps)	236.8(DL)/236.8(UL)	

Software Features		
Protocol	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/HTTPS/DNS	TCP/IP/IPV4/IPV6/Multi-PDP/FTP/FTPS/HTTP/HTTPS/DNS
TLS	●	●
File System	●	●
Audio Record/Play	o	o
TTS	o	o
DTMF	o	o
LBS	●	●
FOTA	●	●
Jamming Detection	●	●
Android RIL	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0
USB Driver	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android
WWAN (RNDIS)	●	●
ECM	●	●
MBIM	Win8/Win10	Win8/Win10
NDIS	Linux/Windows 7/8/10	Linux/Windows 7/8/10
Firmware Upgrade	USB/FOTA	USB/FOTA

Interfaces		
SIM Card	1.8V/3.0V	1.8V/3.0V
UART	●	●
USB	●	●
PCM	o	o
Analog Audio	o	o
Embedded SIM card socket	o	o
I2C	●	●
Diversity Receiver	●	●

Certification		
Regulatory	CE-RED/FCC/IC/RCM/Telec/Jate/NCC/IMDA/ICASA/CCC/SRRC/Anatel*/PTCRB/GCF/RoHS/REACH	FCC/IC/PTCRB/GCF/RoHS/REACH
Carrier	AT&T/Verizon*/T-mobile/US Celluar/DTAG	AT&T/Verizon/T-mobile/US Celluar

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