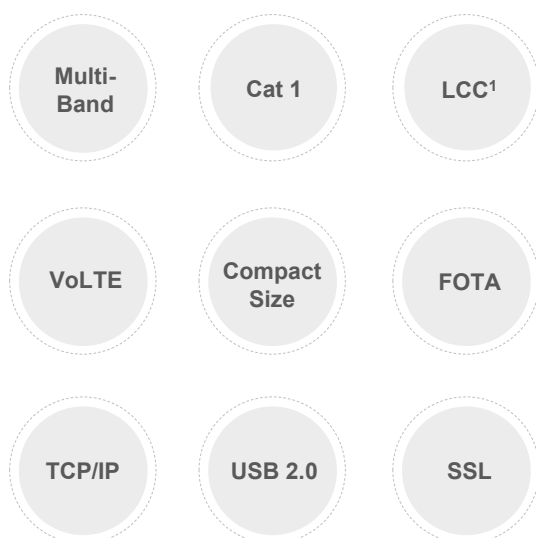
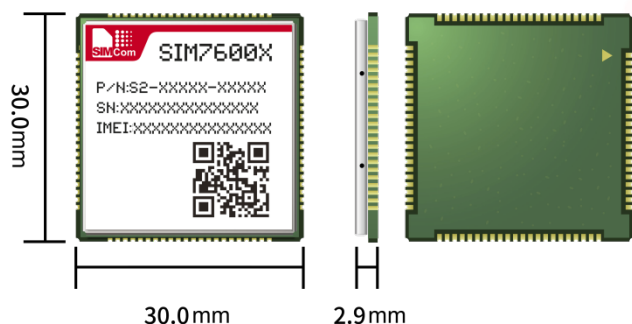


SIM7600 Series

SIMCom LTE Cat 1 Module



Product Description

The SIM7600 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 series adopts LCC¹ form factor and is compatible with SIM5320/SIM5360 series(UMTS/HSPA+ modules), and SIM7600/SIM7600-H series(LTE modules), which enables smooth migration from 3G products to LTE products, and greatly facilitates more compatible product design for the customer needs.

The SIM7600 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 series integrates main industrial standard interfaces, with powerful expansibility, including abundant interfaces such as UART, USB, I2C, GPIO, which is suitable for main IoT applications such as telematics, surveillance devices, CPE, industrial routers, and remote diagnostics etc.

Key Benefits

- ◆ LCC¹ form factor with abundant interfaces
- ◆ 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 series are compatible with the SIM7500/SIM7600-H series modules

NOTE

1: The form factor of SIM7600NA & SIM7600G is LCC+LGA

Product	SIM7600A	SIM7600SA	SIM7600E	SIM7600E-L1C
Form Factor	LCC, 87PIN	LCC, 87PIN	LCC, 87PIN	LCC, 87PIN
Dimensions(mm)	30.0*30.0*2.9	30.0*30.0*2.9	30.0*30.0*2.9	30.0*30.0*2.9
Frequency Bands	LTE-FDD	B2/B4/B12	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/B8
	GSM		850/900/1800/1900MHz	900/1800MHz
GNSS	o	o	o	o
Temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Electrical Features				
Supply Voltage(V)	3.4~ 4.2	3.4~ 4.2	3.4~ 4.2	3.4~ 4.2
Power Consumption (mA)	LTE	2.3	2.3	2.3
	WCDMA, DRX=9	3.3	3.3	3.3
	GSM, BS_PA_MFRMS=2	2.8	2.8	2.8
Data Transfer				
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				
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				
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
ADC	•	•	•	•
SD Card	•	•	•	•
SPI	o	o	o	o
I2C	•	•	•	•
Diversity Receiver	•	•	•	•
Certification				
Regulatory	FCC/PTCRB/RoHS/REACH/IC	CE-RED/ACMA/FCC/ RoHS/REACH/Anatel	CE-RED/RoHS/REACH/ IMDA/GCF	CE-RED/RoHS/REACH
Carrier	AT&T/Rogers	Telstra	Deutsche Telekom/Vodafone	

•: support o: optional *: on going

Product		SIM7600G	SIM7600NA
Form Factor		LCC+LGA, 119PIN	LCC+LGA, 119PIN
Dimensions(mm)		30.0*30.0*2.9	30.0*30.0*2.9
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°C ~ +85°C	-40°C ~ +85°C
Electrical Features			
Supply Voltage(V)		3.4~ 4.2	3.4~ 4.2
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
ADC		•	•
SD Card		•	•
SPI		o	o
I2C		•	•
SGMII		o	o
Diversity Receiver		•	•
Certification			
Regulatory		CE-RED/FCC/IC/RoHS*/REACH*	FCC*/IC*/PTCRB*/GCF*/RoHS*/REACH*
Carrier			AT&T*/Verizon*/Sprint*/T-mobile*

•: support o: optional *: on going