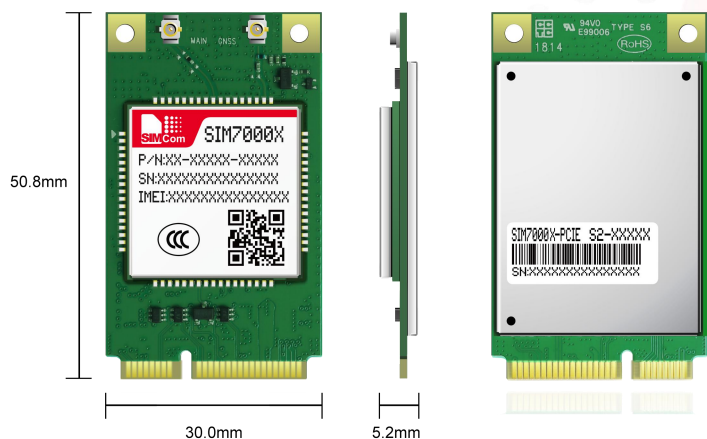


# SIM7000X-PCIE Series

## SIMCom LPWA Module



### Product Description

The SIM7000X-PCIE is LTE-FDD、TDD-LTE and Quad-Band GPRS/EDGE module solution in a PCIE type which supports LTE CAT-M1(eMTC) and NB-IoT up to 375kbps data transfer.

It has strong extension capability with rich interfaces including UART, USB2.0. The module provides much flexibility and ease of integration for customer's application.

It is designed for applications that need low latency, medium throughput data communication in a variety of radio propagation conditions. Due to the unique combination of performance, security and flexibility, this module is ideally suited for M2M applications, such as metering, telematics, asset tracking, remote monitoring, E-health, mobile pos terminals and sharing bike.



### Key Benefits

- ◆ With Power Saving Mode(PSM) and Extended Discontinuous Reception(eDRX), the SIM7000X-PCIE series can extend battery life to 10 years
- ◆ SIM7000X-PCIE series provides deeper coverage enhancement compared to GSM
- ◆ The form factor and AT commands of the SIM7000X-PCIE series are compatible with SIM900 and SIM800F

Product	SIM7000G-PCIE	SIM7000E-PCIE	SIM7000A-PCIE	
<b>Form factor</b>	PCIE, 52PIN	PCIE, 52PIN	PCIE, 52PIN	
<b>Dimensions(mm)</b>	50.8 X 30.0 X 5.2mm	50.8 X 30.0 X 5.2mm	50.8 X 30.0 X 5.2mm	
<b>Frequency Bands</b>	<b>Cat-M</b>	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B26/B28/B39	B3/B5/B8/B20/B28	B2/B4/B12/B13
	<b>Cat-NB</b>	B1/B2/B3/B5/B8/B12/B13/B17/B18/B19/B20/B26/B28	B3/B5/B8/B20/B28	B2/B4/B12/B13
	<b>GSM</b>	850/900/1800/1900MHz	900/1800MHz	
<b>GNSS</b>	o	o	o	
<b>Temperature</b>	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	
<b>Electrical Features</b>				
<b>Supply Voltage Range(V)</b>	3.3~ 4.3	3.3~ 4.3	3.3~ 4.3	
<b>Power Consumption</b>	<b>Power Off(μA)</b>	7	7	7
	<b>Sleep(mA)</b>	2	2	2
	<b>Idle(mA)</b>	15	15	15
<b>Data Transfer</b>				
<b>Cat-M(Kbps)</b>	300(DL)/375(UL)	300(DL)/375(UL)	300(DL)/375(UL)	
<b>Cat-NB(Kbps)</b>	34(DL)/66(UL)	34(DL)/66(UL)	34(DL)/66(UL)	
<b>EGPRS(Kbps)</b>	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)		
<b>Software Features</b>				
<b>Protocol</b>	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	
<b>FOTA</b>	•	•	•	
<b>Embedded AT</b>	•	•	•	
<b>Firmware Upgrade</b>	USB	USB	USB	
<b>Interfaces</b>				
<b>SIM Card</b>	1.8V	1.8V	1.8V	
<b>UART</b>	One full modem UART	One full modem UART	One full modem UART	
<b>USB</b>	USB2.0	USB2.0	USB2.0	
<b>PCM</b>	One PCM interface	One PCM interface	One PCM interface	
<b>I2C</b>	One I2C interface	One I2C interface	One I2C interface	
<b>Certification</b>				
<b>Regulatory</b>	RoHS/REACH/CCC/RCM/CE(RED)/GCF/FCC/IC/OCD(Anatel)	RoHS/REACH/KC*/RCM/CE(RED)/GCF	RoHS/REACH/GCF/FCC/PTCRB/IC	
<b>Carrier</b>	Deutsche Telekom	KT*/LGU*/IMDA/TELSTRA/SPARK/Deutsche Telekom/Vodafone*	AT&T/Verizon	

•: support o: optional \*: on going

Product		SIM7000JC-PCIE	SIM7000C-PCIE
Form factor		PCIE, 52PIN	PCIE, 52PIN
Dimensions(mm)		50.8 X 30.0 X 5.2mm	50.8 X 30.0 X 5.2mm
Frequency Bands	Cat-M	B1/B3/B5/B8/B18/B19/B26	B1/B3/B5/B8
	Cat-NB	B1/B3/B5/B8/B18/B19/B26	B1/B3/B5/B8
	GSM		900/1800MHz
GNSS		o	o
Temperature		-40°C ~ +85°C	-40°C ~ +85°C
<b>Electrical Features</b>			
Supply Voltage Range(V)		3.3~ 4.3	3.3~ 4.3
Power Consumption	Power Off(uA)	7	7
	Sleep(mA)	2	2
	Idle(mA)	15	15
<b>Data Transfer</b>			
Cat-M(Kbps)		300(DL)/375(UL)	300(DL)/375(UL)
Cat-NB(Kbps)		34(DL)/66(UL)	34(DL)/66(UL)
EGPRS(Kbps)			85.6(DL)/85.6(UL)
<b>Software Features</b>			
Protocol		TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP
FOTA		•	•
Embedded AT		•	•
Firmware Upgrade		USB	USB
<b>Interfaces</b>			
SIM Card		1.8V	1.8V
UART		One full modem UART	One full modem UART
USB		USB2.0	USB2.0
PCM		One PCM interface	One PCM interface
I2C		One I2C interface	One I2C interface
<b>Certification</b>			
Regulatory		RoHS/REACH/JATE/Telec	RoHS/REACH/CCC/NAL/SRRC
Carrier		Docomo/KDDI	Mobile/Unicom/Telecom

• : support    o : optional    \* : on going