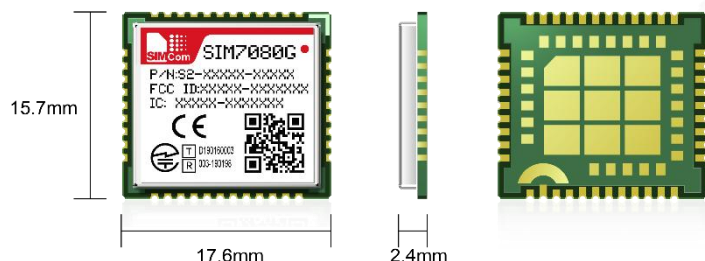


V: 2024.H2

# SIM7080 Series

## SIMCom LPWA Module

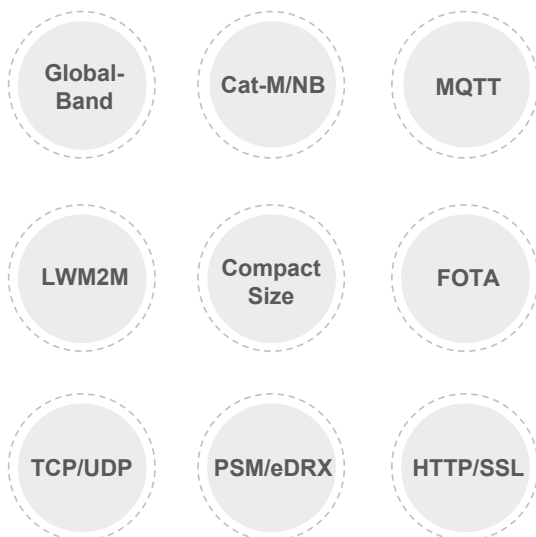


### Product Description

The SIM7080 series is the LPWA module which supports wireless communication modes of Cat-M/Cat-NB.

The SIM7080 series adopts LCC and LGA form factor and has a compact size of 17.6mm\*15.7mm which makes it ideal for compact products design.

The SIM7080 series has powerful expansibility with abundant interfaces including UART, GPIO, PCM, SPI, I2C etc. The SIM7080 series is designed for applications that need low power consumption, low 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, asset tracking, remote monitoring, E-health etc.



### Key Benefits

- ◆ With Power Saving Mode(PSM) and Extended Discontinuous Reception(eDRX), the SIM7080 series can extend battery life up to 10 years
- ◆ The SIM7080 series provides deeper coverage enhancement compared to GSM
- ◆ The form factor and AT commands of SIM7080 series are compatible with SIM7020/SIM868

Product		SIM7080G	SIM7080G-M
Form Factor		LCC+LGA, 77PIN	LCC+LGA, 77PIN
Dimensions(mm)		17.6*15.7*2.3	17.6*15.7*2.3
Frequency Bands	Cat-M	B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26/B27/B28/B66/B85	B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26/B27/B28/B66/B85
	Cat-NB	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66/B71/B85	
RF Power Class		Class 5 (Typ. 21dbm)	Class 5 (Typ. 21dbm)
GNSS		o	o
Temperature		-40°C ~ +85°C	-40°C ~ +85°C
Electrical Features			
Supply Voltage Range(V)		2.7~ 4.8	2.7~ 4.8
Power Consumption	@PSM(uA)	3.2	3.2
	@Sleep(mA)	0.6	0.6
	@Idle(mA)	10	10
Data Transfer			
Cat-M (Kbps)		589(DL)/1119(UL)	589(DL)/1119(UL)
Cat-NB (Kbps)		127(DL)/158.5(UL)	127(DL)/158.5(UL)
Software Features			
Protocol		TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/LWM2M/COAP/MQTT	TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/LWM2M/COAP/MQTT
FOTA		●	●
Embedded AT		●	●
Firmware Upgrade		USB/FOTA	USB/FOTA
Interfaces			
SIM Card		1.8V	1.8V
UART		●	●
USB		●	●
PCM/I2S		●	●
ADC		●	●
SPI		●	●
I2C		●	●
Embedded SIM		o	o
Certification			
Regulatory		RoHS/REACH/NCC/JATE/TELEC/KC/RCM/CE/GCF/UKCA/FCC /PTCRB /IC	RoHS/REACH/NCC/JATE/TELEC/KC/RCM/CE/GCF/UKCA/FCC /PTCRB /IC
Carrier		DoCoMo*/KDDI/Softbank/Orange*/TIM/Deutsche Telekom /Telefonica /AT&T /VERIZON/T-mobile/US Celluar/OCD(Anatel)	DoCoMo*/KDDI/Softbank/Orange*/TIM/Deutsche Telekom /Telefonica /AT&T /VERIZON/T-mobile/US Celluar/OCD(Anatel)

●: support o: optional \*: on going