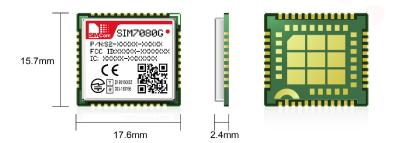


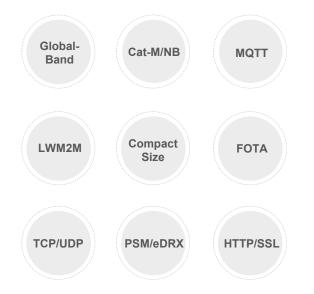
## V: 2020.03 SIM7080 Series

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 latency, 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

Copyright © 2020 SIMCom Wireless Solutions Limited All Rights Reserved Building B, SIM Technology Building, No.633, Jinzhong Road Changning District, Shanghai P.R.China Tel: 86-21-31575100 Email: support@simcom.com Web: www.simcom.com



Cat.Wi         Cat.Wi         Cat.Wi         Cat.Wi         Cat.Wi         B25/B26/B27/B28/B66/B85           B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B2// B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B2// B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B2// B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B2// Cat.Wi         Class 5 (Typ. 21dbm)           GNSS         0         0           GNSS         40°C ~ +85°C         40°C ~ +85°C           Electrical Features         40°C ~ +85°C         40°C ~ +85°C           Electrical Features         2.7~ 4.8         3.2           Power 0/ Consumption         @PSM(uA)         3.2         3.2           @Belep(MA)         0.6         0.6         0.6           @Ide(mA)         0.6         0.6         0.6           Cat.NB (Kbps)         589(DL)/1119(UL)         10         10           Data Transfor         127(DL)/158.5(UL)         127(DL)/158.5(UL)         127(DL)/158.5(UL)           Cat.NB (Kbps)         127(DL)/158.5(UL)         127(DL)/158.5(UL)         127(DL)/158.5(UL)           Forda               Protocol         USB/FOTA              Forda                Forda         USB/FOTA	Product		SIM7080G	SIM7080G-M
Cat.M Frequency Bands         Cat.M Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.Cat.NB Cat.Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.NB Cat.Cat.NB Cat.Cat.NB Cat.Cat.NB Cat.Cat.NB Cat.Cat.Cat.NB Cat.Cat.Cat.Cat.Cat.Cat.Cat.Cat.Cat.Cat.	Form Factor		LCC+LGA, 77PIN	LCC+LGA, 77PIN
Cate Mile         B25/B20/B27/B20/B60/B36         B25/B20/B27/B20/B60/B36           RF Power Class         Cate AB         B1/B2/B30/B19/B30/B19/B30/B20/B20/B20/B20/B20/B20/B20/B20/B20/B2	Dimensions(mm)		17.6*15.7*2.3	17.6*15.7*2.3
Frequency Bains         Cat.NB         Bit/B2/R3/R44/ES/R8/R1/98/20/R20/F2           Cat.NB         Class 5 (Typ. 21 dbm)         Class 5 (Typ. 21 dbm)           SNSS          0         0           SNSS          40°C - 485°C         40°C - 485°C           SNSS          40°C - 485°C         40°C - 485°C           Supply Voltage Rander         27-4.8         27-4.8           Supply Voltage Rander         27-4.8         2.7-4.8           Supply Voltage Rander         0.6         0.6           Onseumption         0.6         0.6           Onseumption         0.6         0.6           Oract Transfer         SegloLy/1119(UL)         589(0L)/1119(UL)           Cat-NB (KDps)         SegloLy/1119(UL)         127(0L)/198.3(UL)           Cat-NB (KDps)         TOP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PINGY         TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PINGY           Software Fastures         USB/FOTA         USB/FOTA         USB/FOTA           Cot.ND         Cot.ND         SegloLy/1119(UL)         USB/FOTA           Software Fastures         USB/FOTA         USB/FOTA         USB/FOTA           Software Fastures         USB/FOTA         SegloL         SegloL           Software Fastures		Cat-M		B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/
SNSS v v 40° - 40° - 40° - 40° - 485° Temperature 40° - 485° Electrical Features Supply Voltage Rarge(V) 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-4.8 2.7-	Frequency Bands	Cat-NB	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/	B25/B26/B27/B28/B66/B85
Temperature     40°C + 48°C       Eloctrical Features     40°C + 48°C       Eloctrical Features     2.7-4.8       Supply Voltage Range (V)     3.2       @PSM(uA)     3.2       @Sisep(mA)     0.6       @Gisep(mA)     0.8       @Gisep(mA)     0.8       @Gisep(mA)     0.8       @Gisep(mA)	RF Power Class		Class 5 (Typ. 21dbm)	Class 5 (Typ. 21dbm)
Electrical Features Supply Voltage Range (V) 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8 2.7~4.8	GNSS		0	0
Supply Voltage Range (V)     2.7~4.8     2.7~4.8       Power Consumption     @PSM(uA) @die(mA)     3.2     3.2       @Gisep(mA) @die(mA)     0.6     0.6       Octa Transfer     0     10       Data Transfer     27(DL)/150.5(UL)     569(DL)/1119(UL)       Cat.MG (Kbps)     569(DL)/1119(UL)     569(DL)/1119(UL)       Software Features     727(DL)/156.5(UL)     127(DL)/156.5(UL)       Protocol     TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LVM/2M/COAP/MQTT     TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LVM/2M/COAP/MQTT       FOTA     •     •       Fermware Upgrade     USB/FOTA     USB/FOTA       USB     •     •       OC     •     •       SPI     •     •       Certification     •     •       Certification     •     •       Certification     *     •	Temperature		-40°C ~ +85°C	-40°C ~ +85°C
Power Consumption@PSM(uA) @Sieep(mA) 0.63.23.2@Sieep(mA) @did(mA)0.60.6@did(mA)1010Data TransforCat-M (Kbps)539(DL)'1119(UL)539(DL)'1119(UL)Cat-NB (Kbps)127(DL)'158.5(UL)127(DL)'158.5(UL)Colspan="2">CP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PINTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PINTCP/UDP/HTTP//TTPS/FTP/TLS/DTLS/PINTCOLSFOTCP/UDP/HTTP//TTP//TTP//TTP//TTP//TTP//TTP//T	Electrical Features			
Power Consumption         @Sleep(mA) @Ide(mA)         0.6         0.6           Data Transfer         10         0           Cat-M (Kbps)         589(DL)/1119(UL)         589(DL)/1119(UL)           Cat-M (Kbps)         127(DL)/158.5(UL)         127(DL)/158.5(UL)           Software Features         127(DL)/158.5(UL)         127(DL)/158.5(UL)           Protocol         CP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2W/COAP/MQTT         CP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2W/COAP/MQTT           COTA         •         •           Cota Software Upgrade         0         •           USB/FOTA         USB/FOTA         USB/FOTA           SiM Card         1.8v         1.8v           JBR         •         •           Com/Lac         •         •           Com/Lac         •         •           SiB Card         1.8v         1.8v           JBR         •         •           Com/Lac         •         •           SiB Card         •         •	Supply Voltage Range(V)		2.7~ 4.8	2.7~ 4.8
Consumption     Got Consumption     Consumption     Consumption     Consumption       @iddle(mA)     10     10       Data Transfer     589(DL)/1119(UL)       Cat-M (Kbps)     589(DL)/1119(UL)       Software Features     127(DL)/158.5(UL)       Protocol     TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT     TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT       FOTA     •     •       Fortace     •     •       Firmware Upgrade     USB/FOTA     USB/FOTA       SIM Card     1.8V     1.8V       JSB     •     •       Consumption     •       SPCM/I2S     •     •       ADC     •     •       SPI     •     •       Cartification     •     •       Regulatory     CC/C/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RehS/REACH     •       Partice     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/		@PSM(uA)	3.2	3.2
Consumption     (gldle(mA))     10       Data Transfer     588(0L)/1119(UL)     588(0L)/1119(UL)       Cat-M (Kbps)     588(0L)/1119(UL)     588(0L)/1119(UL)       Cat-NB (Kbps)     127(DL)/158.5(UL)     127(DL)/158.5(UL)       Software Features     127(DL)/158.5(UL)     127(DL)/158.5(UL)       Protocol     CP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT     CP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT       FOTA     -     -       Embedded AT     0     -       Firmware Upgrade     USB/FOTA     USB/FOTA       USB/FOTA     1.8V     1.8V       UART     1.8V     1.8V       USB     0     0       PCM/I2S     0     0       SPI     0     0       Certification     0     0       Regulatory     FCC/I/C/C/FRCM/JATE/TELEC/NCC'/GCF'/     FCC/I/C/C/FRCM/JATE/TELEC/NCC'/GCF'/			0.6	0.6
Data Transfer         Cat-M (Kbps)       589(DL)/1119(UL)         Cat-NB (Kbps)       127(DL)/158.5(UL)         Software Features       127(DL)/158.5(UL)         Protocol       TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT       TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT         FOTA       •       •         FotA       •       •         Firmware Upgrade       USB/FOTA       USB/FOTA         INBERGEN       •       •         SIM Card       1.8V       1.8V         UJART       •       •         SPC       •       •         SPI       •       •         2C       •       •         Embedded SIM       o       •         Octocol       •       •         SPI       •       •         2C       •       •         SPI       •       •         2C       •       •         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoH5/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/ROH5/REACH	Consumption		10	10
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     ICP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTT     TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2/WCOAP/MQTT       FOTA     •     •       Embedded AT     •     •       Firmware Upgrade     USB/FOTA     USB/FOTA       UART     •     •       UART     •     •       ADC     •     •       SPI     •     •       Izc     •     •       Embedded SIM     •     •       Cattification     •     •       Regulatory     CC//C/C/E/RCM/JATE/TELEC/NCC'/GCF'/     FC///C/C///C///TMOBILE-US'/SPRINT'/				
Cat-NB (Kbps)     127(DL/158.5(UL)     127(DL/158.5(UL)       Software Features     ICP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT     ICP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2M/COAP/MQTT       Forda     •     •       Forda     •     •       Forda     •     •       Embedded AT     •     •       Firmware Upgrade     USB/FOTA     USB/FOTA       JART     1.8V     1.8V       JJSB     •     •       PCM/I2S     •     •       ADC     •     •       SPI     •     •       embedded SIM     •     •       ccutification     •     •       Regulatory     EC///C/CE//RCM/JATE/TELEC/NCC'/GCF'/ PTCRB'/RoHS/REACH     EC////CE//RCM/JATE/TELEC/NCC'/GCF'/ PTCRB'/RoHS/REACH			580/DL \/4440/LU \	590/DL \/1110/LL \
Software Features         Protocol       TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2W/COAP/MQTT       TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/ LWM2W/COAP/MQTT         FOTA       •         FOTA       •         Embedded AT       •         Firmware Upgrade       USB/FOTA         USB/FOTA       USB/FOTA         Interfaces       •         SIM Card       1.8V         UJART       •         USB       •         PCM/I2S       •         ADC       •         SPI       •         •       •         Embedded SIM       •         o       •         Certification       •         Regulatory       EC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RehS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RehS/REACH				
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       •       •         Embedded AT       •       •         Firmware Upgrade       USB/FOTA       USB/FOTA         SIM Card       1.8V       1.8V         UJART       •       •         USB       •       •         PCM/I2S       •       •         ADC       •       •         SPI       •       •         IzC       •       •         Regulatory       CC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RehS/REACH       •         AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/			127(DL)/158.5(UL)	127(DL)/158.5(UL)
Protocol     LWM2M/COAP/MQTT     LWM2M/COAP/MQTT       FOTA     •       Embedded AT     •       Embedded AT     •       Firmware Upgrade     USB/FOTA       USB/FOTA     USB/FOTA       INETACCO     1.8V       INETACCO     •	Software Features			
Embedded AT       •         Firmware Upgrade       USB/FOTA         USB/FOTA       USB/FOTA         Interfaces       ISW         SIM Card       1.8V         JART       •         JSB       •         PCM/I2S       •         ADC       •         SIN Card       •         ADC       •         SPI       •         Cardio       •         Cardio       •         SPI       •         o       •         Cardio       •         SPI       •         Regulatory       CC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RehS/REACH       •         AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	Protocol			
Firmware Upgrade     USB/FOTA     USB/FOTA       Interfaces     Interfaces       SIM Card     1.8V     1.8V       UART     •     •       USB     •     •       PCM/I2S     •     •       ADC     •     •       SIPI     •     •       ICC     •     •       PCM/I2S     •     •       ADC     •     •       SIPI     •     •       ICC     •     •       ICC     •     •       Regulatory     CC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH     FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH	FOTA		•	•
Interfaces           SIM Card         1.8V         1.8V           UART         •         •           USB         •         •           PCM/I2S         •         •           ADC         •         •           SPI         •         •           I2C         •         •           Embedded SIM         o         o           Certification         FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/         FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/           Regulatory         FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/         FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/           AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/         AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	Embedded AT		•	•
SIM Card       1.8V       1.8V         UART       •       •         USB       •       •         PCM/I2S       •       •         ADC       •       •         SPI       •       •         I2C       •       •         Embedded SIM       •       •         Certification       •       •         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH	Firmware Upgrade		USB/FOTA	USB/FOTA
UART • • • • • • • • • • • • • • • • • • •	nterfaces			
USB       •       •         PCM/I2S       •       •         ADC       •       •         SPI       •       •         I2C       •       •         Embedded SIM       o       o         Certification       •       •         Regulatory       ECC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH	SIM Card		1.8V	1.8V
PCM/I2S       •         ADC       •         ADC       •         SPI       •         I2C       •         Embedded SIM       o         Certification       •         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH	UART		•	•
ADC • • • • • • • • • • • • • • • • • • •	USB		•	•
SPI       •       •         2C       •       •         Embedded SIM       o       o         Certification       •       •         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH         Carrier       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	PCM/I2S		•	•
2C       •       •         Embedded SIM       o       o         Certification       •       •         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH         Carrier       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	ADC		•	•
Embedded SIM       0       0         Certification       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/         AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	SPI		•	•
Certification         Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH         Carrier       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	12C		•	•
Regulatory       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH       FCC/IC/CE/RCM/JATE/TELEC/NCC*/GCF*/ PTCRB*/RoHS/REACH         Carrier       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/       AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	Embedded SIM		0	0
Regulatory     PTCRB*/RoHS/REACH     PTCRB*/RoHS/REACH       Carrier     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/	Certification			
Regulatory     PTCRB*/RoHS/REACH     PTCRB*/RoHS/REACH       Carrier     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/     AT&T*/VERIZON*/TMOBILE-US*/SPRINT*/				
	Regulatory			
	Carrier			
•: support o: optional *: on goin				<ul> <li>support o: optional *: on goin</li> </ul>

Tel: 86-21-31575100 Email: support@simcom.com Web: www.simcom.com