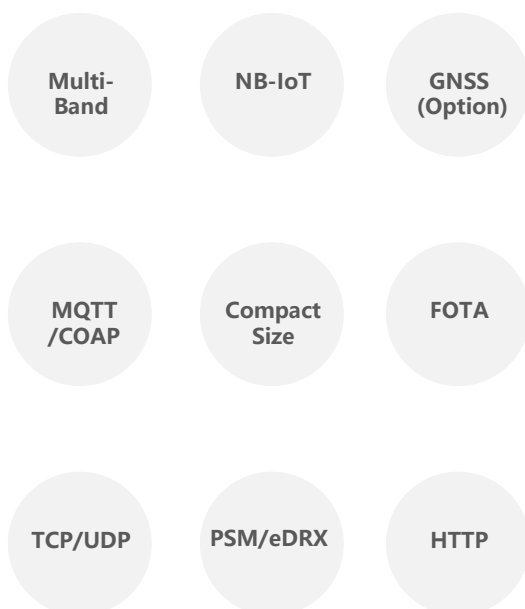
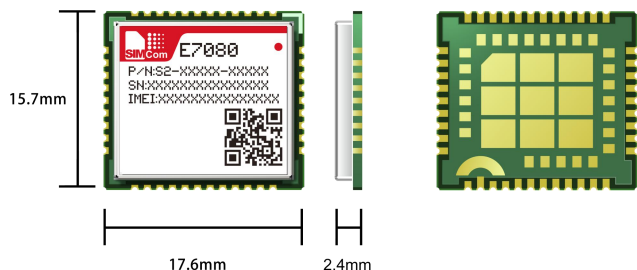


E7080



Product Description

The E7080 is Multi-Band NB-IoT module solution in a SMT type .

It has strong extension capability with rich interfaces including UART, GPIO etc.

The E7080 has rich hardware interfaces, including UART, GPIO, ADC, etc., giving the module extensive expandability. Its package is compatible with the Y7080E/SIM7022/SIM7080G/SIM7022 series, providing great convenience for users' product development.

As a wireless communication module featuring low power consumption, wide area coverage and long-distance communication, the E7080 module is widely used in demand scenarios requiring low bandwidth, low power consumption, long distance and a large number of connections. It is highly suitable for Internet of Things applications such as metering, remote control, asset tracking, remote monitoring, telemedicine, and shared bicycles.

Key Benefits

- With Power Save Mode(PSM) and Extended Discontinuous Reception(eDRX), E7080E can extend battery life to 10 years
- GNSS function configurable, support Standalone mode, support GPS/BDS/GLO/GAL/QZSS
- The package of E7080E mostly are compatible with Y7080E/SIM7022/SIM7080G/SIM7022 series.

Smart machine Smart decision

| Product | | E7080 |
|-------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor | | LCC+LGA, 77PIN |
| Dimensions(mm) | | 15.7*17.6*2.4 |
| Frequency Bands | Cat-NB2 | Cat-NB2:B1/B2 ^① /B3/B4 ^① /B5/B8/B12 ^① /B13 ^① /B17 ^① /B20/B28/B85 ^① |
| LTE RF Power Class | | Class 3 (Typ. 23dbm) |
| Temperature | | -40°C ~ +85°C |
| Electrical Features | | |
| Supply Voltage Range(V) | | 3.0V~4.5V [NB+GNSS] (Typical value: 3.6V) 2.1V~4.5V [NB only] (Typical value: 3.6V) |
| Power Consumption(mA) | @PSM(uA) | 2.1 uA |
| | @eDRX(mA) | 43 uA |
| | @Idle(mA) | 1.7 mA |
| Data Transfer | | |
| Cat-NB2(Kbps) | | 127(DL)/158.5(UL) |
| GNSS Features (Option) | | |
| Time-To-First Fix2: | | Cold Starts:29s/Hot Starts:<2s |
| Software Features | | |
| Protocol | | IPv4, IPv6 and non-IP ONENET/CTWING/TCP/UDP/HTTP/PING/DTLS*/TLS*/MQTT/COAP/LwM2M*/PPP FOTA |
| Memory | | 2MB or 4MB NOR flash |
| FOTA | | • |
| Embedded AT | | • |
| Firmware Upgrade | | UART/FOTA |
| Interfaces | | |
| SIM Card | | 1.8/3.0V |
| AGPIO | | • |
| UART | | • |
| ADC | | • |
| SPI | | • |
| GPIO/I ² C | | • |
| Certification | | |
| Regulatory | | SRRC*/NAL*/RoHS*/REACH*/CE*/UKCA*/GCF*/Orange*/TIM*/Telefonica*/Deutsche Telekom*/Vodafone Spain*/Anatel* |
| Carrier | | Telecom*/Mobile* |

•: support ○: optional
*: means under developing/on-going/planning
①: Special software version required

Smart machine Smart decision

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