

# **SIM7020G**

NB-IoT(Cat-NB2) Module





Global-Band Cat-NB2 LCC+LGA

LWM2M/CO Compact FOTA
AP Size

TCP/UDP PSM/eDRX HTTP/SSL

# **Product Description**

The SIM7020G is Global-Band NB-IoT (Cat-NB2) module solution in a SMT type.

It has strong extension capability with rich interfaces including UART, SPI,I2C, GPIO etc. The module provides much flexibility and ease of integration for customer's application.

The package (LCC part) of SIM7020G is compatible with SIM800C (2G module with LCC package). This also maximizes the investments of customers, and enables a short time-to-market.

It 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 Save Mode(PSM) and Extended
   Discontinuous Reception(eDRX), SIM7020G can extend
   battery life to 10 years
- SIM7020G provides deeper coverage enhancement compared to GSM
- The package and AT commands of SIM7020G mostly are compatible with SIM800C.

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### **General Features**

Support Bands:

B1/B2/B3/B4/B5/B8/B12/B13/B17/B18/B19/ B20/B25/B26/B28/B66/B70/B71/B85

Control Via AT Commands
Supply voltage range: 2.1V-3.6V

Operation temperature: -40  $^{\circ}\mathrm{C}$  to +85  $^{\circ}\mathrm{C}$  Dimensions: 17.6 X 15.7 X 2.3mm

Weight:  $1.3g \pm 0.2g$ 

### **Data**

Uplink: 150Kbps Downlink:126Kbps

#### **SMS**

Text and PDU mode

# Consumption

PSM: 3.4 uA sleep: 0.4mA Idle: 5.6mA

eDRX: 30uA (eDRX=655.36s)

# **Other Features**

TCP/UDP
HTTP/HTTPS/TLS/DTLS/DNS/NTP/PING
LWM2M/COAP/MQTT/MQTTS
Ayla Cloud\*/Ali Cloud
Firmware update via UART
FOTA

# **Interfaces**

**UART** 

EAT\*

SIM card (1.8V/3V)

Embedded SIM IC (Optional)

SPI
I2C
GPIO
ADC
Netlight
PSM\_EINT
Reset
Powerkey

# Certifications(plan)

**RoHS / REACH** 

CE\* / RCM\* / FCC / IC\* / GCF / PTCRB T-mobile\* Telstra\* Vodafone\*

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<sup>\*</sup> In development