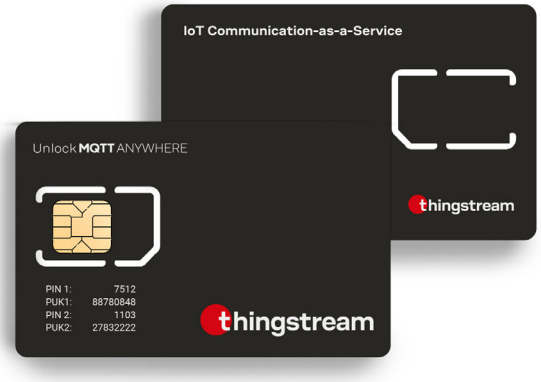
Product summary

MQTT Anywhere IoT SIM

Enable your device to connect from almost anywhere in the world

Unlock the power of MQTT Anywhere

- Seamless global roaming on 2G/3G/LTE networks
- Low cost, fixed price pay-as-you-go plans with no monthly contract or roaming fees
- Multiple form factors: 2FF, 3FF, and 4FF



Product description

The MQTT Anywhere IoT SIM allows your device to connect to the Thingstream Global MQTT Network from almost anywhere in the world. This enables the device to send and receive MQTT-SN messages via the Thingstream IoT platform.

The MQTT Anywhere IoT SIM comes in the standard three form factors, for easy integration in any device.

Once you have the MQTT Anywhere IoT SIM, you can integrate your application with the Thingstream SDK to enable your own devices to start working with Thingstream. You can download an appropriate build for your MCU from:

https://portal.thingstream.io/app/downloads

2FF - Mini SIM

3FF - Micro SIM

4FF - Nano SIM

thingstream Ready

MQTT Anywhere IoT SIM

Chip features

CPU	ARM7™ SC100 16/32-bit RISC
Electrical characteristics	1.6 V, 3 V, and 5 V operating supply voltage ranges
Operational temperature characteristics	-25 °C to +85 °C

NVRAM characteristics

Endurance cycles (min.) @ 25 °C	Min. 500 k read/write cycle
Data retention (min.) @ 25 °C	25 years
Sector / bank erase time	1.5 ms / 3 ms
Page / write erase time	1.5 ms / 0.4 ms

Software features

Platform	Technology UICC Java Card Global platform	2G/3G/4G/LTE Release 8 2.2.1 2.1.1	
Supported applications	Sim USim ISim	Release 4 Release 8 Release 8	
OTA capabilities	Remote file management Remote applet management	Release 8 Release 8	
Authentication algorithms	2G comp 128-1,2,3 2G gsm milenage 3G milenage		All applicable according to profile

Other features

Serial i/o interface	H/W UART for asynchronous half-duplex (conforms to ISO 7816-3)
Des / T-Des	Built-in hardware DES/T-DES Start and stop control
Parity / CRC calculator	Parity calculator for 8/16/32-bit CRC-16/32 calculator
Timers	Two 16-bit timers with 8-bit pre-scaler 20-bit watchdog timer
16-bit random number generator (RNG)	One 16-bit RNG for security key generation Start and stop control
Reset	Power-on reset External reset circuit

CPU

CS100 32-bit CPU core
Fully 16/32-bit RISC architecture

Memory

32 kB ROM for boot loader
340 kB flash for program and data
10 kB static RAM
Memory protection unit

Flash write operations

Page (256 B) / sector (4 kB) / chip (340 kB) erase operation
Program with 4-bytes units to maximum 128 B
0.4-3.2 ms for page erase time 1.5 ms for sector erase time 3.0 ms for chip erase time
Min. 500,000 erase/write cycles
Min. 25 years data retention at 25 °C

Data security

ROM code not visible due to implantation
256 bytes for security (read only) and 256 bytes OTP area
Reset operation is selective if abnormal condition is detected

Operating characteristics

Operating voltage	1.62 V to 5.5 V
Operating external frequency	1-10 MHz (class A/B), 1-7.5 MHz (class C)
Operating internal frequency	max 28 MHz
Operating temperature	-25 °C to 85 °C

Product variants

IoT SIM 2FF	MQTT Anywhere IoT SIM - 2FF format
IoT SIM 3FF	MQTT Anywhere IoT SIM - 3FF format
IoT SIM 4FF	MQTT Anywhere IoT SIM - 4FF format

Further information

Find out more at **www.u-blox.com/iot-communication-service**