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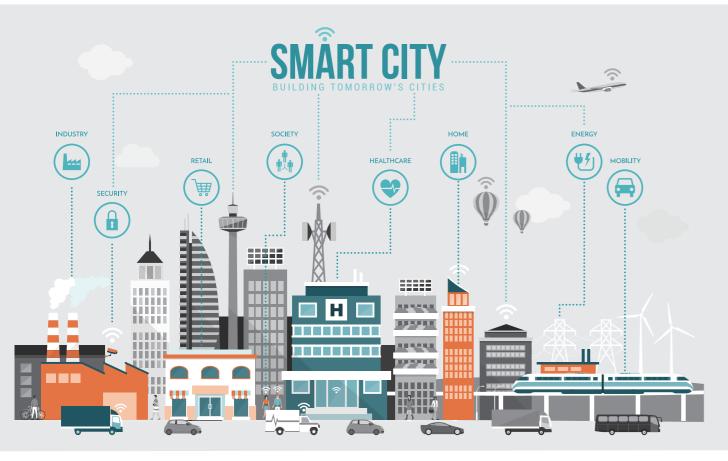


## Muz Tech Co.,Ltd

Global leading one-stop suppliers in M2M industry







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## About Us

Muz Tech Co., Ltd. was established in 2018 as a customer-oriented independent inventory distributor. Our goal is to provide our customers with the best products, as well as quality service and support. We specialize in wireless modules, electronic components, antennas, PCB/PCBA, etc. Provide you with one-stop service.

We offers a multi-manufacturer and multi-technology product line to meet all possible wireless needs of customers in terms of product life cycle, regional usage, communication speed, price, performance, certification, and more. Much of our success is the result of a dynamic team effort working with excellent suppliers. We also make technical support and customer service a top priority to help customers integrate components as easily as possible.

**Module brands:** SIMCOM, Quectel, Fibocom, Sierra, Huawei, Ublox, Telit, ZTE,LoRa,Ai-thinker, Espressif......

IC brand: ST, ON, NXP, Infineon, TI, ADI, Microchip, Xilinx, Analog, Atmel, ......

#### Our advantages:

- 1.BOM one-stop service
- 2. Products are 100% new and original
- 3. Deliver quickly and offer you competitive prices
- 4. Technical support. We have professional engineers to provide service for you
- 5. Excellent after-sales servicetor

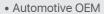
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Simcom and Sierra module **IOT** Application



#### Telematics&Transport

### Energy



- Vehicle Tracking
- Container Tracking
- Ship Tracking
- Fleet Management
- OBD
- DVR
- Insurance Box



- Electricity Meter
- Gas Meter
- Water Meter
- Heat Meter
- Smart Grid
- Wind Turbines
- Solar Panel
- Charging Pile



#### Payment

- Wireless POS
- Cash Register
- Vending Machine
- ATM
- Top-up Machine



#### Security

- Alarm
- Camera
- Video Surveillance



#### **Smart City**

- Street Lighting
- Traffic Light
- Elevator
- Digital Signage
- Advertisement Display
- LED Lighting
- Garbage Bin Monitoring
- Parking



## Gateway

- DTU
  - Consumer Router
  - Industrial Router
  - VOIP
  - Server



#### Industry

- Industrial PDA
- Rugged Tablet PC
- Pipeline Management
- UAV
- Robot
- Flow Meter
- Refrigerator
- Industrial Control
- Industrial Monitoring



### Agriculture&Environment +

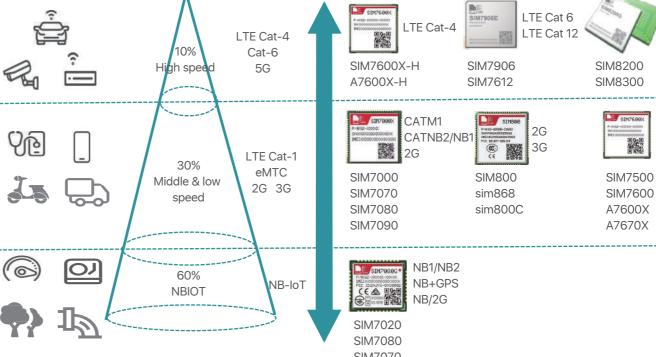


#### Personal Tracker

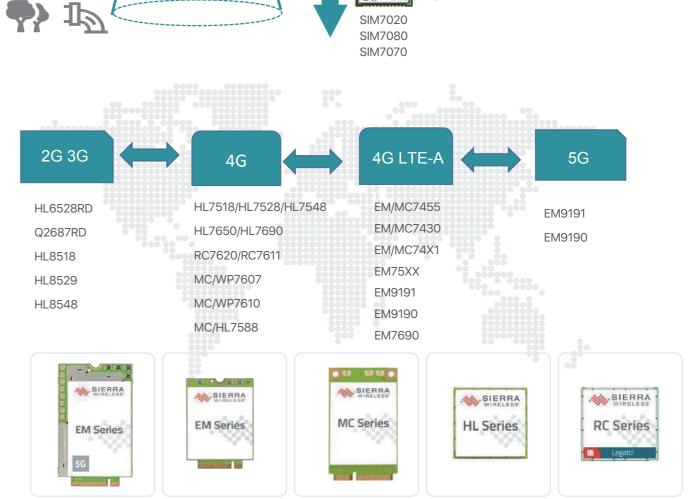
Life&Healthcare

- Trail Camera
- Farm Machinery
- Irrigation
- Meteorological Station
- Wildlife Tracking
- Environment Monitoring

- Pet Tracker
- Wearables
- Elderly Monitoring
- Remot Medical Device
- Glucometer
- Blood Pressure Monitor
- Gaming Machine

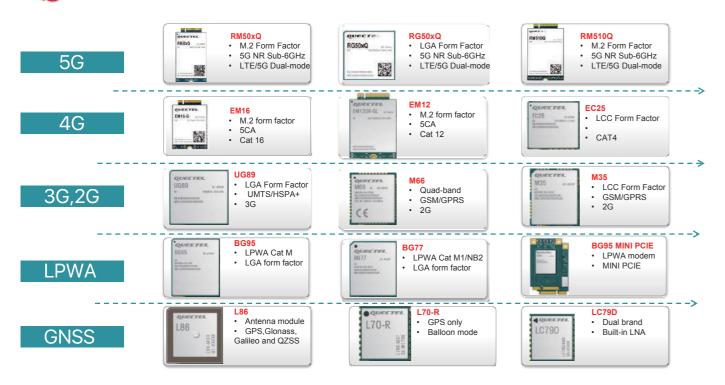


LTE Cat 1

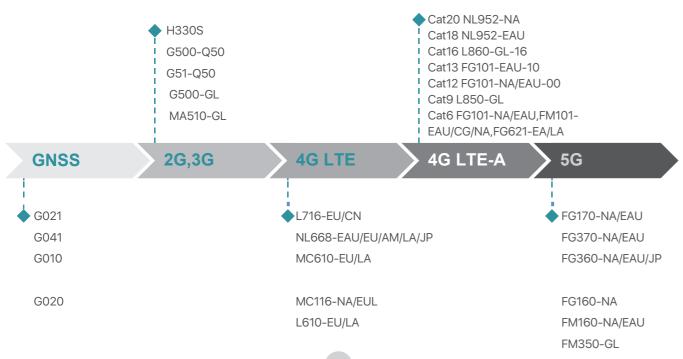


Quectel and Fibocom module Telit and Ublox module

## QUECTEL



## FIDOCOM





LPWA	Talk	ME910G1 ME910C1 ME310G1 NE310L2 EXS82 EXS62 TX82 TX62 TN23 ML865G1 ML865C1
4G LTE	Macanana Marinery D	LM960A18 LN920 LE910Cx LM940 LE910R1 LE910S1 mPLS83 mPLS63 PLS83 PLS63 ELS62 SE250B4 SE150A4 LE915Ax-P
5G Sub-6 mmWave	1	FN990Axx FN980/FN980m MV32 MV31



GNSS	Bluetooth	LPWA	2G/3G	4G LTE
ZED - F9R/F9K/F9P/ F9H/F9R/F9T	NORA- W30/W36/W10/W2	SARA- R500E (LTE-M)	SARA-G450 (GSM/GPRS)	LARA-L6 (Cat4)
NEO-M8P/D9C/D9S /M9V/M9L/M8U/M9N/F 10 T/M8T/M8N	IRIS-W16/W10	SARA- R540S, SARA-R5, UBX-R5, (LTE-M/NB-IOT)	SARA-U2 (HSPA with 2G fallback)	LENA-R6 (Cat1)
UBX- M9340/M9140/ M10050	NINA-B40/W15/B2 /W10/B31/B30	SARA-R4 (LTE-M/BN- IOT/EGPRS)		LENA-R8(CAt1)
LEA-M8F/M8T	NINA-B40/W15/B2 /W10/B31/B30	SARA-510AWS		
ANN-MB1/MB/MS	M2-JODY-W3/W2 card (BT+Wifi)	SARA-N310 (NB-IOT,LTE Cat NB2)		



The SIM7000G is global-Band LTE-FDD, LTE-TDD and Quad-Band GPRS/EDGE module solution in a LCC type which support LTE Cat-M1 and NB-IoT up to 375kbps data transfer. This module is ideally suited for M2M applications, such as metering, telematics, asset tracking, remote monitoring, E-health, mobile pos terminals and sharing bike.







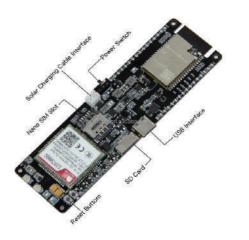


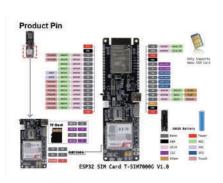
SIM7600X-H is a complete multi-band

LTE-FDD/LTE-TDD/HSPA+/UMTS/EDGE/GPRS/GSM modulesolution in LCC type which supports LTE CAT4 up to 150Mbps for downlink and 50Mbps for uplink data transfer.

- ◆ Stand-alone GPS
- ◆Control Via AT Command, Rich interfaces including UART, USB2.0
- ◆Supply voltage range:3.4v~4.2v, Typ:3.8V
- ◆Dimension: 30x30x2.9mm
- ◆Operation temperature:-40 °C to +85 °C

Part number	BK-SIM7600G-H
Part number	BK-SIM868
Part number	BK-SIM7600E-H
Part number	BK-SIM7600SA-H
Part number	BK-A7670E
Part number	BK-SIM7070G





LILYGO TTGO SIM7000G, In addition to the NBIOT module-SIM7000G, it also comes with the ESP32-Wrover-B chip and the 18560 battery seat solar charging development board, which can work together and complement each other. It also has WiFi and Bluetooth functions, making it more widely used.

Part number	LILYGO SIM7600G-HR2
Part number	LILYGO SIM800L
Part number	LILYGO SIM7600E-L1C
Part number	LILYGO SIM7600E-H
Part number	LILYGO A7670SA

All development borads will be used with the antenna.

#### **Main Products**





USB Dongle series USB Dongle series

#### **Application**

- Industrial Internet of things
- Medical device
- Intelligent entrance guard
- Self service equipment
- Financial payment
- Charging station













#### **Product Instruction**

USB 2.0 Interface

Multi System Support

Multi System Support

Windows / Android / Linux

Serial port support

**UART** Serial port support

Of the Oction port Support

China / Middle East / Africa / Europe / Korea /

Thailand / India / Japan / Global version

LTE Cat M1

375Kbps Downlink and Uplink (BG96)

LTE Cat 4

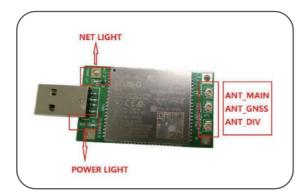
150Mbps Downlink

Multi Country And Regional Support 50Mbps Uplink (EC20 Series/ EC25 Series /EG25-G)

USB Dongle V2.1 has built-in rich network protocols, and is suitable for Windows/Linux/Android. It is widely used in IoT fields such as device networking, unmanned self-service equipment, industrial routers, and Raspberry Pi applications.



BG95-M3 LPWA Cat M1/ NB1/ EGPRS Dongle



EC20 Series/ EC25 Series / EG25-G LTE Cat 4 Dongle

This 4G LTE dongle is equipped with 4G USB Dongle / EC25 Series IoT/M2M-optimized LTE Cat 4 LCC Module, which enables it be able to delivers maximum data rates up to 150Mbps downlink and 50Mbps uplink. It also can be used for Windows, Linux, Android after installing the corresponding drivers.



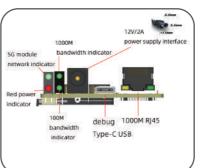


#### 5G Dongle WWAN Card To RJ45 Adapter With SIM Slot

The product is compact, plug and play, no need to install drivers. just plug in the 5G module RM502Q-AE + 5G antenna + 5G card, connect the network cable to use the 5G network, stable performance, fast and convenient use

The product size is small, easy to use, and after the customer installed integration. It can help customers to realize machine networking, state monitoring, remote equipment maintenance and other application requirements. It is suitable for intelligent factory, robot, video surveillance, intelligent power, electronic sentry and other fields.









### SIM7600G-H USB Dongle User Manual

SIM7600 is a complete multi-band, LTE-FDD/LTE-TDD/HSPA+/UMTS/EDGE/GPRS/GSM solutio SIM7600G-H supports LTE CAT4 up to 150Mbps for downlink and 50Mbps for uplink, SIM7600G supports LTE CAT1 upto 10Mbps for downlink and 5Mbps for uplink data transfer.

Stand-alone GPs and Control via AT Command, USB2.0 interface









Bom list&IC PCB&PCBA

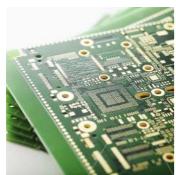
#### IC & BOM



#### **Bill Of Materials**

A bill of materials or product structure (sometimes a bill of materials, BOM, or related list) is a list of the raw materials, subassemblies, intermediate assemblies, subassemblies, parts, and quantities of each required to make the final product. The bill of materials can be used for communication between manufacturing partners or can be limited to a single manufacturing plant.



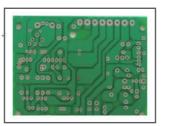




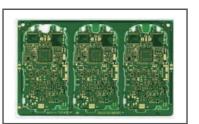


#### PCB&PCBA

Muz Tech has the capability to manufacture pcb ranging from basic single sided boards up to forty layers, and provide one stop turnkey services, including pcb manufacture, assembly, components sourcing and function testing. With one-stop solution, high-end product structure, professional product development and manufacturing technology, stable quality performance and well management system





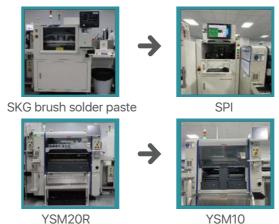


Single-Sided Boards

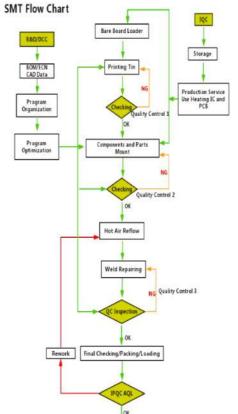
Double-Sided Boards

Multi-Layer Boards

#### **Production Equipment**







#### Doucuments needed

Bom list Gerber file XY Date (pick-N-place)

#### **FAQ**

1.What files for PCB&PCBA quotaion?
PCB files(gerber with designator),Bom
list,XY Date(pick-N-place)

2.MOQ and Delivery time? 5pcs, 1-2weeks

3.How to test PCB and PCBA boards?

SPI,AOI,X-RAY,FQC for PCBA AOI,Fly probe testing,Text fixture testing,FQC for PCB





Product case Product case

The Internet of Things has been applied in industry, medical treatment, agriculture, logistics, transportation, power grid, environmental protection, fire protection, furniture and other aspects, closely fit our life, bringing us all kinds of convenience. With the continuous development and maturity of the Internet of Things technology, the future Internet of Things will bring revolutionary changes to life.

#### Case display

Smart energy -- charging pile

Related products:4G,5G module

With the rapid development of new energy vehicles, charging piles, as electronic devices for electric vehicles to charge, will usher in great prospects for development.

#### 1. Ease of use of charging pile

Currently, users who use mobile phone payments to charge their batteries have become the mainstream. Users can recharge and check payment records through mobile app. Charging pile operators can realize remote monitoring of charging equipment through mobile phones to ensure the normal operation of charging business.

All of these can be realized through wireless communication module, which greatly improves the convenience of users and the efficiency of the charging pile.

#### 2. Safety of charging pile

Under the national standard, electric vehicle charging pile should be equipped with over and under voltage protection, lightning protection, output short-circuit protection, leakage protection and overcurrent protection and other protection devices; Electric vehicle charging pile has electric leakage protector, when electric vehicle charging pile in standby or charging process, if there is electric leakage, it will trip in time to protect the personal safety of customers; Press the button in



emergency, pile instantaneous power off, protect personal and property safety.

Real-time monitoring of charging pile status through wireless communication, such as leakage trip information will be fed back to the platform for alarm processing in the first time, so that "supervision" and "protection" completely eliminate safety risks;

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#### Intelligent agriculture

Related products :NB-IOT module, LTE Cat1/Cat4/Cat6 module,GPS module

Traditional agriculture is in the natural economic conditions, the use of human, animal power, hand tools, iron and other manual labor mode, with the further deepening of the trend of intensive production of modern agriculture, in order to achieve the improvement of agricultural output and management efficiency, more need to use digital management means to achieve scientific decision-making.

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#### Numbers drive intensive farming in the field

BNIOT module, featuring wide area link and low power consumption, can carry out all-day detection and data transmission for large areas of fields, so that administrators can know the situation in real time through data. Through wireless network transmission, managers can view the data of soil moisture and PH, fertility, temperature, light duration, diseases and pests that affect crop growth collected by sensors on mobile phones and other terminals, and then make timely decisions.g





With the support of the Internet of Things, the amount of labor involved in agricultural production has been reduced, but tilling, sowing, spraying pesticides, weeding and so on are unavoidable. Common agricultural machinery, such as fertilizer applicator, planter, harvester, tractor, agricultural UAV, etc., can realize autonomous operation of agricultural machinery by integrating wireless communication connection ability and GNSS positioning ability, combined with other technologies.