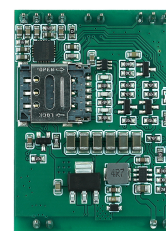
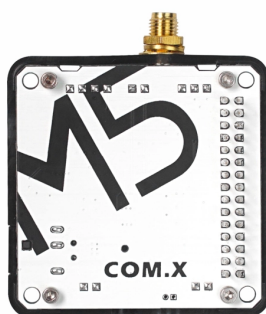
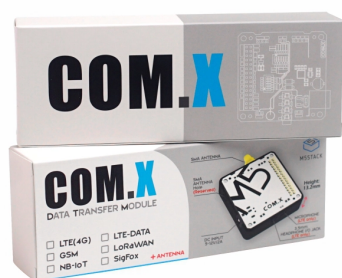
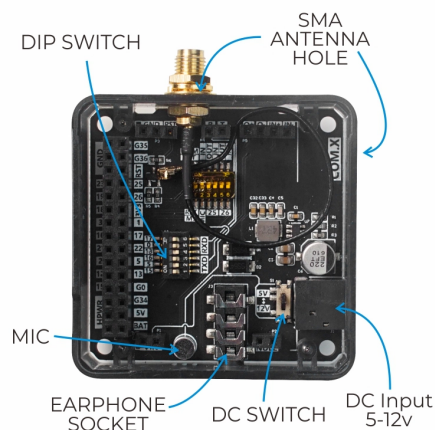


Module COMX LTE

SKU:M031-A



Description

Module COMX LTE is a stackable multifunctional LTE communication module, built-in LTE module SIM7600G, supporting LTE-TDD/LTE-FDD/WCDMA and GSM frequency bands, supporting LTE.CAT4 (downlink speed of 150Mbps), and supporting voice calls and SMS. It has stable performance, compact appearance, and high cost performance, enabling low-power transmission of SMS and data information. The module comes with a DC power input, which can be powered by an external power supply of 5 ~ 12V. For user convenience in configuring

pins, a DIP switch is used to set the pins. The onboard microphone and 3.5mm headphone jack support the insertion of headphones with a microphone. This module is particularly suitable for scenarios requiring high-speed network connections, such as video calls, drone data transmission, and industrial IoT.

Note

Compatibility

When used with the Fire main control, due to PSRAM pin (G16/G17) conflicts, please switch the module base DIP switch pins to TX(G0/G13), RX(G5/G15).

Features

- Stackable design
- Supports voice calls, SMS, and cellular data transmission
- Can be powered externally
- Built-in microphone
- AT command control
- SIM card type: MicroSIM
- Status signals: Two LED indicators
- External antenna: SMA antenna
- Serial communication: UART 115200bps
- Frequency bands:
 - LTE-TDD B34/B38/B39/B40/B41
 - LTE_FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66
 - WCDMA B1/B2/B4/B5/B6/B8/B19
 - GSM/GPRS/EDGE 850/900/1800/1900MHz
- Data transmission:
- LTE Cat4
 - Maximum uplink speed: 50Mbps
 - Maximum downlink speed: 150Mbps
- HSPA+
 - Maximum uplink speed: 5.76Mbps
 - Maximum downlink speed: 42Mbps
- WCDMA
 - Maximum uplink/downlink speed: 384Kbps
- EDGE/GPRS
 - Maximum uplink/downlink speed: 236.8Kbps
- Supported protocols
 - TCP/IP/IPV4/IPV6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS
 - TLS
 - RNDIS/ECM
 - FOTA

Includes

- 1 x Module COMX LTE
- 1 x SMA antenna
- 1 x Hex wrench

Applications

- Smart metering
- Video calls
- Industrial IoT

Specifications

Specification	Parameters
Supported bands	LTE-FDD/LTE-TDD/WCDMA/GSM
Network protocols	TCP/IP/IPV4/IPV6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS
Communication method	UART 115200bps
DC interface specification	5.5mm
Net weight	55g
Gross Weight	90g
Product Size	54 x 54 x 13.2mm
Package Size	165 x 60 x 36mm

Learn

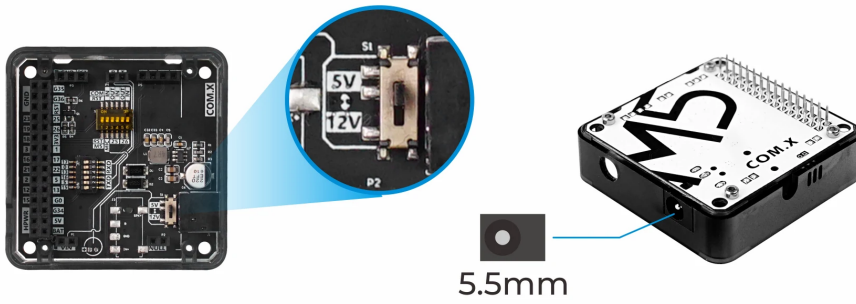
Frequency bands of some national operators

The following content is not real-time information and is for reference only.

North America	B4 (1700), B12 (700), B66 (1700), B71 (600), B26 (850)
Asia Pacific	B1(2100), B3(1800), B5(850), B8(900), B18(850), B20(800), B26(850),B28(700)
Europe	B3 (1800), B8 (900) , B20 (800)
Latin America	B2(1900), B3(1800), B5(850), B28(700)
Commonwealth of Independent States	B3 (1800), B8 (900), B20 (800)
Sub-Saharan Africa	B3(1800), B8(900)
Middle East, North Africa	B8(900), B20(800)

Power supply switching

The module base has a DC power input interface. When using this interface to connect to a power supply, please strictly follow the input range (5-12V) to prevent module damage. The internal power DIP switch can adjust the voltage level of the internal terminal VIN to adapt to different modules.



Headphone Jack Compatibility Instructions

When using the 3.5mm headphone jack onboard the Module COMX LTE, a 3.5mm male connector with a length of 17mm is required; otherwise, the microphone will not work properly. For connectors of other lengths, use an adapter, or cut a small part of the headphone jack to ensure the headphone plug is fully inserted into the headphone jack. Alternatively, you can enable the onboard microphone via the DIP switch.

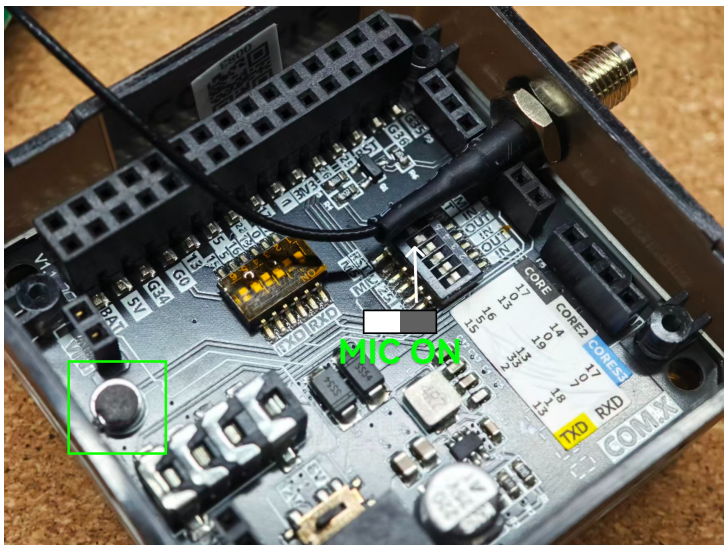
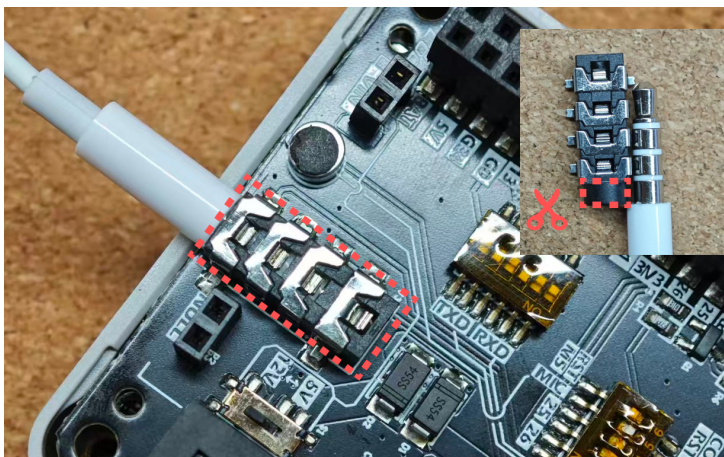


Diagram of cutting the headphone jack:



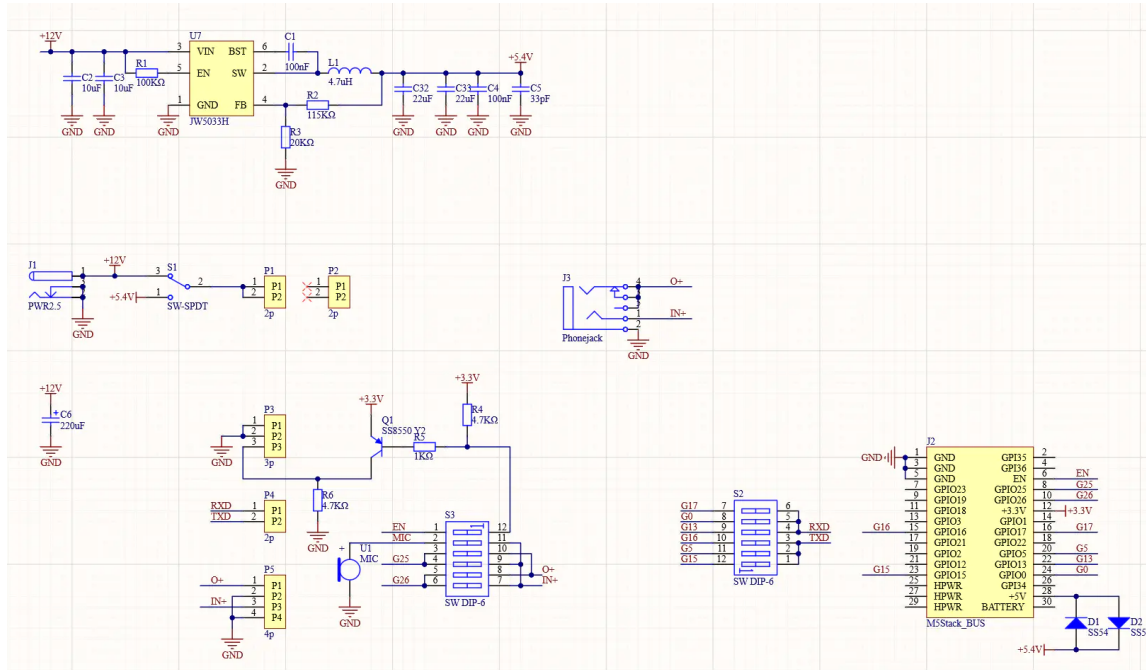
Certifications

- CE/RCM/FCC/IC
- PTCRB/GCF
- AT&T/Verizon

- RoHS/REACH
- [SIM7600E-PCIE_Deutsche Telekom_Certificate_2020.pdf.pdf](#)

Schematics

Module COMX Module Base Schematic



PinMap

M5-Bus

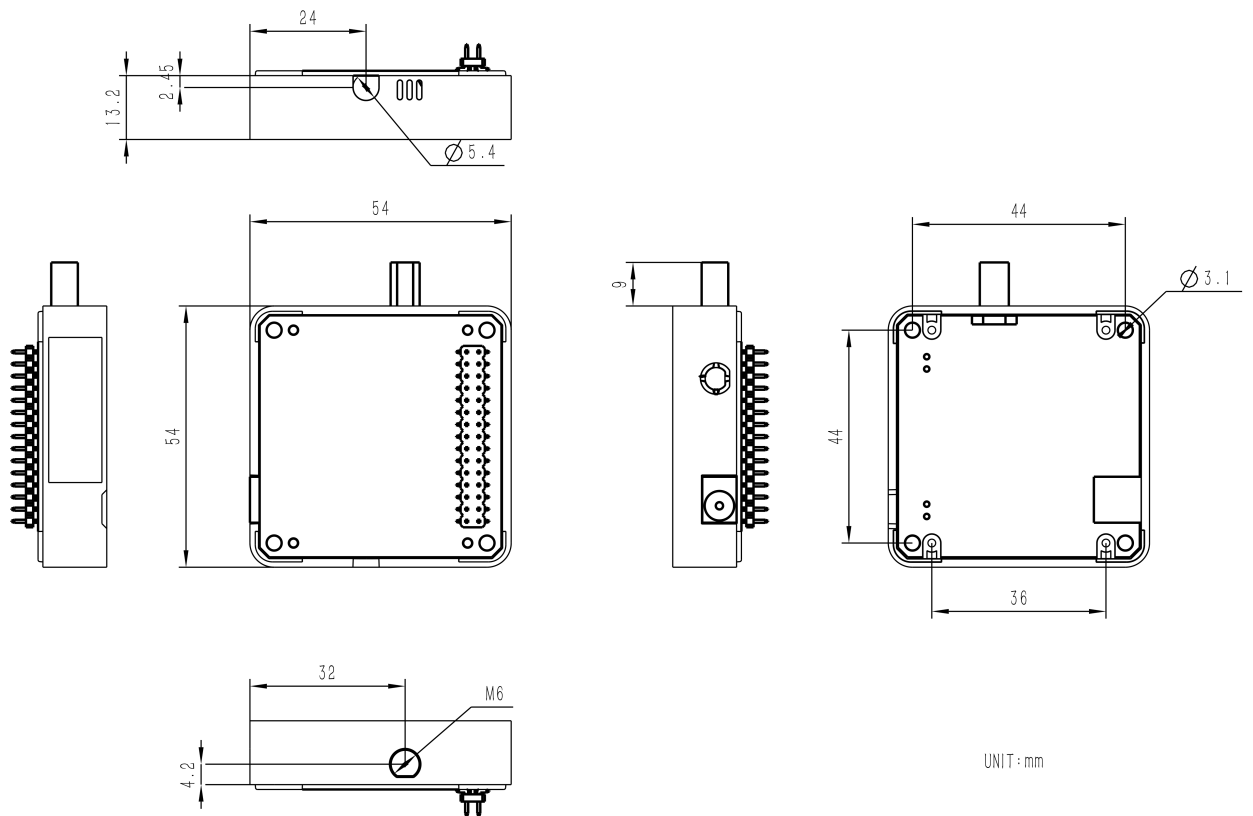
Switch

The pins marked **SW** on the M5-Bus below can be switched via DIP switches to adapt to different main controllers.

PIN	LEFT	RIGHT	PIN
GND	1	2	
GND	3	4	
GND	5	6	
	7	8	
	9	10	
	11	12	3V3
	13	14	
TXD (SW)	15	16	RXD (SW)
	17	18	
	19	20	TXD (SW)
	21	22	RXD (SW)
TXD (SW)	23	24	RXD (SW)
	25	26	
	27	28	5V
	29	30	

Model Size

- [Module COMX LTE Model Size PDF](#)



Datasheets

- Datasheet
 - [SIM7600G datasheet](#)
- Application
 - [SIM7100_SIM7500_SIM7600_SIM7800 Series_USB AUDIO_Application Note_V2.00.pdf](#)
 - [SIM7100_SIM7600 Series_TTS_Application Note_V2.0.pdf](#)
 - [SIM7500_SIM7600 Series_FOTA_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600 Series_FTP\(S\)_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600 Series_GNSS_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600 Series_Jamming Detection_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600 Series_SAT_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600_SIM7800 Series_ECALL_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600_SIM7800 Series_MQTT_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600_SIM7800 Series_SMS_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600_SIM7800 Series_SSL_Application Note_V2.00.pdf](#)
 - [SIM7500_SIM7600_SIM7800 Series_TCPIP_Application Note_V2.00.pdf](#)
 - [SIM7600 Series_HSIC_LAN_Application Note_V2.00.pdf](#)
 - [SIM7600_AYLA_V2.00.pdf](#)
 - [SIM7600_Alibaba_MQTT_COAPV2.00.pdf](#)
 - [SIM7100_SIM7500_SIM7600 Series_GPIO_Application Note_V2.00.pdf](#)
 - [SIM7100_SIM7500_SIM7600 Series_LBS_Application Note_V2.00.pdf](#)
 - [SIM7100_SIM7500_SIM7600 Series_Sleep Mode_Application Note_V2.00.pdf](#)
 - [SIM7100_SIM7500_SIM7600 Series_UART_Application Note_V2.00.pdf](#)
 - [SIM7100_SIM7500_SIM7600 Series_UIM_HOT_SWAP_Application Note_V2.00.pdf](#)

Arduino

- [Module COMX LTE Arduino Quick Start](#)
- [Module COMX LTE Example with M5Core](#)

UiFlow1

- [Module COMX LTE UiFlow1 Docs](#)

UiFlow2

- [Module COMX LTE UiFlow2 Docs](#)

Protocol

- [SIM7500_SIM7600 Series_AT Command Manual_V2.00.pdf](#)

Easyloader

Easyloader	Download Link	Notes
Module COMX LTE Example Easyloader with M5Core	download	/

Video

[COM.LTE\(4G\).mp4](#)