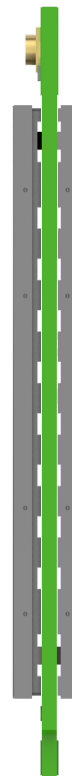


ML620 450MHz LTE Cat.4 Module

Powered by GCT semiconductor 2nd generation 4G modem chipset GDM7243ST, ML620 is the high performance dual core processor modem which can support multiple commercial LTE bands and LTE450 bands. It is a very high stability and cost effective design by adopting single SoC modem chipset inside. It can work with extreme wide temperature range and it always can offer very good performance for various applications.



Features

- Most powerful and popular mini-PCIe type LTE450 Cat.4 module in the market.
- State-of-the-art 450MHz RF front-end design providing superior performance.
- Adopt GCT semiconductor 2nd generation 4G modem chipset GDM7243ST with 3GPP Release 9 support.
- Rich RF band configuration to cover the LTE FDD/TDD commercial and LTE450 bands in the market.
- 150Mbps Max Download speed and 50Mbps Upload speed @ LTE FDD/TDD commercial network bands.
- 37.5Mbps Max Download speed and 12.5Mbps Upload speed @ LTE450 private network band.
- High memory configuration 1Gb RAM and 1Gb Nand Flash to make sure high performance always.
- Advance features including 10/100M Ethernet port on-board(optional) and SDIO for 802.11 b/g/n Wi-Fi externally
- Laser engraving process to ensure better heat dissipation and information not easy to be erased.
- Rich software features implementation including internet protocols and industry standard interfaces.
- Mission Critical QCs (65,66,69,70) support till 3GPP Rel.14.
- Mature module solution for MC-PTT and other industrial applications.

Specification

Basic Modem Information

SoC	GCT GDM7243ST
CPU	ARM Dual core 400MHz
LTE Cat.	LTE Category 4
3GPP Rel.	3GPP Release 9
RF TRX	1T2R
RAM	LPDDR2 1Gbit
Flash	Nand 1Gbit
OS	Linux 3.10

Basic Hardware Interface

SIM	x1, 1.8V/3.0V (U)SIM Interface
USB	x1, USB 2.0 with high speed up to 480Mbps
UART	x1, AT command
Net Light	x3, STATUS, NET_STATUS, NET_MODE
SDIO	x1, hardware optional
Ethernet	x1, 10/100M hardware optional
RESET	x1, active LOW
ADC	x1
Antenna	x2, U.FL for Primary and Rx-diversity Antennae

Physical Characteristic

Input Voltage	DC 3.3~4.2V, Typical 3.8V
Consumption	Max 2A
TX Power	23dBm ± 2dB
Work Temp	-30°C to 70 °C
Extend Temp	-40°C to 85 °C *
Size	51mm x 30mm x 4.5mm
PIN Number	mPCIe standard 52 PIN
Weight	Approx. 10 gram

Package Detail

Gift Box	Include 10 x trays in total 100pcs, Approx. 1.5Kg
Carton Box	Include 4 x giftboxes in total 400pcs, Approx. 6.9Kg

Ordering Information

ML620EU	LTE Cat.4 LTE B3/7/20/31/72
ML620DE	LTE Cat.4 LTE B3/7/20/72
ML620RU	LTE Cat.4 LTE B3/7/20/31/40

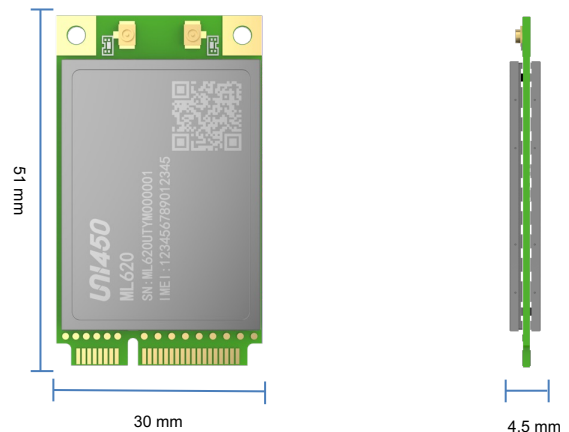
Software Feature

LTE	APN Management
	BAND Management
	PIN Management
Dial Mode	Auto Call Manager
	Manually by AT command
Protocols	TCP
	UDP
	HTTP
	HTTPS
	FTP
USB Driver	Android RIL 10.x
	ECM Linux 3.x/4.x/5.x
	RNDIS WINDOW 7/10/11
	RNDIS Linux 3.x/4.x/5.x
AT Command	3GPP TS 27.007, 27.005
	UNI450 Enhanced AT commands

3GPP Ideal Data Throughput**

20MHz BW	Download speed up to 150Mbps, 2Rx
	Upload speed up to 50Mbps, 1Tx
5MHz BW	Download speed up to 37.5Mbps, 2Rx
	Upload speed up to 12.5Mbps, 1Tx

Mechanical Characteristic



*: Under this temperature condition, some of RF indicators may exceed the 3GPP standard.

** : Actual speed over the air depends on the real network environment and terminal design.