A7676E

SIMCom LTE450 Cat 1 Module

24mm

24mm   2.4mm

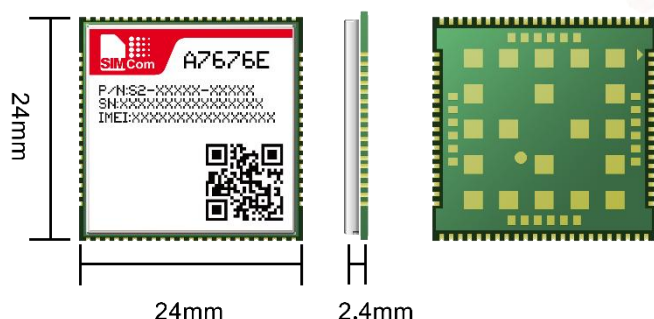| Multi-Band | CAT 1 +GSM | LCC+LGA |
| TCP/IP | Compact Size | FOTA |
| 450MHz | CAT 1bis | GNSS |

Product Description

A7676E is the LTE450 & Cat 1 module that supports wireless communication modes of LTE-FDD/GSM/GPRS/EDGE. It also supports LTE 450MHz frequency band and supports maximum 10Mbps downlink rate and 5Mbps uplink rate.

A7676E adopts LCC+LGA form factor and is compatible with SIM7000/SIM7070 series (NB/Cat M modules), and SIM800F (2G modules), which enables smooth migration from 2G/NB/CAT-M products to LTE Cat 1 & 450Mhz products, and greatly facilitates more compatible product design for the customer needs.

A7676E is optimized for LTE Cat 1bis and supports multiple built-in network protocols and the drivers for main operation systems (USB driver for Windows, Linux and Android). A7676E also supports Dual SIM, VoLTE and GNSS* to adopt various usage scenario. Due to the latest generation LTE Cat1 chipset, A7676E offers ultra-low power consumption and integrates abundant industrial standard interfaces with powerful expansibility, such as UART, USB, I2C and GPIO, which makes it perfectly suitable for main IOT applications such as telematics, POS, surveillance devices, industrial routers, and remote diagnostics etc.

Key Benefits

◆ Compact size with abundant interfaces & ultra-low power consumption

◆ Supports Dual SIM, VoLTE and GNSS function(optional)

◆ Abundant software functions: FOTA, LBS, SSL

◆ Form factor is compatible with the SIM7070E (LTE450 Cat M1 & NB2 module)

General Features

Frequency Bands	LTE-FDD B1/B3/B8/B20/B31/B72
	GSM/GPRS/EDGE 900/1800 MHz
Supply Voltage	3.4V ~ 4.2V, Typ: 3.8V
Control Via AT Commands	
Operation temperature	-40℃ ~ +85℃
Dimensions	24*24*2.4mm
Weight	2.8±0.1g

Other Features

USB Driver for Microsoft Windows 7/8/10

USB Driver for Linux /Android

RIL supporting for Android 5.0/6.0/7.0/8.0/9.0

Firmware update via USB/FOTA

TCP/IP/IPV4/IPV6/Multi-PDP/FTP/HTTP/DNS

RNDIS/PPP/ECM

MQTT/MQTTS

TLS1.2

LBS

Data Transfer

LTE Cat 1	Uplink up to 5Mbps
	Downlink up to10Mbps
EDGE	Uplink/Downlink up to 236.8Kbps
GPRS	Uplink/Downlink up to 85.6Kbps

Interfaces

USB2.0

UART

(U)SIM card(1.8V/3V)

Analog audio

PCM

ADC

I2C

GPIO

Antenna: Primary / GNSS*

Certifications

CE-RED/RoHS/REACH

Note

*: optional
#: means under developing/on-going/planning