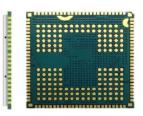
Amphenol

LTE CAT1 Module





Overview

A1310EA is the LTE Cat 1 module which supports wireless communication modes of LTE-TDD/LTE-FDD/ GSM/GPRS. It supports maximum 10Mbps downlink rate and 5Mbps uplink rate.

A1310EA supports multiple built-in network protocols, supports drivers for main operation systems (USB driver for Windows, and Linux etc.) and software function.

A1310EA integrates main industrial standard interfaces, with powerful expansibility, including abundant interfaces such as UART, USB, I2C, GPIO, which is suitable for main IoT applications such as telematics, surveillance devices, CPE, industrial routers, and remote diagnostics etc.

Key Feature

- ➤ -40°C to +85°C, industrial-grade
- ➤ TCP/IP/UDP/MQTT/HTTP(s)/FTP IoT protocols
- Compact size: 29.0mm × 32.0 mm × 2.5 mm

Key Benefit

- LCC+LGA form factor with abundant interfaces
- > Suitable for LTE and GSM networks
- > Abundant software functions: FOTA, LBS, SSL

Application Interfaces

- Power Supply
- ◆ USB2.0 Interface
- UART Interfaces
- ♦ MMC/SD Interface
- USIM Interface
- ◆ GPIOs

AMPHENOL

- ADC
- One channel LDO Power Output
- ◆ PCM Interface
- ♦ I2C Interface
- SPI Interface
- Analog Audio Interface

Features

Feature	Implementation
Power supply	Single supply voltage 3.4 ~ 4.2 V, recommend 3.8 V.
Power saving	Current in sleep mode : <3 mA
Radio frequency bands	FDD-LTE: B1, B3, B5, B7, B8, B20, B28
	TDD-LTE: B38, B40, B41
	GPRS: B3, B8
Data Transmission Throughput	GPRS multi-slot class 12: 85.6 kbps (UL). 107 kbps (DL).
	FDD-LTE: 10 Mbps (DL), 5 Mbps (UL).
Antenna	GSM/UMTS/LTE main antenna
	GNSS antenna
GNSS	GNSS engine: GPS, GALILEO and GLONASS
	Protocol: NMEA
SMS	MT, MO, CB, Text and PDU mode
	SMS storage: USIM card or ME(default)
	Transmission of SMS alternatively over CS or PS.
USIM interface	Support identity card: 1.8 V / 3 V
USIM application toolkit	Support SAT class 3, GSM 11.14 Release 98
	Support USAT
Phonebook management	Support phonebook types: DC,MC,RC,SM,ME,FD,ON,LD,EN
Audio feature	Support PCM interface
	Only support PCM master mode and short frame sync, 16-bit linear data formats
UART interfaces	MAIN UART:
	A full modem serial port by default
	Baud rate: 9600 bps to 3.6Mbps (default:115200 bps)
	Can be used as the AT commands or data stream channel
	Support RTS/CTS hardware handshake
	Multiplex ability according to GSM 07.10 Multiplexer Protocol
SD	Support SD Cards with 3.3 V on SD port
USB	USB2.0 high speed interface
Certification	CE,ROHS,REACH,GCF*
Firmware upgrade	Firmware upgrade over USB interface
Temperature range	Normal operation temperature: -30°C ~ +80°C
	Extended operation temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
	Storage temperature $-45^{\circ}\text{C} \sim +90^{\circ}\text{C}$

^{*-} On going

AMPHENOL

