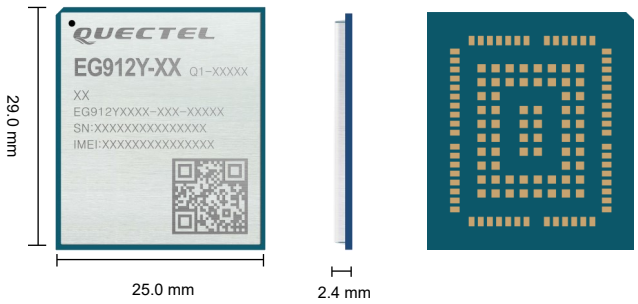
Quectel EG912Y

IoT/M2M-optimized

LTE Cat 1 Module



Quectel EG912Y refers to a type of LTE Cat 1 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel -9 LTE technology, EG912Y delivers maximum data rates of 10 Mbps downlink and 5 Mbps uplink. Designed in a compact and unified form factor, EG912Y is compatible with Quectel multi-mode LTE Standard LTE Cat 1/Cat 4 EG91 and EG95 series modules, LTE Cat M1/Cat NB1 BG36 and UMTS/HSPA+ UG35/UG96 modules, which allows flexible network switch of EG912Y from a 3G network to a 4G network.

EG912Y contains two variants: EG912Y-CN and EG912Y-EU, which meet the frequency band coverage of different countries and regions. EG912Y undergoes the laser engraving process to ensure better appearance, stronger metal texture and faster heat dissipation, and to ensure that information is less erasable and EG912Y better meets automaton requirements.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB drivers for Windows 7/8/8.1/10, Linux and Android) help extend the applicability of EG912Y to a wide range of M2M and IoT applications such as industrial router, industrial PDA, tablet PC, video surveillance, and digital signage.

Key Benefits

- LTE Cat 1 module optimized for M2M and IoT applications
- Extensive LTE, GSM/GPRS/EDGE coverage
- Support Firmware Over-the-Air (FOTA) *
- Super cost-effective

LTE Cat 1
Max 10 Mbps (DL)
Max 5 Mbps (UL)

Compact Size

LGA Package

Abundant Protocols Compliant

FOTA*

Wi-Fi*

USB 2.0 High Speed Interface

USB Drivers

Quectel Enhanced AT Commands

Rev.: V1.0 | Status: Released

Quectel EG912Y

IoT/M2M-optimized LTE Cat 1 Module

China/India

EG912Y-CN:

LTE-FDD: B1/B3/B5/B8

LTE-TDD: B34/B38/B39/B40/B41

GSM: 900/1800 MHz

Europe/Southeast Asia

EG912Y-EU:

LTE-FDD: B1/B3/B5/B7/B8/B20/B28

LTE-TDD: B38/B40/B41

GSM:B2/B3/B5/B8

Data

LTE:

FDD: Max 10 Mbps (DL)/5 Mbps (UL)

TDD: Max 7.5 Mbps (DL)/1 Mbps (UL)

GSM:

GPRS: Max 85.6 Kbps (DL)/85.6 Kbps (UL)

EDGE: Max 236.8 Kbps (DL)/236.8 Kbps (UL)

Interfaces

USB 2.0: × 1 up to 480 Mbps

Digital Audio Through PCM Interface (optional)

(U)SIM: x 2 ((U)SIM1 & (U)SIM2*)

1.8 V/3.0 V (U)SIM Interface

NETLIGHT: x 1 NET_STATUS

UART: x 2 Main UART , Debug UART

SPI: x 1

ADC: x 2

SDIO: x 1 (for Wi-Fi*)

RESET (active low)

PWRKEY (active low)

Electrical Characteristics

Output Power:

Class 3 (23 dBm ±2 dB) for LTE FDD bands

Class 3 (23 dBm ±2 dB) for LTE TDD bands

Class E2 (27 dBm ±3 dB) for EGSM900 8-PSK

Class E2 (26 dBm ±3 dB) for DCS1800 8-PSK

Class 4 (33 dBm ±2 dB) for EGSM900

Class 1 (30 dBm ±2 dB) for DCS1800

Consumption:

15 μA @Power off Mode

1.1 mA @LTE Sleep Mode (PF = 128)

0.9 mA @LTE Sleep Mode (PF = 256)

12.5 mA @Idle Mode

Sensitivity:

FDD B1: -97.5 dBm

FDD B3: -97.5 dBm

FDD B5: -98.5 dBm

FDD B7: -96.5 dBm

FDD B8: -98.5 dBm

FDD B20: -98 dBm

FDD B28: -98 dBm

TDD B34: -98 dBm

TDD B38: -97.5 dBm

TDD B39: -98 dBm

TDD B40: -97. 5 dBm

TDD B41: -97.5 dBm

GSM850: -108 dBm

EGSM900: -108.5 dBm

DCS1800: -107.5 dBm

PCS1900: -108.5 dBm

Software Features

VoLTE*

FOTA (Firmware Over-the-Air)*

Wi-Fi Scan*

General Features

Extended Temperature Range: -40 °C to +85 °C

Dimensions: 29.0 mm × 25.0 mm × 2.4 mm

Package: LGA Package

Weight: approximately 3.5 g

Approvals

SRRC*/NAL*/CCC* (China)

CE*（Europe）

* Under Development

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