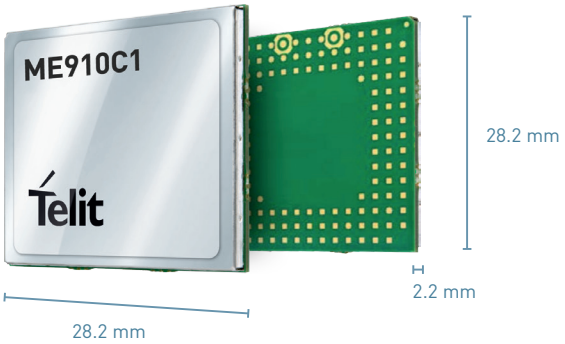
ME910C1 Series

LTE Cat M1 | Embedded



Product Description

The ME910C1 is the LTE UE Category M variant of the Telit LE910 series of LTE modules with optional quad-constellation GNSS . Ideal for numerous IoT applications, CAT M1 modules are optimized for efficient power consumption and enhanced coverage. Swappable with other models in the xE910 family of 28 x 28 mm LGA modules, the ME910C1 is the perfect solution for smart metering, security and surveillance, point of sale, health monitoring, fleet management, asset tracking, and wearables.

The ME910C1 delivers maximum downlink and uplink data rates in the range of 300kbps. This next generation of products supports the new features specified by 3GPP to boost IoT applications, The modules support power saving mode and extended discontinuous reception (eDRX), which together allow the module to wake up periodically, exchange small amounts of data with the network and return to sleep, providing for years of battery life. LTE Cat M devices contain a host of features that deliver cost-effective, compact designs, and ultra-low power consumption compared to higher UE categories. These advantages make the ME910C1 the perfect platform to enable a quick implementation of LTE technology in IoT/M2M where low cost and low power are more relevant than high speed.

The ME910C1 helps increase the addressable market for LTE technology to include a broad range of new applications and use cases best served with lower maximum data rate, ultra-low power, reduced complexity and cost. Some examples are smart meters, industrial sensors, healthcare monitors, home automation, asset tracker and many other low data rate IoT devices. The ME910C1 is offered in two different band configurations for deployment in Verizon Wireless, AT&T and T-Mobile 4G networks; Additional regional variants will follow, starting with an addition SKU for EMEA market. It is highly recommended for new designs, but also in particular as a migration path for existing GPRS or CDMA devices, both new and updated designs benefit from a significantly extended product lifecycles with LTE Cat M1.

Key Benefits

- Design once and deploy globally, with the swappable xE910 form factor family
- Perfect platform for regional IoT applications such as smart metering, security & surveillance, point of sale, health monitoring, fleet management, asset tracking and wearable devices
- LTE UE Category M1 is compliant with the latest 3GPP Release 13 enhanced Machine-Type Communication (eMTC), specifically designed for IoT use cases, offering minimum power consumption and extended coverage

Family Concept

The ME910C1 is a member of Telit's flagship xE910 module family delivering 4G radio access technology in the 28.2 x 28.2 x 2.2mm family form factor. The Telit xE910 Unified Form Factor Family is comprised of 2G, 3G, and 4G 3GPP and 3GPP2 products sharing a common form factor as well as electrical and programming interfaces which allows developers to implement a "design once, use any-where" strategy.

AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Africa
- Russia

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	ME910C1-NV	ME910C1-NA
Market	North America (Verizon)	North America (AT&T)
Frequencies		
4G bands (MHz)	B4(AWS1700), B13(700)	B2(1900), B4(AWS1700), B12(700)
Approvals	FCC, GCF, Verizon	FCC, PTCRB, AT&T

ME910C1 Series

Product Features

- LTE UE Category M1
- 3GPP release 13 compliant
- Half Duplex FDD
- Single Rx, single antenna
- 3GPP Rel. 12 Power Saving Mode (PSM)
- 3GPP Rel. 13 Extended Discontinuous Reception (eDRX)
- 3GPP Rel. 13 Extended coverage
- Control via AT commands according to 3GPP TS27.005, 27.007 and customized AT commands
- Serial port multiplexer 3GPP TS27.010
- SIM application Tool Kit 3GPP TS 51.01
- SMS
- IPv4/IPv6 stack with TCP and UDP protocol
- OMA Lightweight M2M (LWM2M)
- Over-the-Air firmware update
- Telit Application Development Environment: AppZone C (for future release)
- SSL
- Optional embedded GNSS (GPS, GLONASS, Beidou, Galileo)

Data

LTE Category M1

- Uplink up to 375 kbps
- Downlink up to 300 kbps

Physical & Environmental

- Dimensions 28.2 x 28.2 x 2.2 mm
- Extended temperature range: -40 to +85 °C

Interfaces

- 10 I/O ports maximum including multifunctional I/Os
- USB 2.0 HS
- UART
- SPI
- I2C
- 1.8 V / 3 V SIM interface

Electrical

- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC

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