LE910C1 Series
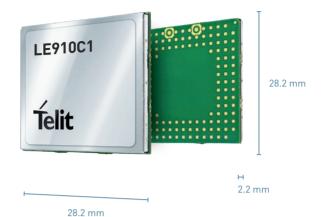
LTE Cat.1 10/5 | Embedded

28.2 mm

2.2 mm

28.2 mm

Product Description

The LE910C1 series of 4G LTE modules are compliant with the 3GPP Release 10 and are available with optional quad-constellation GNSS capability. This compact LGA form factor family is available in a variety of configurations, supporting both single-mode and fallback as needed for specific regions, carriers, and use cases.

Key Benefits

- Best-in class 3GPP rel10 platform
- MTC features ready according to 3GPP Rel.12
- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user definable GPIOs
- Internet friendly with integrated TCP/IP and UDP/IP stacks
- Simple drop-in migration and technology design reuse path to 2G and 3G with any xE910 module
- Over-the-Air firmware update
- Embedded GNSS solution

Family Concept

The LE910C1 is a member of Telit's flagship xE910 module family delivering 4G radio access technology in the 28.2 x 28.2 x 2.2 mm 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 programing interfaces which allows developers to implement a "design once, use anywhere" strategy.

Variants

Three variants:

4G North American market for Sprint (LTE single-mode) and AT&T (with the addition of global roaming capabilities due to 3G/2G fallback).

The third variant is 4G with 3G fallback for APAC optimized for the ANZ region.

IoT Connectivity and Portal Ready

This product is capable of supporting the extensive suite of Value Added Services from IoT Connectivity including Module Management and others which make the management of IoT deployments under mobile networks effective, enhancing profitability and reliability. It is also Portal-ready which means that the AT command library in this module includes a set of high-level commands designed exclusively for quick and hassle-free on-boarding of the device to the portal and to back-end systems and servers. Telit Portal-ready modules powered by deviceWISE make application-level data flows and controls simple to program, maintain and improve.

ENABLING THE IoT
IS WHAT WE DO.

	LE910C1-NA	LE910C1-AP	LE910C1-NS	LE910C1-EU
Market	North America (AT&T and global roaming)	APAC/ANZ (Telstra/Vodafone AU)	North America (Sprint)	EMEA
FREQUENCIES				
4G bands (MHz)	B2(1900), B4(AWS1700), B12(700)	B1(2100), B3(1800), B5(850), B8(900), B28(700)	B2/B25(1900), B4(AWS1700), B5/B26(850), B12(700)	B1(2100), B3(1800), B7(2600), B8(900), B20(800), B28A(700)
3G bands (MHz)	B1(2100), B2(1900), B4(AWS1700), B5(850), B8(900)	B1(2100), B5(850), B8(900)	-	B1(2100), B3(1800), B8(900)
2G bands (MHz)	B2(1900), B3(1800), B5(850), B8(900)	-	-	B3(1800), B8(900)

LE910C1 Series

Product Features

- LTE FDD Cat.1, 3GPP release 10 compliant
- Rx Diversity and MIMO DL 2x2
- Single Rx option
- VoLTE support
- SMS over IMS
- Built in UDP/TCP/FTP/SMTP stack
- IPv4/IPv6 stack
- Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit Custom AT commands
- SIM application Tool Kit 3GPP TS 51.014
- OMA-DM Telit Software Management
- Simultaneous support of GPS, Glonass, Bei-dou, Galileo, QZSS

Data

LTE Cat.1

- Uplink up to 5 Mbps
- Downlink up to 10 Mbps

DC-HSPA+ 42 Mbps
(supported on the variants with 3G fallback)

Environmental

- Dimensions 28.2 x 28.2 x 2.2 mm
- Temperature Range -40°C to +85°C
- REACH and RoHS compliant

Interfaces

- 181-pin LGA Interface
- 10 I/O ports (@1.8V) including multifunctional I/Os
- USB 2.0 HS / HSIC
- UART
- SPI
- PCM
- 1.8 V / 3 V SIM interface
- RF pad, RX Div. & MIMO pad

Approvals

- FCC /IC, PTCRB , (North America)
- RCM (Australia)

Electrical & Sensitivity

- Output power
  - Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.3 - 4.2 VDC

Join the Telit Technical Forum

For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all IoT topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing IoT community and exchange experiences.

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