Product Description

The LE910Cx series Mini PCIe (mPCIe) modules are optimized for LTE low category networks and are available in single mode and 3G/2G fallback options. In addition to VoLTE support, the LE910Cx series are swappable with other modules in the xE910 mPCIe family.

Key Benefits

- Standard Mini PCIe Data-card form factor
- Best-in-class 3GPP rel10 platform
- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user definable GPIOs
- Battery-friendly 1.8V GPIO
- Ideal platform for IoT applications and mobile data and computing devices with ultra-compact design and extended operating temperature range
- 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

Family Concept

Longevity and cost efficiency are built right into the developer’s product architecture with the Telit family, “design once, use anywhere” philosophy.

Designers looking to add LTE capabilities to commercial and industrial computing devices benefit from the simple, yet powerful mPCiE form factor with the flexibility to choose another technology best suited for the application environment from any one of the other models in the xE910 mPCIe series.

IoT Connectivity 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.

Variants

Cat.4 and Cat.1 4G North American market - AT&T, Verizon and T-Mobile
Cat.1 4G North American market for Sprint (LTE single-mode) and AT&T (with the addition of global roaming capabilities due to 3G/2G fallback).
Cat.1 4G with 3G fallback for APAC optimized for the ANZ region and Japan.
Cat.4 and Cat.1 4G with 3G/2G fallback for Europe with full coverage for EU market.
LE910Cx Mini PCIe Series

Product Features
- LTE FDD Cat.1, 3GPP release 10 compliant
- LTE FDD Cat.4, 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

LTE Cat.4
- Uplink up to 50 Mbps
- Downlink up to 150 Mbps

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

Environmental
- Dimensions 51 x 30 x 3.2 mm
- Temperature Range -40°C to +85°C
- REACH and RoHS compliant

Interfaces
- 181-pin LGA interafce
- 10 I/O ports (I0.1.8V) including multifunctional I/Os
- USB 2.0 HS / HSIC
- UART
- SPI
- PCM
- 1.8 V / 3 V SIM interface

Approvals
- FCC / IC, PTCRB , GCF (North America)
- RCM (Australia)
- Jade/Telec (Japan)
- R&TTE/GCF (Europe)

Electrical
- Supply voltage
  - Nominal: 3.3 VDC
  - Range: 3.3 - 4.2 VDC

Le910


Frequencies


3G bands (MHz) B1, B2, B4, B5, B8 B1, B5, B4 B19, B6, B8 B1, B3, B8 B1, B3, B8 B2, B4, B5 - - - B1, B2, B3, B4, B5 B1, B2, B3, B4, B5

2G bands (MHz) B2, B3, B5, B8 B3, B8 B3, B8 - - - B2, B3, B4, B5 B3, B8

*ThreadX operating system