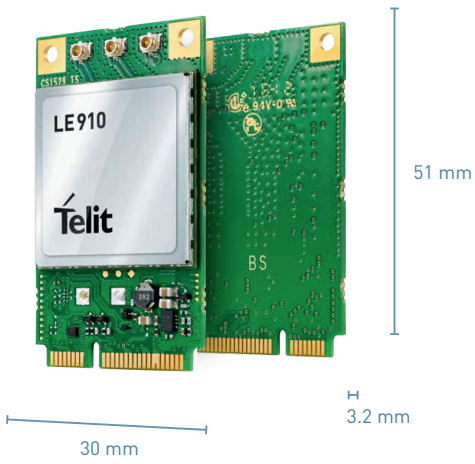
LE910 Cat.1 Mini PCIe Series

LTE Cat.1 10/5 | mPCIe Data Cards



Product Description

The LE910 series of Cat. 1 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 LE910 Cat.1 series are swappable with other modules in the xE910 mPCIe family.

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Key Benefits

- Standard Mini PCIe Data-card form factor
- 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, as well as HTTP, SMTP, FTP, SSL
- 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 Cat 1 to commercial and industrial computing devices benefit from the simple, yet powerful mPICe form factor with the flexibility to choose another technology best suited for the application enviornment 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

Different series of variants are available to fulfill the requirements of North American, Japanese and European markets. Multiband configurations, covering different sets of 4G bands as well as MNO certifications, are available.

AVAILABLE FOR

- EMEA
- North America
- Latin America
- Japan
- Korea
- Australia

Combine your **Cellular** module with Short Range modules

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Complete, Ready to Use Access to the Internet of Things

	LE910-SV1	LE910-NA1	LE910-EU1	LE910-JN1
Market	North America (Verizon)	North America (AT&T, T-Mobile)*	Europe	Japan (NTT DoCoMo)
Frequencies				
4G bands (MHz)	B2(1900)W B4(AWS1700) B13(700)	B2(1900), B4(AWS1700), B5(850), B12/B13(700)	B1(2100), B3(1800), B7(2600), B8(900), B20(800)	B1(2100), B19(850), B21(1500)
3G bands (MHz)		B2(1900) B5(850)		
2G bands (MHz)			B3(1800), B8(900)	
Voice	VoLTE			

LE910 Cat.1 Series

Product Features

- LTE FDD Cat.1, 3GPP release 9 compliant
- Rx Diversity and MIMO DL 2x2
- SIM application Tool Kit 3GPP TS 51.014
- Serial port multiplexer 3GPP TS27.010
- SMS over IMS
- Built in UDP/TCP/FTP/SMTP stack
- Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit Custom AT commands
- VoLTE

Data

LTE Cat.1

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

Environmental

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

Interfaces

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

Approvals

- FCC/IC, PTCRB, GCF (North America)
- R&TTE/GCF (Europe)
- Radio/Telecom Biz Act (Japan)

Electrical & Sensitivity

- Output power
  - Class 3 (0.2 W, 23 dBm) @ LTE
  - Class 3 (0.25 W, 23 dBm) @ 3G
  - Class 4 (2W) @ GSM 900
  - Class 1 (1W) @ DCS 1800
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.3 - 4.2 VDC

Software and Application Development

AppZone application resources

- Programming language: C
- IDE: Eclipse
- Dedicated File System: 5 MB
- Separate App. RAM Space: 2 MB

***Single SKU** option available for LE910-NA1 with flexibility to switch between AT&T/TMobile and Verizon software configuration and vice versa, due to both operators bands support (B2, B4, B5, B12 for AT&T and B2, B4, B13 for Verizon) featuring a Fast Time Switch from one configuration to the other one.

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