



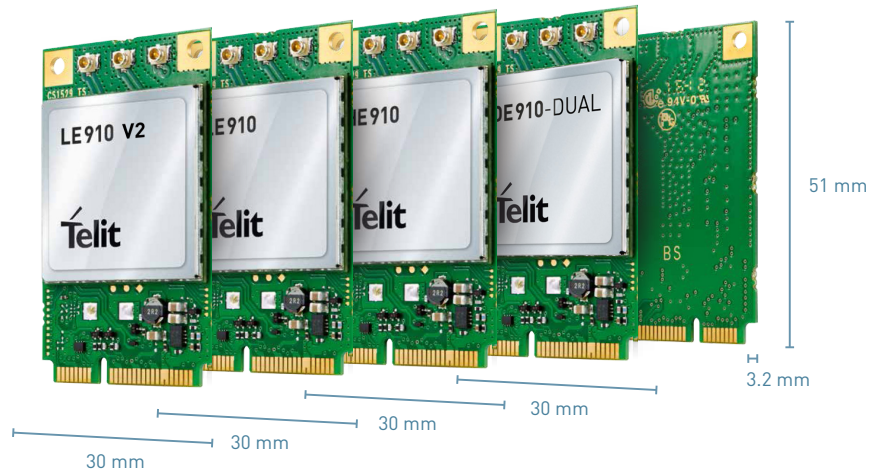
## xE910 Mini PCIe

CDMA | 1xEV-DO Rev.A

UMTS | HSPA+ 21.0/5.76

LTE 150/50 | DC-HSPA+

M.2 Data Cards



### Product Description

The xE910 Mini PCIe data-card is a product series available in three different technologies: LTE, HSPA+ and EV-DO, providing connected device makers maximum range of options for Global cellular operator support.

It is particularly well-suited for devices with high throughput requirements such as mobile computing, kiosks, PDAs, e-readers, tablet PCs, and consumer electronics in general.

### Key Benefits

- Standard Mini PCIe Data-card form factor
- LTE technology interchangeable with HSPA+ or EV-DO counterpart
- Ideally suited for devices such as PDAs, mobile resource management (MRM), logistics, POS terminals, trackers, wireless backup for DSL modems and gateways
- Rx diversity which allows the end-device to be equipped with two distinct cellular antennas improving the quality and reliability of the wireless connectivity
- Over-the-Air firmware update
- Battery-friendly 1.8V GPIO

### Family Concept

The mini PCIe form factor has become a popular standard adopted by connected device manufacturers to easily integrate wireless connectivity into their devices for commercial and industrial computer markets.

### IoT Connectivity Ready

This product is capable of supporting the extensive suite of IoT Connectivity value-added services and connectivity you can use to enhance your application and boost your competitive advantage.

#### AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Korea
- Australia

#### Combine your Cellular module with

Short Range modules



[www.telit.com](http://www.telit.com)

#### Complete, Ready to Use Access to the Internet of Things



IoT MODULES



IoT CONNECTIVITY



IoT PORTAL

ENABLING THE IOT IS WHAT WE DO.

## LE910 V2 Mini PCIe

### Product Features

#### Supported frequencies:

- EU variant (European)
  - LTE: 800 (B20) / 900 (B8) / 1800 (B3) / 2100 (B1) / 2600 (B7)
  - UMTS | HSPA: 900, 2100 MHz
  - GSM | GPRS | EDGE: 900, 1800 MHz
- NA variant (NA market - AT&T)
  - LTE: 700 (B17/B12/B13) / 850 (B5) / AWS1700 (B4) / 1900 (B2)
  - UMTS | HSPA: 850, 1900 MHz
- SV variant (NA market - Verizon)
  - LTE: 700 (B13) / AWS1700 (B4) / 1900 (B2)
- AU variant (Australian)
  - LTE: 700 (B28) / 1800 (B3) / 2600 (B7)
- LTE FDD Cat.4, 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

### Data

- LTE Cat.4
- Uplink up to 50 Mbps
- Downlink up to 150 Mbps
- DC-HSPA+ 42 Mbps  
{Supported on the variants with 3G fallback}

### Electrical & Sensitivity

- Output power
  - Class 3 (0.2 W, 23 dBm) @LTE
- Supply voltage: 3.3 VDC +/- 9%

## LE910 Mini PCIe

### Product Features

#### Supported frequencies:

- EUG variant (European)
  - LTE: 800 (B20) / 1800 (B3) / 2600 (B7)
  - UMTS | HSPA: 850, 900, 2100 MHz
- NAG variant (NA market - AT&T)
  - LTE: 700 (B17) / 850 (B5) / AWS1700 (B4) / 1900 (B2)
  - UMTS | HSPA: 850, 1900 MHz
  - GSM | GPRS | EDGE: 850, 1900 MHz
- NVG variant (NA market - Verizon)
  - LTE: 700 (B13) / AWS1700 (B4)
  - UMTS | HSPA: 850, 1900 MHz
- Embedded GPS | GLONASS receiver
- Rx Diversity and MIMO 2x2
- 3GPP release 9 compliant
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP / TCP / FTP / SMTP stack
- IP stack with TCP and UDP protocol
- Standard and extended AT command set

### Data

- LTE cat 3
  - Uplink up to 50 Mbps
  - Downlink up to 100 Mbps
- HSPA+
  - Uplink up to 5.76 Mbps
  - Downlink up to 42 Mbps

### Electrical & Sensitivity

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850 / 900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
  - Class E2 (0.5 W, 27 dBm) @ EDGE 850 / 900
  - Class E2 (0.4 W, 26 dBm) @ EDGE 1800 / 1900
  - Class 3 (0.25 W, 24 dBm) @ UMTS
  - Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage: 3.3 VDC +/- 9%

## HE910 Mini PCIe

### Product Features

- Supported frequencies:
  - GSM | GPRS | EDGE: 850, 900, 1800, 1900
  - UMTS | HSPA: 800 / 850\*, 900, AWS 1700, 1900, 2100 MHz
  - \* Bands B6 and B19 (800 MHz) are a subset of B5 (850 MHz) and supported as well.
- Optional high sensitivity GPS | A-GPS receiver (SUPL 1.0)
- Rx Diversity
- 3GPP release 7 compliant
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP/TCP/FTP/SMTP stack
- IP stack with TCP and UDP protocol
- Standard and extended AT command set
- Available variants:
  - Voice, Data and GPS
  - Data-Only

### Data

- HSPA category 6 in uplink and up to category 14 in downlink
  - Uplink up to 5.76 Mbps
  - Downlink up to 21.0 Mbps

### Electrical & Sensitivity

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850 / 900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
  - Class 3 (0.25 W, 24 dBm) @ UMTS
  - Class E2 (0.5 W, 27 dBm) @ EDGE 850 / 900
  - Class E2 (0.4 W, 26 dBm) @ EDGE 1800 / 1900
- Supply voltage: 3.3 VDC +/- 9%
- Sensitivity
  - 108 dBm @ UMTS
  - 107 dBm @ GSM 850 / 900 MHz
  - 106 dBm @ DCS1800 / PCS1900 MHz

## DE910 Mini PCIe

### Product Features

- Dual-band EV-DO Rev.A 800 / 1900 MHz
- Dual-mode GPS (standalone and gpsOne®) and GLONASS
- Standard and Telit Unified AT command sets
- RX diversity for increased performance
- Built in UDP/TCP/IP stack
- Full voice support includes
- 2-way SMS support

### Data

- CDMA 1xRTT / EV-DO Rev. A
- Air interface IS-95A/B and CDMA 2000
- 1x EVDO (Rev. A) data up to 3.1 Mbps
- Downlink and 1.8 Mbps Uplink

### Electrical & Sensitivity

- Supply voltage: 3.3 VDC +/- 9%
- Sensitivity:
  - CDMA 1x: < -108 dBm
  - 1x EV-DO: < -109 dBm
- Maximum RF output power:
  - 24 dBm [typical] for EVDO
  - 24.4 dBm [typical] for 1x

## Environmental

- Dimensions:
  - 51 x 30 x 3.2 mm
  - 51 x 30 x 4.8 mm (with optional sim-holder)
- Weight: 10 grams
- Temperature range -40 to +85°C
- REACH and RoHS compliant

## Interfaces

- USB 2.0 HS
- USIM/SIM connection
  - class B and class C
- SIM holder (option)
- DVI (Digital Voice Interface through the 52 pin edge connector)
- Wake
- W\_Disable
- Led\_wwan



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