Telit

xE910 Mini PCIe

CDMA | 1xEV-DO Rev.A
UMTS | HSPA+ 21.0/5.76
LTE 150/50 **| DC-HSPA+** 42.0/11.5 M.2 Data Cards

51 mm

3.2 mm

30 mm

30 mm

30 mm

30 mm
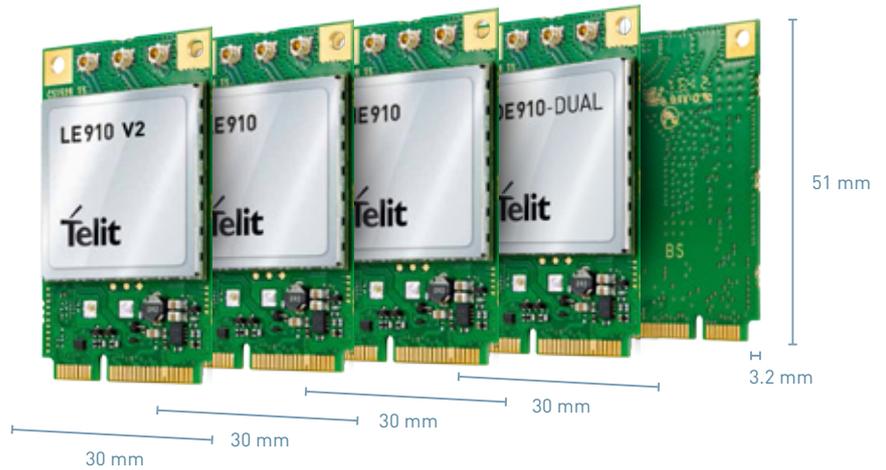
Product Description

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.

ENABLING THE IOT
IS WHAT WE DO.

Telit

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: 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 com-
  mand sets
- RX diversity for increased perfor
  mance
- 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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