



Product Description

The LE910 introduces the next generation of Telit LTE modules. It is essentially two high-speed cellular modules in one. An LTE 3GPP Release 9 module delivering data rates of 100Mbps downlink and 50Mbps uplink and an HSPA+ module delivering up to 42Mbps downlink and 5.76Mbps uplink rates. The LE910 automatically falls back to HSPA+ if it is unable to register onto an LTE network. It also includes Multiple-input multiple-output (MIMO) technology, an essential feature to meet demands for data rate and link reliability in modern wireless communication systems including LTE.

Key Benefits

- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user definable GPIOs
- Increased connectivity performance with RX diversity
- Ideal platform for m2m applications and mobile data and computing devices with ultra-compact design and extended operating temperature range
- Combines high-speed wireless connectivity combined with embedded multi-constellation high-sensitivity positioning GPS + GLONASS receiver
- Voice friendly with VoLTE Voice over LTE support
- 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
- Battery-friendly 1.8V GPIO

Family Concept

The LE910 is a member of Telit's flagship xE910 module family and its first model delivering 4G radio access technology in the $28.2 \times 28.2 \times 2.2$ 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

Two different series of variants are available, one for the North American market and another for the European. Korean Japanese and Australian markets are planned as well. Both include multiband configurations, covering different sets of 4G and 3G bands as well as MNO certifications.

AVAILABLE FOR

- FMFA
- North America
- Latin America
- APAC
- Kore:
- Australia

Combine your Cellular module with

• Short Range modules



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		LE910-NAG	LE910-NVG	LE910-EUG
Market		North America AT&T	North America Verizon	Europe
HSPA+	Upload (Mbps)	5.76	5.76	5.76
HSPA+	Download (Mbps)	42.0	42.0	42.0
LTE	Upload (Mbps)	50	50	50
LTE	Download (Mbps)	100	100	100
Frequencies				
LTE bands (MHz)		700 (B17) / 850 (B5) / AWS1700 (B4) / 1900 (B2)	700 (B13) / AWS1700 (B4)	800 (B20) / 1800 (B3) / 2600 B7)
UMTS HSPA+ bands (MHz)		850 (B5) / 1900 (B2)	850 (B5) / 1900 (B2)	900 (B8) /2100 (B1)
GSM GPRS EDGE bands (MHz)		850 / 1900	N.A.	850 / 900 / 1800 / 1900



Product Features

- Rx Diversity and MIMO
- Embedded GPS | Glonass receiver
- SIM Access Profile
- 3GPP release 9 compliant
- SIM application Tool Kits 3GPP TS 51.014
- Digital voice and VoLTE
- IP stack with TCP and UDP protocol
- Standard and extended AT command set
- e-Call compliant

Data

LTE

- Uplink up to 50 Mbps
- Downlink up to 100 Mbps

HSPA+

- Uplink up to 5.76 Mbps
- Downlink up to 42.0 Mbps

• Uplink/Downlink up to 384 kbps

Environmental

• Dimensions 28.2 x 28.2 x 2.2 mm

Interfaces

- 144-pin LGA Interface
- 10 I/O ports including multifunctional I/Os
- USB 2 0 HS
- 2 UART
- 1.8 V / 3 V SIM interface
- RF pad, RX Div. & MIMO pad, GNSS Antenna pad

Approvals

- RoHS Compliant
- CE, GCF (Europe)
- FCC, PTCRB, IC (North America)

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
 - Nominal: 3.8 VDC
- Range: 3.4 4.2 VDC

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