

# LE910Cx ThreadX

LTE Cat. 4 150/50 - Cat.1 10/5 Embedded

# **Product Description**

The LE910Cx series of 4G LTE modules are compliant with the 3GPP Release 10 and are available with optional quadconstellation GNSS capability. This compact LGA form factor family is available in a variety of configurations, supporting both single-mode and fallback as needed for specific regions, carriers, and use cases.

### **Key Benefits**

- Best-in class 3GPP rel10 platform
- MTC features ready according to 3GPP Rel.12
- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user definable GPIOs
- 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
- Embedded GNSS solution

# Family Concept

The LE910Cx ThreadX is a member of Telit's flagship xE910 module family delivering 4G radio access technology in the same, pin-to-pin compatible 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

Cat.1 4G with 3G/2G fallback for EMEA with full coverage for EU market

28.2 mm

2.2 mm

Cat.1 4G North American market - AT&T

LE910Cx ThreadX

**Telit** 

Cat.1 4G North American market - Verizon

28.2 mm

Cat.1, Cat.4 4G with 3G/2G fallback for global use across EMEA/North America/APAC/LATAM

### IoT Connectivity and Portal 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.

#### OneEdge<sup>™</sup> Features

Telit offers LE910Cx with OneEdge, a software suite integrated with deployment and management tools to address the complexity expected with the exponential growth in the number of IoT devices. The following key components are included:

• Lightweight M2M protocol enables comprehensive device management, FOTA updates and application enablement of lowpower devices with the goal of more robust and secure connections.

Telit simWISE<sup>TM\*</sup>, a module-embedded SIM technology, enables reduced footprint, streamlined manufacturing and logistics, secure communications for connected devices.
Telit IoT AppZone can run code and applications directly inside the Telit module.

• Telit's Connection Manager automates operations for connection to cellular networks.

• Location services provide the position of devices even in the absence of a GNSS connection.

#### AVAILABLE FOR

North America	
Australia	
Europe	
Japan	
LATAM	

# **ONE3DGE**

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



\*Available on LE910C1-EUX from the first maintenace release



	LE910C1-EUX	LE910C1-SAX	LE910C1-SVX	LE910C1-WWX	LE910C4-WWX
Market	EMEA	North America (AT&T)	North America (Verizon)	EMEA, North America, APAC, LATAM	EMEA, North America, APAC, LATAM
Frequencies					
4G bands	B1, B3, B7. B8, B20, B28A	B2, B4, B12	B4, B13	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B26, B19, B20, B28	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B26, B19, B20, B28
3G bands	B1, B3, B8	-	-	B1, B2, B4, B5, B8, B19	B1, B2, B4, B5, B8, B19
2G bands	B3, B8		-	B2, B3, B5, B8	B2, B3, B5, B8

# LE910Cx ThreadX

#### **Product Features**

- LTE FDD Cat.4, 3GPP release 10 compliant
- LTE FDD Cat.1. 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, Beidou, Galileo, QZSS

### Data

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

#### DC-HSPA+ 42 Mbps

#### LTE Cat. 1

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

#### Environmental

- Dimensions: 28.2 x 28.2 x 2.2mm
- Dimensions LE910Cx-WWX: 29.4 x 29.4 x 2.2 mm
- Temperature Range Industrial: -40°C to +85°C
- REACH and RoHS compliant

#### AppZone

- Software and application development
- AppZone application resources
- Programming language: C
- IDE: Eclipse based

# Interfaces

- 181-pin LGA interface
- 10 I/O ports (@1.8V) including multifunctional I/Os
- USB 2.0 HS / HSIC
- UART
- SPI
- PCM
- I2C
- 1.8 V / 3V SIM interface
- RF pad, RX Div. & MIMO pad

# Approvals

- FCC /ISED, PTCRB (North America)
- RED/GCF (Europe)

# **Electrical & Sensitivity**

- Output power
- Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage range:
  - Nominal: 3.8 VDC
  - Range: 3.4 4.2 VDC

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