![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!
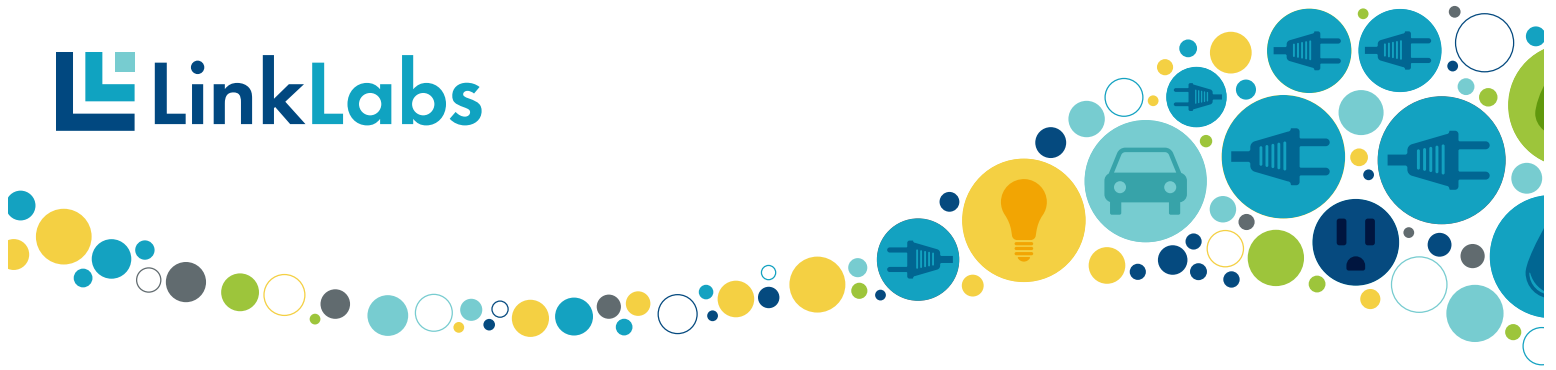
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LTE Cat-M1 Carrier-Certified Low-Power Module

LL-LTE-M-VZN-SE

The LL-LTE-M-VZN-SE is the follow-on to the world's first end-device-certified LTE CAT-M1 expansion board. In addition to its compact form-factor, it optimized for low-power applications, and the nationwide coverage, scalability, and security of Verizon's LTE cellular network. The LL-LTE-M-VZN-SE leverages Link Labs' extensive experience designing low-power IoT devices, has a data efficient API for IoT data plans, and is ideal for battery-powered applications and 2G/3G device replacements.

All devices are pre-provisioned on the Verizon network, and offer a full suite of security, network management, and device management tools in the Link Labs Conductor™

Platform. Conductor™ allows users to add rules, access device usage information, create billing plans, and access many other features so users can focus on building their applications and not the pipes.

Paired with the LTE-M1 Sensor Suite, customers can pilot LTE-M1-based solutions in under a day, instead of the months traditionally needed to build new connected devices. With an open source software library, example software projects for several different development platforms,, developers and OEMs can quickly add LTE-M communications capabilities to their new and existing applications.

Product Highlights

- Follow-on for the world's first end-device certified LTE Cat-M device

- FCC Modular Certification, Verizon end-device certified, and pre-provisioned on the Verizon network

- No additional carrier certification required

- Easy to integrate with new and existing applications using UART API to send and receive data - no AT commands required

- Link Labs low-power protocol stack manages module power states and advanced LTE-M features

- 3.3 V power for battery-powered applications

- OTA firmware updates

- Built-in encryption wrapper and VPN for end-to-end security from device-to-cloud

- Conductor Network and Device management platform
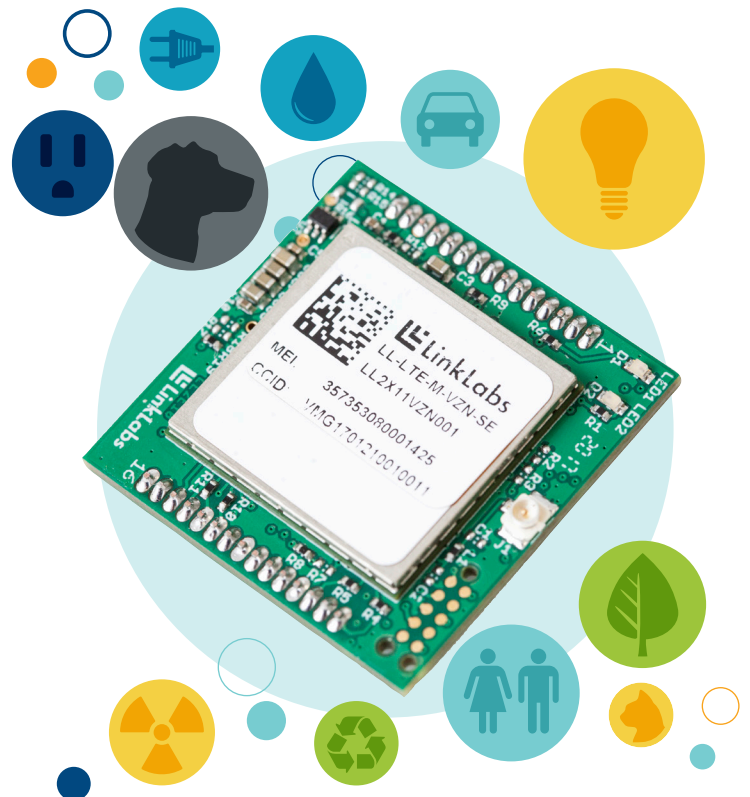
Specifications

Dimensions	30mm x 30mm
Serial Data Interface	UART
Chipset	Link Labs / Sequans
Support	Dev kit(s), sensor boards(s)
Operating Temperature (RF Compliant)	-30°C - +60°C (ambient)
Storage/Operating Temperature	-40°C - +85°C (board)
Operating Humidity	10% to 85% (non condensing)
Max Transmit Power	23 dBm
Receive Sensitivity	-103 dBM
Technology	LTE Cat-M1, 3GPP release 13 compliant
Modulation	QPSK, 16QAM
Supported LTE Bands*	B4 (AWS1700) / B13 (700)
Security	Verizon VPN
Data Rates	300 kbps DL/375 kbps UL in HD-FDD, and 1 Mbps in FD-FDD
Supply Voltage	3.1-4.5 V
Peak Transmit Current	450 mA (@4.2 V)
Receive Current	270 mA (@4.2 V)
Idle Current / Sleep Mode	<10 uA
Regulatory Approvals	FCC (2AAGMVZM20Q), IC
Market	North America
Carrier Pre-Certification	Verizon

Additional Features

Single Antenna System Architecture
One UL and One DL Transceiver, FDD, Support of HD-FDD Duplexing, Category M1 UE
Reduced TX Power Class Option
Discontinuous Reception (DRX, eDRX) with Long and Short Cycles*
Power Saving Mode (PSM)*
Fast Scanning
Location Based Services*
Advanced QoS Features
Built-in HTTP Stack
***RoHS Compliant**

Pending network availability

For ordering, or additional questions:
link-labs.com/contact
+1 (202) 524-1390

Additional product info:
docs.link-labs.com

Warranty and repair info:
support@link-labs.com

Ready to get started?

link-labs.com/lte-m