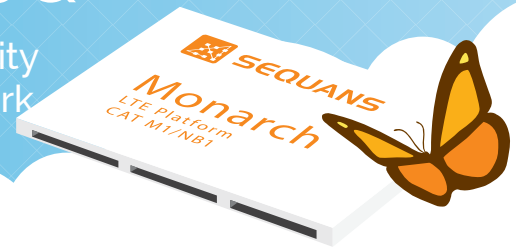


Sequans EZLinkLTE VZM20Q

Optimized, single-mode LTE category M1 IoT connectivity solution certified for use on the Verizon Wireless network



The VZM20Q EZLinkLTE module is the first, all-in-one, single-mode LTE category M1 (CAT M1) module certified compliant with Verizon Wireless Open Network specifications, operating on LTE bands 4 and 13. VZM20Q is based on Sequans' LTE CAT M1 Monarch chip, a member of Sequans' StreamliteLTE™ family of LTE chip products for the Internet of Things. VZM20Q comprises Sequans' Monarch LTE Platform and all other elements necessary for a complete LTE modem system. These include an LTE-optimized transceiver, a complete dual-band RF front-end for bands 4 and 13, key interfaces, all in a single compact LGA package. VZM20Q also includes Sequans' carrier-proven LTE protocol stack and a comprehensive software package for over-the-air device management and packet routing. VZM20Q is compatible with any host running Linux, Android, Windows and a wide range of embedded and real-time OSes.

Highlights

- Verizon Wireless certified and ThingSpace Ready
- 3GPP LTE Release 13 CAT M1, half-duplex FDD, 375Kbps downlink and 300 Kbps uplink
- Operates with a single LTE antenna on LTE bands 4 and 13
- Ultra small 20 x 21 x 1.5 mm LGA module
- Based on Sequans Monarch LTE Platform
 - 3GPP Release 13 LTE Advanced Pro, with configurable support for LTE UE CAT M1/NB1
 - Supports narrowband channel sizes for machine type communications: 1.4MHz and 200kHz bandwidth
- Embedded LWM2M client
- Supports location based services
- Compatible with Linux, Android, Windows and a wide range of embedded and real-time OSes
- High-speed UART as primary data interface
- Fully tested and calibrated
- Pin-to-pin compatible footprint with Sequans EZLinkLTE CAT 4 VZ22Q module and LTE CAT 1 VZ120Q module
- Supports full-duplex FDD implementation
- Monarch chip embeds power management, pSRAM

Monarch LTE Platform

At the heart of VZM20Q is the Monarch LTE Platform, an ultra-compact, cost and power-efficient LTE chip for IoT and M2M device design. Monarch provides all necessary IoT features along with extremely low power consumption at a low cost for industry leading price/performance. Monarch's software suite is based on more than a decade of proven field experience. It is running in major 4G deployments around the world and is one of the most mature solutions in the global 4G ecosystem. It includes the entire LTE Release 13 software stack along with all drivers required for a complete 4G system. It includes a turnkey package compatible with Linux, Android, Windows and a wide range of embedded and real-time OSes, and contains Sequans' standard compliant LWM2M clients. A field diagnostic tool is available for faster time-to-market.

Applications

The VZM20Q EZLinkLTE modules are ideal for adding LTE connectivity to M2M and connected IoT devices. It is an ultra-compact, but high performance solution, delivering a perfect blend of LTE features and ultra-low power consumption. It supports a high-speed UART, I2C and USIM interfaces.

EZLinkLTE VZM20Q Evaluation Kit

VZM20Q evaluation kit enables plug-and-play development with all major operating systems. The evaluation kit also includes schematic layout and BOM design files for use in PCB designs.



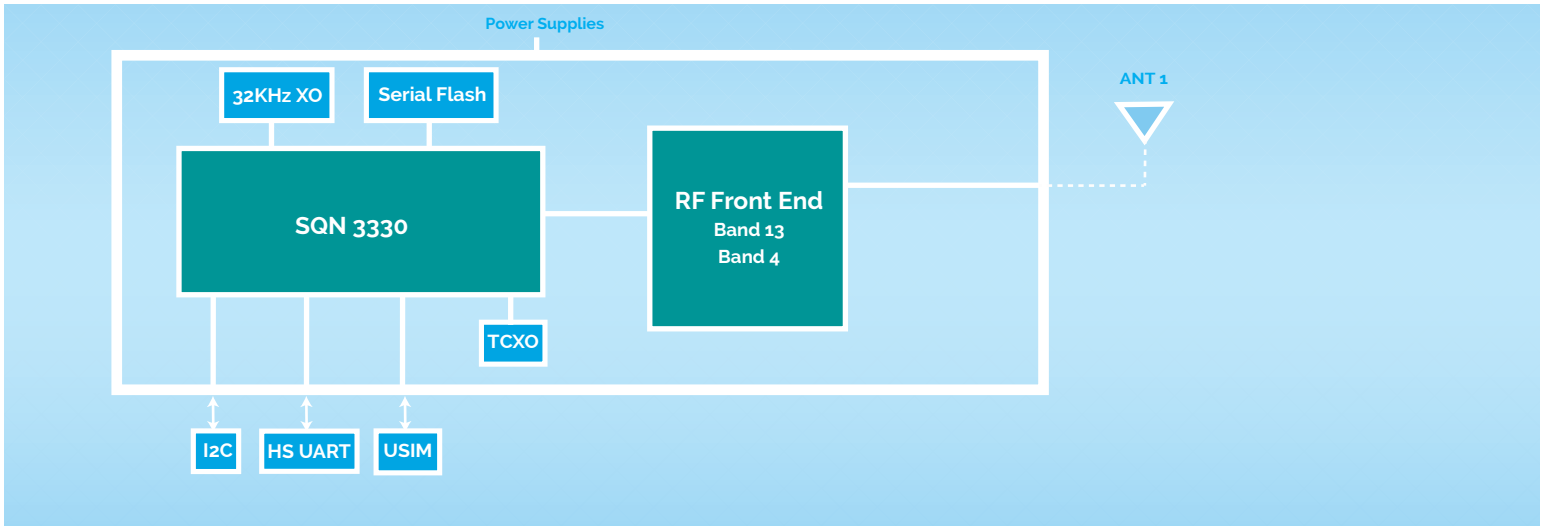
streamLITE^{LTE}

VZM20Q is a member of Sequans' StreamliteLTE™ family of products optimized for the Internet of Things. StreamliteLTE solutions provide an ideal balance of IoT features and low cost, enabling affordable, mass-market M2M and IoT devices.

EZLinkLTE VZM20Q Module

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VZM20Q block diagram



Product characteristics

LTE Modem

- ❖ Certified compliant with Verizon Open Network specifications
- ❖ 20x21x1.5mm, LGA module
- ❖ Operates on HD-FDD LTE bands 4 and 13
- ❖ 3GPP Release 13 and GCF compliant
- ❖ Certified compliant with FCC modular requirements
- ❖ Max transmit power up to +23 dBm
- ❖ RoHS Compliant

Throughput

- ❖ LTE Category M1: 375 kbps DL / 300 kbps UL

Data Interfaces

- ❖ High speed UART
- ❖ I2C
- ❖ USIM

Environmental

- ❖ Operating temperature: -30° C to +85° C
- ❖ Storage: -40° C to +85° C

streamLITE^{LTE}

StreamliteLTE is Sequans' product line for devices for the Internet of Things. StreamliteLTE solutions provide an ideal balance of IoT features and low cost, enabling affordable, mass market, M2M and IoT devices.

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