

Colibri VZ22Q Module

Complete, single-mode LTE connectivity solution certified for use on the Verizon Wireless network



The Colibri VZ22Q module is an ultra small, all-in-one, single-mode LTE module certified compliant with Verizon Wireless Open Network specifications, operating on LTE bands 4 and 13. The Colibri VZ22Q module comprises Sequans' Colibri 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 package. The Colibri VZ22Q module also includes Sequans' carrier-proven LTE protocol stack, an IMS client, and a comprehensive software package for over-the-air device management and packet routing. The Colibri VZ22Q module supports eMBMS, VoLTE, Wi-Fi SoftAP, and all major operating systems, including Windows, Android, Linux, Google Chrome, and MAC OS, for maximum versatility.

Highlights

- Verizon Wireless certified
- Operates on LTE bands 4 and 13
- Ultra small 20 x 21 x 1.5 mm LGA module
- Based on Sequans Colibri LTE platform
 - 3GPP Release 10; software-upgradeable to Release 11
 - GCF compliant
 - Category 4 throughput (150Mbps DL/ 50 Mbps UL)
 - Multi-band FDD and TDD capable
- Embedded OMA-DM and IMS clients
- Supports eMBMS, VoLTE, location based services, and Wi-Fi SoftAP
- Compatible with all major host operating systems: Android, Chrome OS, Linux, Windows 7, 8.x, 10, MAC OS
- USB 2.0 (including Microsoft-certified MBIM support)
- Fully tested and calibrated

Colibri LTE platform

Colibri is an extremely compact, cost and power-efficient chipset at the heart of the Colibri VZ22Q module. Colibri has been optimized for IoT and M2M device design, providing all necessary IoT features along with extremely low power consumption at a low cost for an industry-leading price/performance capability.

Colibri'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 10 software stack along with all drivers and host applications required for a complete 4G system. It includes a turnkey package for all major operating systems (including Android, ChromeOS, Linux, Windows and MAC OS) and contains Sequans' standard compliant OMA-DM and IMS clients. A field diagnostic tool is available for faster time-to-market.

Applications

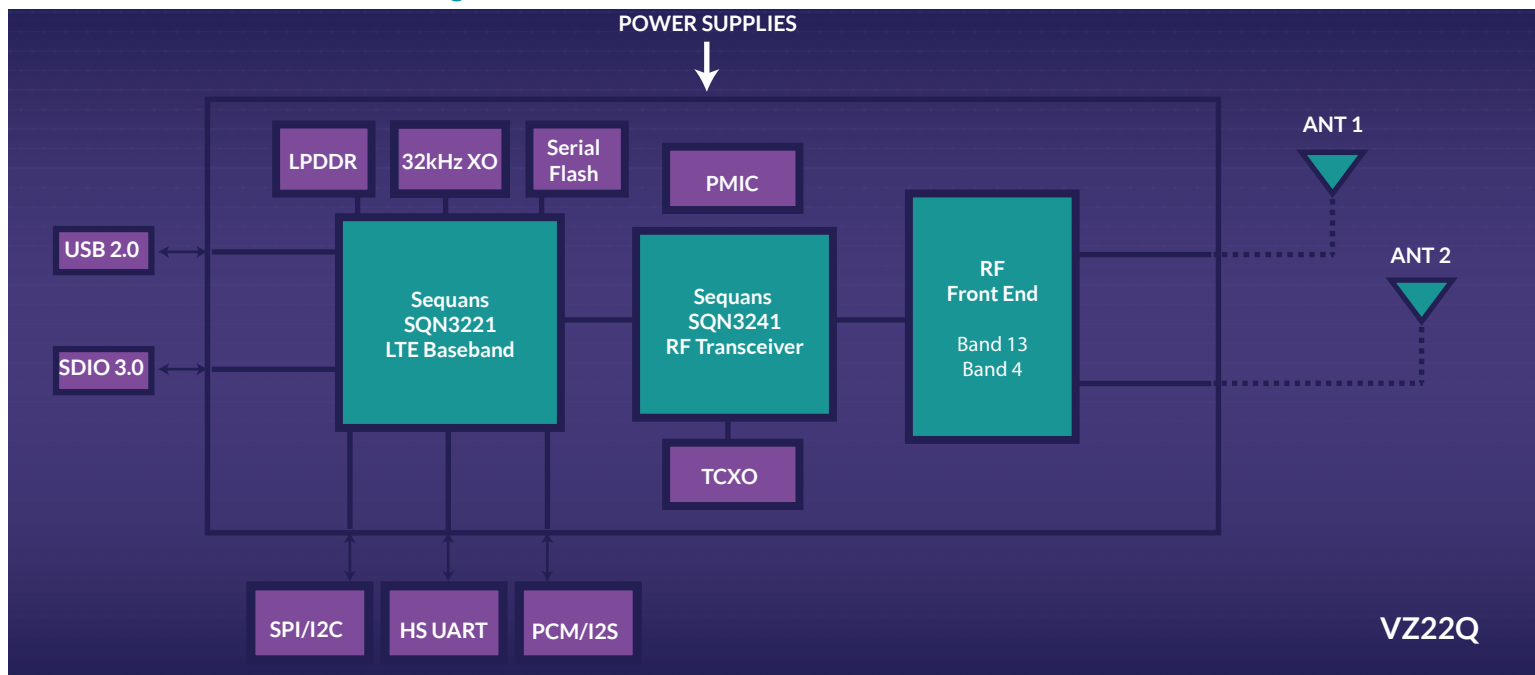
The Colibri VZ22Q module is ideal for adding LTE connectivity to M2M and connected consumer electronics devices. It is an ultra compact, but high performance solution, delivering a perfect blend of LTE features and ultra low power consumption. It supports a wide variety of interfaces, including USB 2.0 host and device, SDIO 3.0 host, USIM, UART and I2S/PCM-TDM for audio.

Colibri VZ22Q module Evaluation Kit

The Colibri VZ22Q module 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.



Colibri VZ22Q module block diagram



Product characteristics

LTE modem

- ❖ Certified compliant with Verizon Open Network specifications
- ❖ 20x21x1.5mm, LGA module
- ❖ Operates on FDD LTE bands 4 and 13
- ❖ 3GPP Release 10 and GCF compliant
- ❖ VoLTE and eMBMS ready
- ❖ Certified compliant with FCC modular requirements
- ❖ Max transmit power up to +23 dBm
- ❖ RoHS Compliant

Data Interfaces

- ❖ USB 2.0 host and device
- ❖ SDIO3.0 host
- ❖ SPI
- ❖ High speed UART
- ❖ PCM-TDM and I2S (audio)

Environmental

- ❖ Operating temperature: -30° C to +60° C ambient
- ❖ Storage: -40° C to +85° C

Throughput

- ❖ LTE Category 4: 150 Mbps DL / 50 Mbps UL