

Mont Blanc VZ20M Module

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

The Mont Blanc VZ20M module is certified compliant with Verizon Wireless Open Network specifications and operates on LTE bands 4 and 13. It is an M.2 next generation form factor (NGFF) module, comprising Sequans' Mont Blanc LTE platform baseband chip and all other elements necessary for a complete LTE modem system. This includes an LTE optimized transceiver, a complete dual-band RF front-end for bands 4 and 13, key interfaces, LP-DDR SDRAM, embedded boot Flash, and VC-TCXO all in a single, compact package. The Mont Blanc VZ20M module is delivered with Sequans' comprehensive software package, including an LTE Release 9 protocol stack and OMA-DM and IMS clients. It supports all major operating systems: Windows, Android, Linux, Google Chrome, and MAC OS, for maximum versatility. The Mont Blanc VZ20M module is pre-integrated, pre-tested, and pre-certified, significantly reducing development time and cost.

Highlights

- ❖ Verizon Wireless certified
- ❖ Operates on LTE bands 4 and 13
- ❖ 30 x 42 x 2.3 mm, M.2 interface
- ❖ Based on Sequans Mont Blanc LTE platform
 - 3GPP Release 9 and GCF compliant
 - Category 4 throughput, 150 Mbps DL
 - Multi-band FDD and TDD capable
 - eMBMS
- ❖ Supports all major operating systems
- ❖ Embedded OMA-DM and IMS clients
- ❖ USB 2.0 device interface
- ❖ Fully tested and calibrated
- ❖ SIM hot swap support
- ❖ Tunable antenna and dynamic power reduction for SAR compliance
- ❖ FCC certified

Applications

The Mont Blanc VZ20M module is engineered for fast, reliable, and secure LTE connections. It is a complete LTE connectivity solution for the design of notebooks, laptops, tablet and other portable computers with M.2 interface. The Mont Blanc VZ20M module is a high performance solution, delivering an ideal blend of rich LTE features and low power consumption.

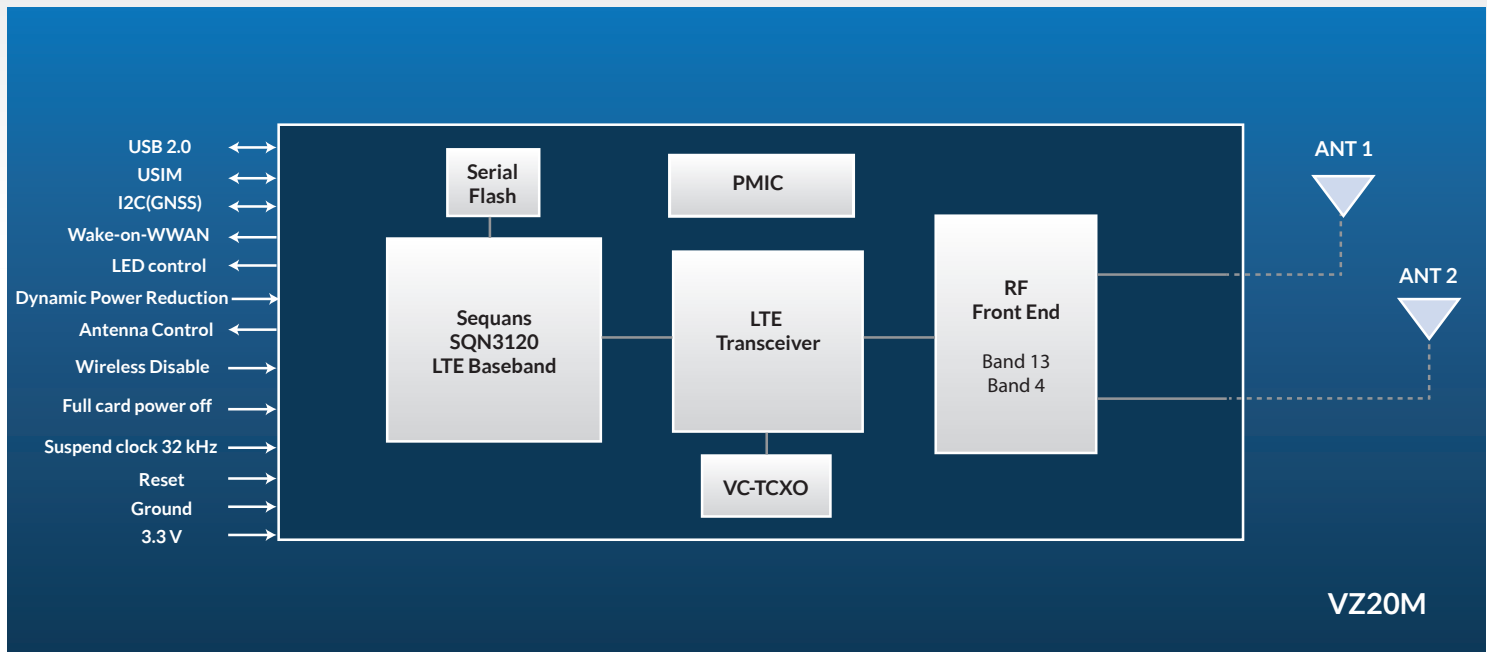
Mont Blanc VZ20M module Evaluation Kit

Mont Blanc VZ20M 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.



At the heart the module is Sequans' Mont Blanc LTE platform and SQN3120 baseband semiconductor solution. Mont Blanc is 3GPP Release 9 and GCF compliant and delivers category 4 throughput of up to 150 Mbps downlink. It supports advanced features such as eMBMS.

Mont Blanc VZ20M Module block diagram



Product characteristics

LTE Modem

- ❖ Approved for use on the Verizon Wireless LTE network, based on Verizon Wireless Open Development Certification specifications
- ❖ Operates on LTE bands 4 and 13
- ❖ 3GPP Release 9 and GCF compliant
- ❖ Meets FCC modular certification requirements
- ❖ USB host interface voltage: 3.3V
- ❖ Max Tx power: +23 dBm

Software

- ❖ OS: Windows 7, Windows 8 and 8.1, Android Jelly Bean, Chrome OS, MAC OS
- ❖ Control via AT commands
 - 3GPP TS27.007 and TS27.005
 - Sequans extended AT commands

Throughput

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

M.2 interfaces

- ❖ USB 2.0 device
- ❖ USIM 1.8V / 3.0V
- ❖ LED signal for modem activity
- ❖ DPR for LTE power back-off (SAR)
- ❖ ANTCTL for antenna tuning
- ❖ W_DISABLE for airplane mode
- ❖ WoWWAN to wake up host
- ❖ FULL_CARD_POWER_OFF for power on/off control by host
- ❖ RESET

Antenna interfaces

- ❖ 2 antenna connectors

M.2 Physical dimension and keying

- ❖ Type 3042-S3-B socket (30x42x2.3mm)

Environmental

- ❖ Supply: 3.135V to 4.4V
- ❖ Operating temperature: -30°C to +70°C
- ❖ Humidity: 5% to 85%
- ❖ Storage: -40°C to +85°C
- ❖ ROHS compliant
- ❖ Weight: 10g