

Monarch GMS01Q Module For Orange

An optimized and complete single-mode LTE category M1 IoT connectivity solution for the Orange network



The Monarch GMS01Q module is a complete, all-in-one, single-mode LTE category M1 module designed for Orange. It is roaming-capable and features a pre-integrated Orange SIM card along with a flexible data plan. The Monarch GMS01Q module comprises Sequans' Monarch LTE Platform and all other elements necessary for a complete LTE modem system. These include an LTE-optimized transceiver, a complete Single SKU™ RF front-end to support LTE bands worldwide, an embedded Orange SIM and key interfaces, all in a single compact LGA package. The Monarch GMS01Q module also includes Sequans' carrier-proven LTE protocol stack and a comprehensive software package for over-the-air device management and packet routing. The Monarch GMS01Q module is compatible with any host running Linux, Windows, and a wide range of embedded and real-time operating systems.

Highlights

- Validated by Orange
- Orange SIM card inside
- Flexible and competitive Orange data plan
- Certified by regulatory agencies: GCF, RED
- 3GPP LTE Release 13 Cat M1
- LTE UE category M1; up to 300 kbps DL/375 kbps UL in HD-FDD
- Operates with a single LTE antenna on LTE low and mid bands
- Upgradable to 3GPP Release 14 LTE Advanced Pro
- Small 20 x 21 x 1.5 mm LGA module
- Based on Sequans Monarch LTE Platform
- Embedded TCP/IP stack
- Supports data over PPP and over AT commands
- Compatible with Linux, Windows, and other embedded and real-time OSes
- High-speed UART primary data and AT command interface
- Fully tested and calibrated
- Pin-to-pin compatible with all other Sequans Q series modules

Monarch LTE Platform

At the heart of the Monarch GMS01Q module is the Monarch LTE-M/NB-IoT chip 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. A field diagnostic tool is available for faster time-to-market.

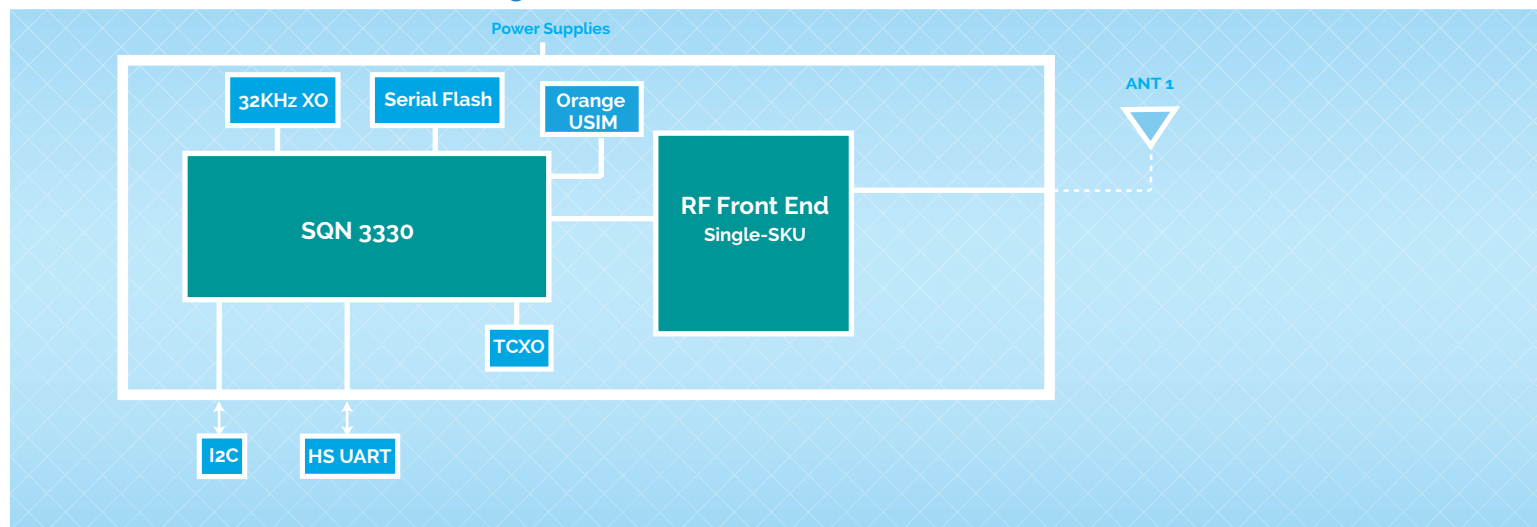
Applications

The Monarch GMS01Q module is ideal for easily adding complete LTE connectivity to M2M and IoT devices. It is an ultra-compact, high performance solution, delivering a perfect blend of LTE features and ultra-low power consumption ideal for the design of cellular devices including sensors, meters, buttons, and trackers of all kinds.





Monarch GMS01Q module block diagram



Product characteristics

LTE Modem

- Validated by Orange
- Orange SIM card inside
- 20 x 21 x 1.5 mm LGA module
- HD-FDD low and mid LTE bands (1, 2, 3, 4, 5, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 66)
- 3GPP Release 13 upgradable to 14
- SMS over SG
- No IMS
- Certified compliant with CE RED
- Max transmit power up to +23 dBm
- RoHS compliant

Throughput

- LTE UE category M1 (1.4 MHz bandwidth) up to 300 kbps DL/375 kbps UL in HD-FDD

Interfaces

- High speed UART
- USIM (as a 2nd sim interface capability)
- 50 ohm antenna interface

Environmental

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