

monarch² GM02S EVK

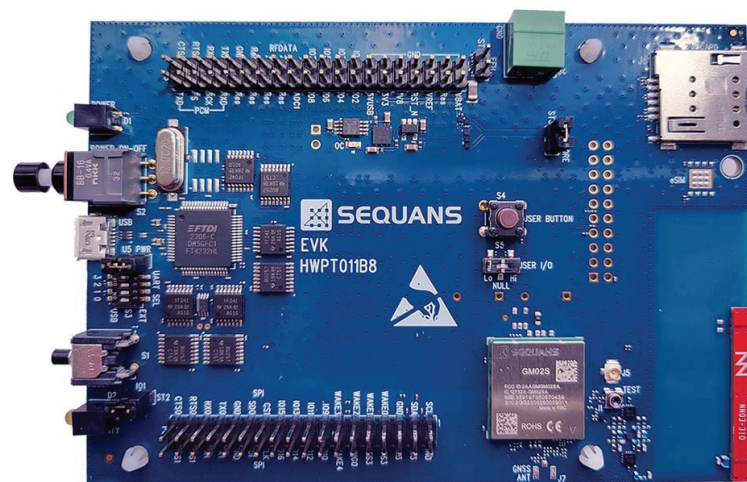
LTE-M & NB-IoT

Evaluation Kit --- Connect to worldwide LTE-M & NB-IoT networks with Monarch 2 GM02S

The Monarch 2 GM02S evaluation kit (EVK) allows you to connect to cellular LTE-M & NB-IoT networks in minutes. The EVK comes pre-packaged with a global SIM card with pre-paid connectivity and an internal antenna. You can connect the EVK to your PC via the USB port, or you can connect it directly to your favorite MCU by using the UART port available on header pins. The EVK supports worldwide cellular IoT connectivity and is powered by Sequans' Monarch 2 GM02S module. With this EVK you can very easily measure the ultra-low power consumption of Monarch 2 GM02S and test its rich set of AT commands.

Highlights

- Monarch 2 GM02S LTE-M & NB-IoT worldwide module
- Pre-paid SIM with global connectivity included
- Integrated, on-board antenna, 617-900Mhz, 1695-2200Mhz
- Easy power measurement with external power supply
- Suitable for lab or field testing
- Access to all module interfaces for development and testing
- Interface connector for daughter boards



Product Characteristics

Interfaces

- ❖ 4xUART over USB
- ❖ UART direct access
- ❖ Removable SIM
- ❖ MFF2 SIM
- ❖ JTAG
- ❖ Power plug
- ❖ RF connector

Other Features

- ❖ Soldering bridges to easily change pull-up/pull-down configuration
- ❖ Remote reset over USB
- ❖ Automatic switching when using external power supply

Software

- ❖ Field proven LTE software stack

Reference Design

- ❖ Schematics, BOM and layout of EVK available as reference design

RF Frequency

- ❖ Worldwide Single SKU™ design
- ❖ 617 – 2200MHz (incl. bands 1,2,3,4,5,8,12,13, 14,17,18,19,20,25,26,28,66,85)

Operating Supply

- ❖ 5V when operated via USB
- ❖ 2.2V-5.5V when using external power supply
- ❖ UART/GPIO logic: 1.8V

Evaluation Kit Contents

- ❖ EVK board with Monarch 2 GM02S module
- ❖ SIM card with prepaid 150 MB of data (valid 90 days)
- ❖ One MiniUSB cable, embedded Ignion® antenna with antenna tuner
- ❖ User manual available for download

Usage

- ❖ Connecting to a host PC (Windows / Linux) via USB cable
- ❖ Connecting to a MCU via the header UART pins (1.8V)
- ❖ Sending AT commands to the module for control
- ❖ Attaching to LTE live network or test equipment (CMW500 or similar)
- ❖ Sending data through PPP or through AT commands
- ❖ Measuring power consumption of Monarch 2 GM02S

For more documentation on Monarch 2 GM02S EVK, check our documentation site <https://cloud.sequans.com/>

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