



# monarch<sup>2</sup> GM02S - NEKTAR Evaluation Kit

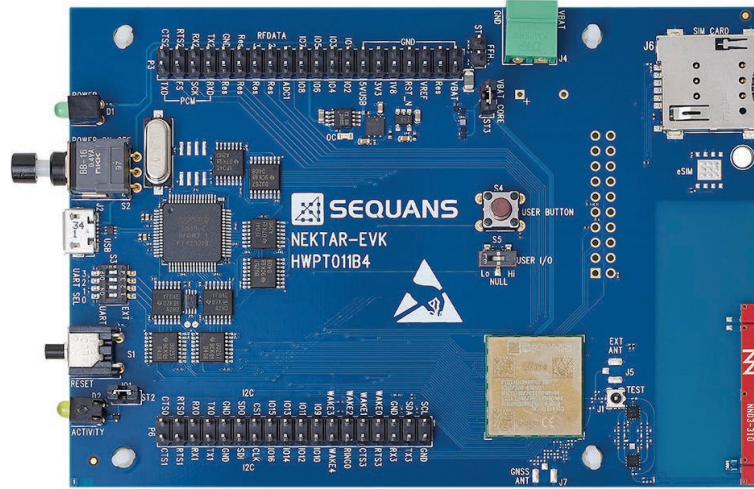


## NEKTAR Evaluation Kit --- Ready to Connect

The Monarch 2 GM02S-NEKTAR evaluation kit (EVK) allows you to connect to cellular LTE-M/NB-IoT networks in minutes. The NEKTAR EVK comes pre-packaged with a global SIM card with pre-paid connectivity and an internal antenna. You can connect the NEKTAR 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 NEKTAR EVK supports worldwide cellular IoT connectivity and is powered by Sequans' Monarch 2 GM02S module. With NEKTAR you can very easily measure the ultra-low power consumption of Monarch 2 GM02S and test its rich set of AT commands.

### Highlights

- Pre-paid SIM with global connectivity included
- Integrated, on-board antenna from Ignion, 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
- NEKTAR-CONNEXT 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 NEKTAR available as reference design

### RF Frequency

- ❖ Worldwide Single SKU™ design
- ❖ 617 – 2200MHz (incl. bands 1,2,3,4,5,8,12,13, 14,17,18,19,20,25,26,28,66,71,85)

### Operating Supply

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

### Evaluation Kit Description

- ❖ Based on Monarch 2 GM02S
- ❖ 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-NEKTAR EVK, check our documentation site <https://cloud.sequans.com/>

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