

monarch² SiP SKY66431 EVK

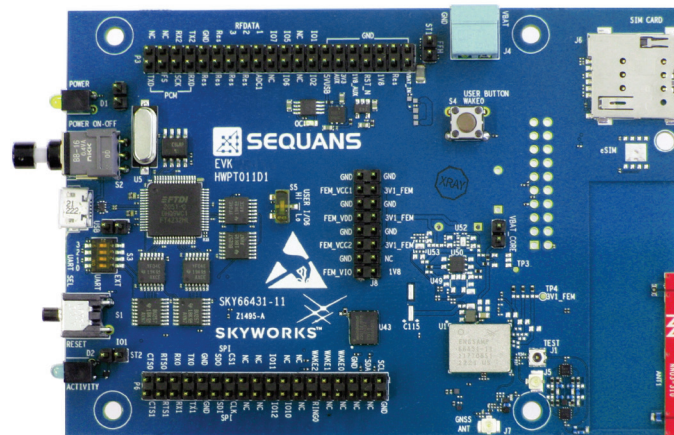
LTE-M & NB-IoT GNSS

Evaluation Kit --- Connect to worldwide LTE-M & NB-IoT networks and get GNSS location with Monarch 2 SiP SKY66431

The Monarch 2 SiP SKY66431 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, an internal antenna and an external GNSS 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 SiP SKY66431 module. With this EVK you can very easily measure the ultra-low power consumption of Monarch 2 SiP SKY66431 and test its rich set of AT commands.

Highlights

- Monarch 2 SiP SKY66431 LTE-M & NB-IoT worldwide module with GNSS
- Pre-paid SIM with global connectivity included
- Integrated, on-board antenna, 698-960Mhz, 1710-2200Mhz
- External GNSS antenna
- 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

- ❑ 3xUART
- ❑ Removable SIM
- ❑ MFF2 SIM
- ❑ JTAG
- ❑ Power plug
- ❑ Embedded Ignion® LTE antenna with antenna tuner
- ❑ uFL connectors for external GNSS antenna and LTE signal

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
- ❑ 698 – 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
- ❑ 2.8V-5.5V when using external power supply
- ❑ UART/GPIO logic: 1.8V

Evaluation Kit Contents

- ❑ EVK board with Monarch 2 SiP SKY66431

- ❑ SIM card with prepaid 150 MB of data (valid 90 days)
- ❑ Mini USB cable
- ❑ External GNSS antenna
- ❑ uFL to SMA cable to connect external GNSS antenna or to access LTE signal
- ❑ 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 SiP SKY66431

For more documentation on Monarch 2 SiP EVK visit <https://cloud.sequans.com>

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