

The Monarch Go Pi HAT is a cellular connectivity add-on card for SBCs with a Raspberry Pi HAT-compatible connector. Fitted with a Sequans Monarch Go (or Monarch Go-GPS) LTE Cat-M1 modem, this HAT board also facilitates expansion via click boards using a compact onboard shuttle click connector. An integrated onboard USB-UART bridge interface allows the HAT to be used with other platforms.

In addition to Monarch Go support, the Pi HAT includes a shuttle click expansion connector that enables 3.3V I/O, I2C, SPI, UART and GPIO-based click modules from MikroElektronika. Having access to the large array of click module offerings permits prototyping of various LTE-based applications.

The Monarch Go Pi HAT can operate in two modes. The first mode works with a SBC over the Pi HAT 40-pin UART interface. In this mode, the SBC performs the communication over the UART interface with the Monarch Go. The second operating mode for the Monarch Go Pi HAT is standalone. In standalone operation, the Monarch Go Pi HAT's power and UART communication to the modem occur through the micro USB interface. In standalone operation, it functions like the Monarch Go Starter Kit and can be evaluated on many other platforms over the USB-UART interface.

The Monarch Go LTE Cat-M1 modem delivers the shortest possible route to market and lowest development cost for cellular IoT-connected devices. Unlike traditional cellular modules, this modem is certified for use on the Verizon network, which avoids costly lab testing while improving time to market. The Monarch Go has an integrated antenna and pre-installed Verizon ThingSpace IoT SIM card, giving developers an easy, cost-effective approach to developing LTE IoT solutions.

## FEATURES

- **Raspberry Pi HAT compatible**
- **Monarch Go LTE modem**
  - Cat-M1
  - Pre-installed Verizon ThingSpace IoT SIM
  - Production ready
- **MikroElektronika shuttle click site**
  - 3.3V I/O
  - I2C
  - SPI
  - GPIO
  - UART
- **Voltage I/O translator**
  - 1.8V to 3.3V
- **Micro USB port**
  - Debug and programming UART



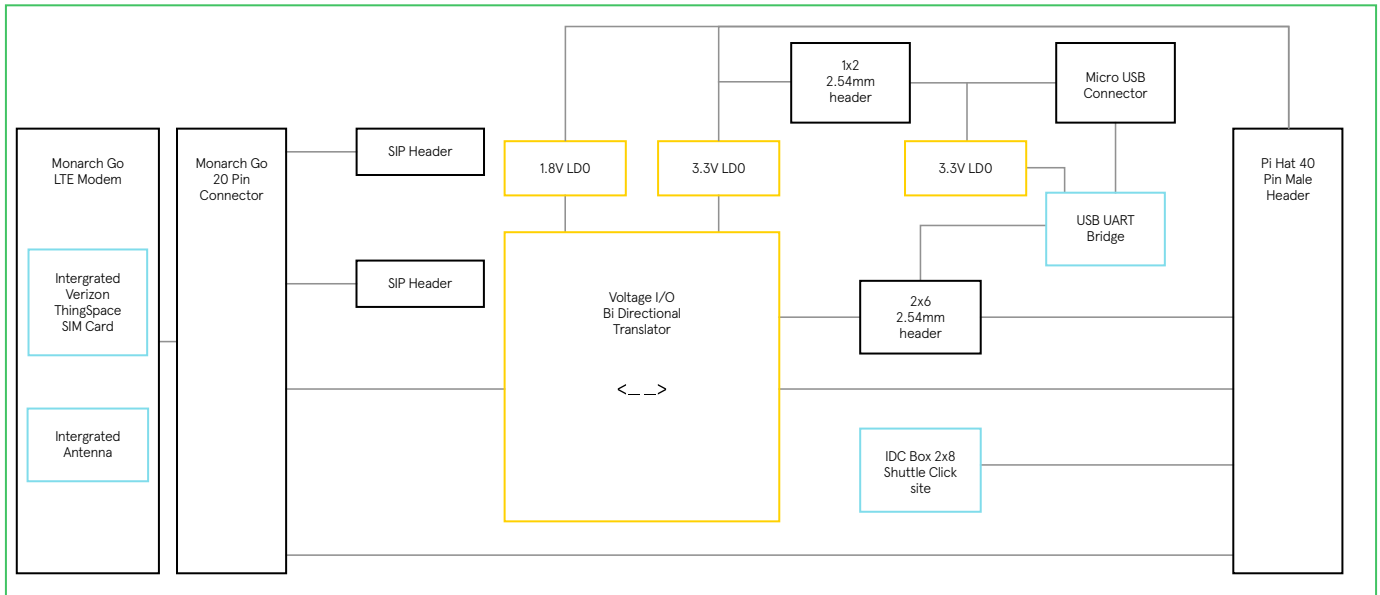
## KIT INCLUDES

- Monarch Go Pi HAT
- Monarch Go LTE modem
- Screws & standoffs
- Quick start card

## TARGET APPS

- Asset tracking
- Remote monitoring
- Embedded kiosk
- Cellular connected SBCs

## BLOCK DIAGRAM



## FEATURED MANUFACTURERS



## PARTS

Part Number	Description	Resale
AES-SQN-MNRCHGO-HT1-G	Pi HAT Adapter with socketed Monarch Go LTE Modem	\$72.95 USD

## RELATED PARTS

Part Number	Description	Resale
MONARCH-GO	Production Certified LTE Cat-M1 Modem	\$38.00 USD
MONARCH-GO-GPS	Production Certified LTE Cat-M1 Modem w/ GPS	\$44.67 USD
AES-MC-SBC-IMX8M-G	MaaXBoard i.MX 8M SBC	\$85.95 USD
MIKROE-2880	Shuttle Click	\$8.00 USD

Countries Available for Purchase: United States

## CONTACT INFORMATION

North America  
 2211 S 47<sup>th</sup> Street  
 Phoenix, Arizona 85034  
 United States of America  
 1-800-585-1602