



NB IoT Things

This IoT Things uses the NB IoT Cellular Mobile Network technology, the replacement for 2G/GPRS, to communicate between the local system and the Internet based Cloud system/server.

The Things connect direct to the Internet, no additional router is needed!

The default application software uses the MQTT protocol to communicate to the Cloud, but other protocols may easily be used (pure socket, REST, ...).

Mobile Network (WWAN):

- SIM7020G Worldwide NB IoT Release 14 (NB2) module
- On Board Antenna or external Antenna via SMA connector

I/O:

- 5 x Input (each: Analog, Counter or Binary Level capable)
- 7 x Output (2x TTL, 3x Relay, 2xPWM/TTL)
- 2 x Keys (User & Reset)
- 4 x Status LEDs (1x RGB, 1x G)
- UART

MCU:

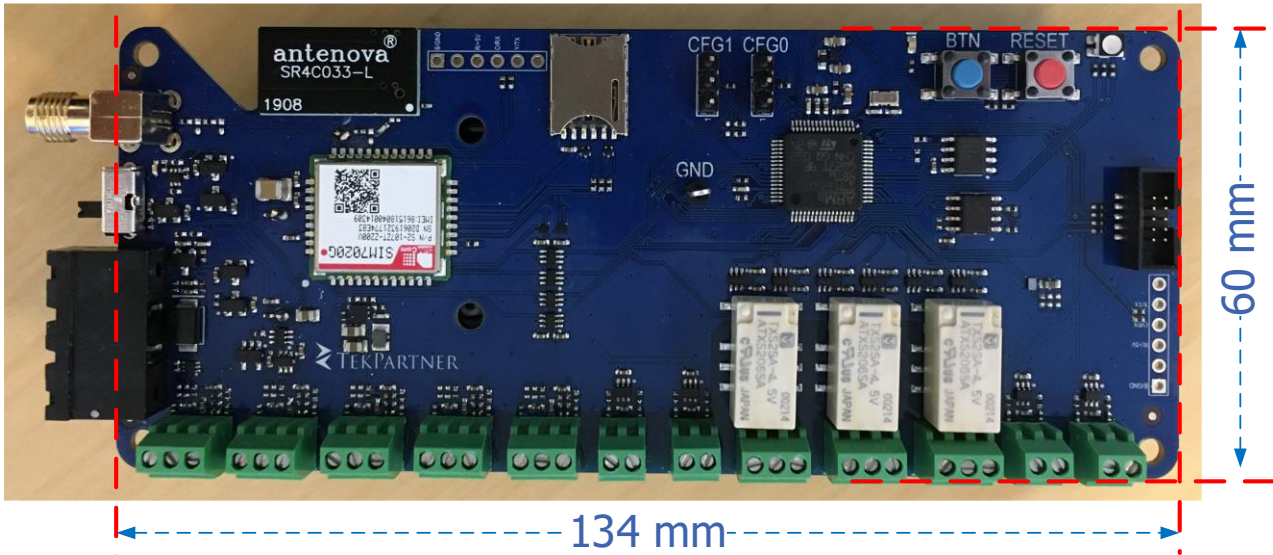
- STM32G070 (64 MHz ARM Cortex M0+)

Memory:

- 36 KB RAM
- 128 KB Program FLASH
- 32 KB FRAM (i2c) – rapidly changes non-volatile persistent data
- 2 MB Data FLASH (spi) – rarely changes non-volatile persistent data

Power:

- Battery compartment (optional)
- 5 VDC Connector



2020-08