



Thread, ZigBee and/or BLE Things

This IoT Things uses the “IEEE 802.15.4 Radio Standard” and/or the “Bluetooth Low Energy” technology to communicate between the local sub-system (WPAN) and the sub-systems Boarder Router/Edge Computer and further on to the Internet based Cloud system/server.

The Things connect to the Internet through the Boarder Router.

The default application is based on OpenThread in the WPAN and uses the MQTT protocol to communicate to the Cloud, but other WPAN and Cloud protocols may easily be used

Things Network (WPAN):

- Radio Standard
 - Thread and/or
 - ZigBee and/or
 - Bluetooth Low Energy
- Board Antenna or external Antenna via SMA connector

I/O

- 3 x Input (each: Analog, Counter and Level)
- 2 x Output (1x TTL, 1x Bi-stable Relay)
- 2 x Keys (User & Reset)
- 3 x Status LEDs

MCU:

- nRF52840 SoC (ARM Cortex M4)

Memory:

- 256 KB RAM
- 1 MB 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
- 5 VDC Connector



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