NB IoT Starter Kit Gen2

Avnet's NB IoT Starter Kit Gen2 enables designers to easily develop and prototype cellular connected IoT devices utilizing NB IoT network. The kit includes all the elements required to collect sensor data, connect to the NB IoT network, and utilize various cloud services for the management, storage, and analytics of a connected IoT device.

The Starter Kit features a two board solution comprised of a microcontroller based carrier board and a pluggable, cellular connectivity module. Avnet IoT Control board acts as the main host processor, providing an Arduino™ compatible R3 expansion slot. Avnet IoT control board contains a ATmega2560 microcontroller, based on an 8-bit AVR RISC-based MCU running at 16 MIPS, with 256KB Flash memory, 8 KB RAM, USB Port, 4 UART, 5 SPI, and 1 I2C. The NB IoT Shield is built around the Quectel. BC95-G NB IoT modem module. It supports primary and diversity external antenna connections through onboard SMA connectors, a 3FF SIM connector, MFF2 eSIM Slot, GPS Module, a temperature, humidity, MEMS, pressure sensor, and multiple serial link options to the host controller.

FEATURES

Avnet IoT Control Board

- Compatible with Arduino™
- ATmega2560 MCU
    - 16 MIPS
    - 256 KB Flash memory
    - 8 KB RAM
- LCD Display
- Three user push buttons with 3 LEDs

KIT INCLUDES

- Avnet IoT Control Board
- Quectel BC95-G NB IoT Shield
- GPS Module
- T/H Sensor
- Pressure Sensor
- MEMS Sensor
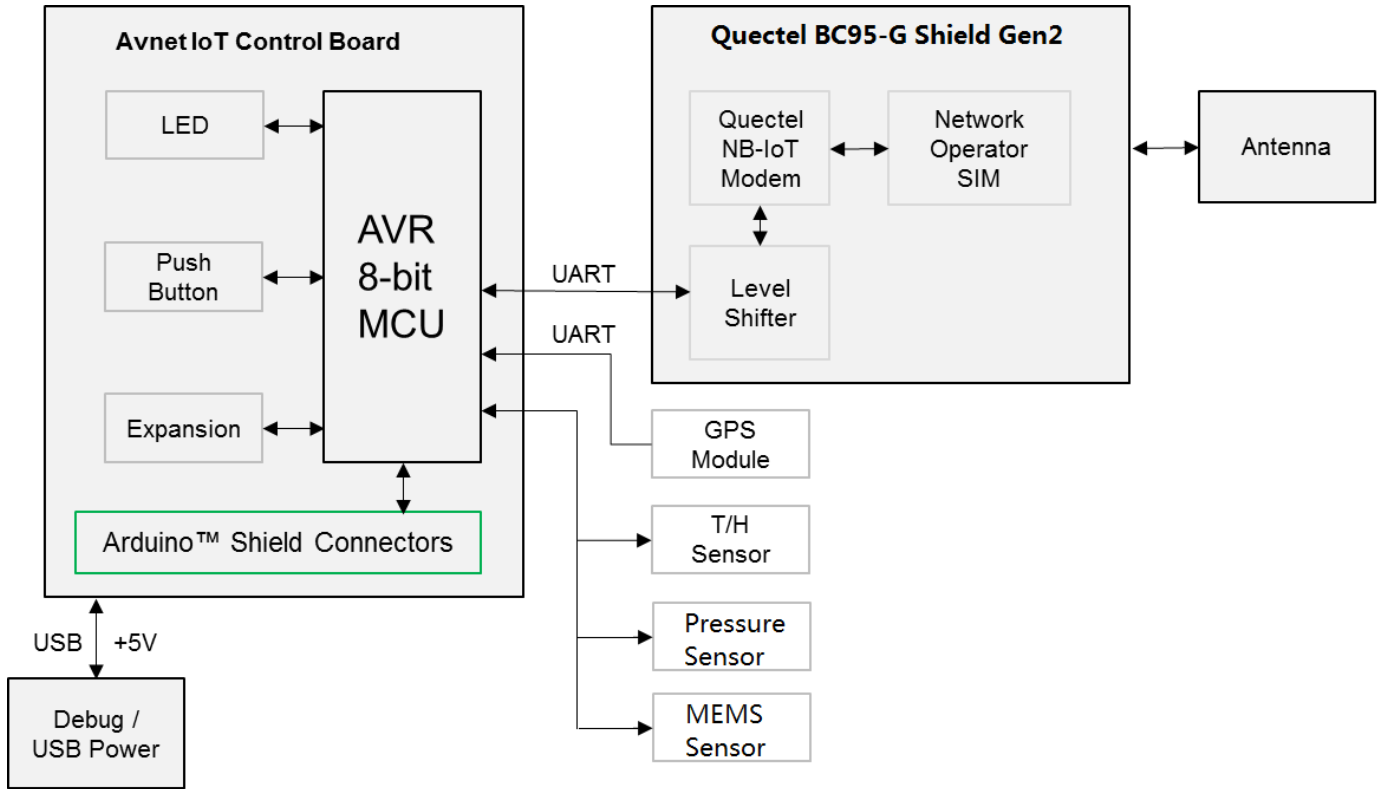- LCD Display
- Quick Start Card

TARGET APPLICATIONS

- Mobile IoT
- Building Automation
- Factory Automation
- Smart Agriculture
- Cellular/Mesh Network Bridging

Features cont...

Quectel BC95-G Shield Gen2

- Quectel LTE Cat-NB Module (HiSilicon Hi2115)

- 3FF SIM socket & MFF2 eSIM slot

- Arduino shield connectors

BLOCK DIAGRAM

FEATURED MANUFACTURERS

PARTS

Part Number	Description	Resale
ADX-QUE95G-IOT-SK-G2	NB IoT Starter Kit Gen2	$199 USD