LTE IoT Add-on Kit

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Reach Further™

The LTE IoT Add-on Kit enables developers to easily add cellular LTE connectivity to existing development platforms such as the Raspberry Pi and Avnet's own MicroZed IIoT Starter Kit. Utilizing AT&T's 4G LTE network, the kit includes all the connectivity elements required to collect sensor data, connect to the AT&T network, and utilize various cloud services for the management, storage, and analytics of a connected IoT device.

The LTE IoT Add-on Kit includes a small 3.25" x 2" cellular shield with on-board LTE module, antennas, power supply and AT&T SIM card. When combined with a developer's processor board of choice, the kit can be used for prototyping applications targeting building and factory automation, smart agriculture, asset management, remote access, and more.

The 4G LTE cellular shield is built around the low-cost Wistron NeWeb Corp. (WNC) M14A2A LTE Cat-1 modem module. The shield supports primary and diversity external antenna connections through two onboard SMA connectors, a 3FF microSIM connector, a temperature and humidity sensor, and multiple serial link options to the host controller. Developers have the option of connecting the cellular shield to other development kits through a standard USB interface or through an Arduino™ compatible R3 UART interface.

Application development is supported by AT&T's M2X Data Services and Flow Designer, which provides a scalable, reliable and highly secure environment for IoT-focused solutions. Additional cloud services from industry partners are also available.

FEATURES

Avnet M14A2A Cellular Shield
- LTE Cat-1 modem (WNC M14A2A)
- 3FF microSIM socket
- USB 2.0
- Arduino shield connectors
- Primary and diversity antenna connections
- Pmod x1
- Temp/Humidity sensor

AT&T IoT SIM Starter Pack
- 300 MB Data
- 300 SMS messages
- Valid for up to 6 months
- Domestic AT&T US and AT&T Mexico (no roaming)

Pulse LTE Stealth Blade Antenna
- Dipole antenna
- Supports LTE Bands 2, 4, and 12
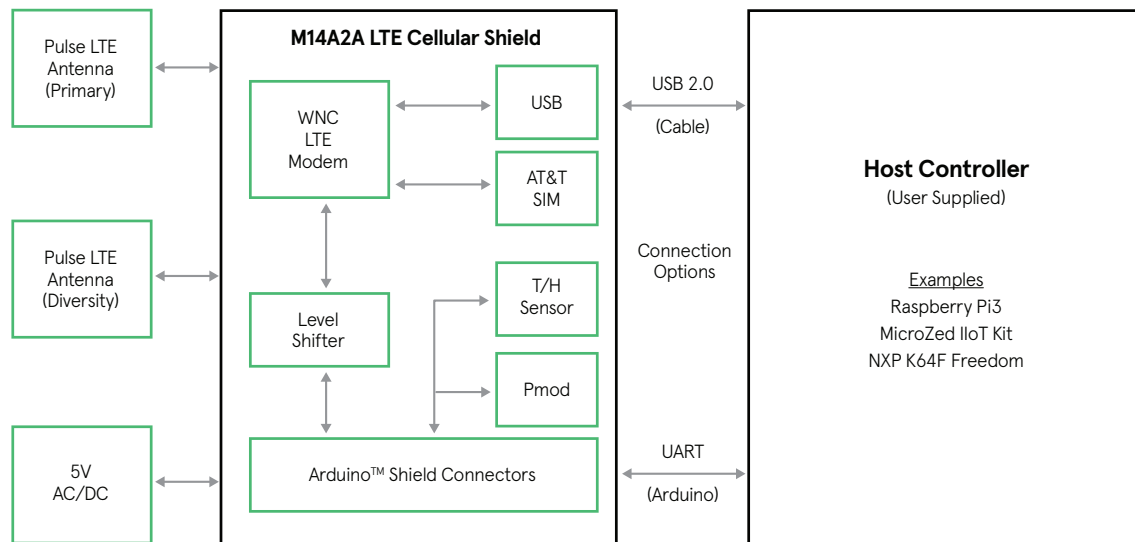
DESIGNED BY AVNET

KIT INCLUDES

- Avnet M14A2A Cellular Shield
- AT&T IoT SIM Starter Pack
- Two Pulse LTE Stealth Blade Antennas
- Two micro-USB Cables
- 5V AC/DC USB Power Supply
- Quick Start Card
- Downloadable Tutorials and Documentation

TARGET APPLICATIONS

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

To purchase this kit, visit
www.cloudconnectkits.org/product/lte-iot-add-on-kit

BLOCK DIAGRAM

M14A2A LTE Cellular Shield

- Pulse LTE Antenna (Primary)
- Pulse LTE Antenna (Diversity)
- 5V AC/DC
- WNC LTE Modem
- USB
- AT&T SIM
- Level Shifter
- T/H Sensor
- Pmod
- Arduino™ Shield Connectors

USB 2.0 (Cable)

Connection Options

UART (Arduino)

Host Controller
(User Supplied)

Examples
Raspberry Pi3
MicroZed IIoT Kit
NXP K64F Freedom

FEATURED MANUFACTURERS

WNC   samtec   Pulse Electronics   ST life.augmented

PARTS

Part Number	Description	Resale
AES-ATT-M14A2A-IOT-ADD-G	AT&T LTE IoT Add-on Kit	$59* USD

*Note: Special $59 resale for limited time only. Normal resale is $107.

RELATED PARTS

Part Number	Description	Resale
SB698SMA3	Pulse LTE Blade Antenna	$20 USD

Countries Available for Purchase: Americas