

NXP IoT Gateway JN5168-RD6040

Internet of Things Gateway

This small, compact implementation of an Ethernet gateway, designed for low-power wireless networks, is based on IEEE 802.15.4 standards, so it's compatible with ZigBee and JenNet-IP.

KEY BENEFITS

- ▶ JN5168 ZigBee / JenNet-IP wireless interface
- ▶ Provides a single application layer for ZigBee Light Link, ZigBee Home Automation, and JenNet-IP
- ▶ Custom software enables hybrid ZigBee Home Automation / ZigBee Light Link networks
- ▶ MIB-based JIP application layer
- ▶ OpenWRT Linux operating system
- ▶ Programmable for custom applications
- ▶ Supports standard internet security, including TLS
- ▶ Supports local web server
- ▶ NXP LPC3240 ARM9 host controller
- ▶ 1 GB Flash
- ▶ 512 kB SRAM
- ▶ 256 kB EEPROM
- ▶ 7-16 V DC power supply input
- ▶ Ethernet RJ45 port
- ▶ USB port supports WiFi dongle or additional network layer
- ▶ CE and FCC certified
- ▶ Customizable LED and button functions
- ▶ External antenna with RP-SMA connector

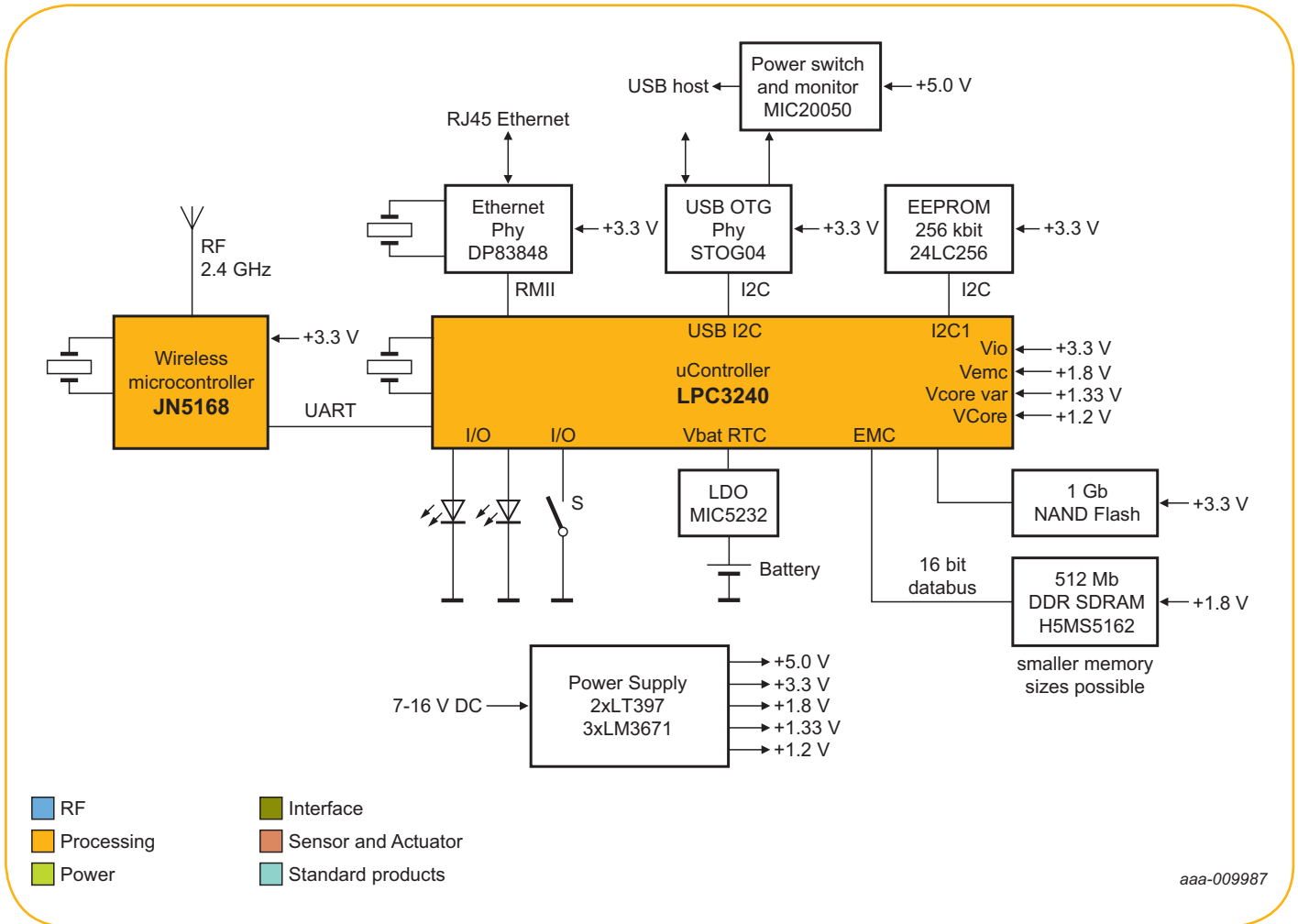
APPLICATIONS

- ▶ Internet control of ZigBee networks
- ▶ Internet control of JenNet-IP networks
- ▶ Ethernet connected gateway/coordinator
- ▶ Floor or room controller in commercial buildings

The NXP Internet of Things (IoT) Gateway is an essential component for connecting everyday wireless-enabled devices to the wired internet so they can be controlled and monitored. The powerful ARM9-based host controller runs an OpenWRT Linux operating system, providing an easy-to-use platform for system development. The software is modular, allowing for easy customization, including changes to the application software. The wireless interface can participate in ZigBee or JenNet-IP networks. With the addition of a wireless USB dongle, the gateway can participate in a mix of both networks. Data encryption uses standard internet techniques on the wired interface, and 128-bit AES encryption for wireless communications.



Block Diagram



What's in the box?

- IoT gateway unit *
- Universal 12 V DC power supply unit **
- Swivel SMA antenna
- 1-meter RJ45 Ethernet cable
- Getting started guide

* RF information: IEEE802.15.4 Tx/Rx, frequency range 2400-2483.5 MHz, 2 dBm
 Operating temperature: 0° to 40 °C (32 to 104 °F)
 Operating humidity: 10 to 85% relative humidity (non-condensing)
 ** Mass Power SFF1200100U1BA or Stontronic T5148RW