

PAN4620

IEEE[®] 802.15.4 and Bluetooth[®] Low Energy Module

Panasonic



OVERVIEW

The PAN4620 is Panasonic's Internet of Things dual mode module comprising NXP's Kinetis KW41Z SoC - a 2.4 GHz 802.15.4 and Bluetooth[®] Low Energy wireless radio microcontroller based on an ARM[®] Cortex-M0+ core.

To provide maximum flexibility, the module can be operated in stand-alone and hosted mode. With 512 kB flash memory and 128 kB SRAM the PAN4620 can easily be used as a stand-alone controller eliminating the need for an external processor, saving complexity, space and cost. It is thus well suited for very small and low-power applications. However, also the integration of 802.15.4 and/or BLE connectivity into existing applications can easily be achieved when using the PAN4620 in hosted mode.

Using the PAN4620 with low power consumption in combination with NXP's certified Thread[®] stack, BLE stack or a combination of both for concurrent operation allows to meet IoT application requirements without the need for a gateway.

Since Thread[®] does not define an application layer, various application layers can be used, such as dotdot, IoTivity, OpenDOF, and others.

FCC, IC, and CE approval are under way.

FEATURES

- Same form factor and compatible pinout for VCC, GND, Reset, UART, I²C, and SWD as PAN1026, PAN1760, PAN1760A, and PAN1761
- Single and concurrent operation of Thread[®] and BLE
- Open to various known application layers or proprietary solutions

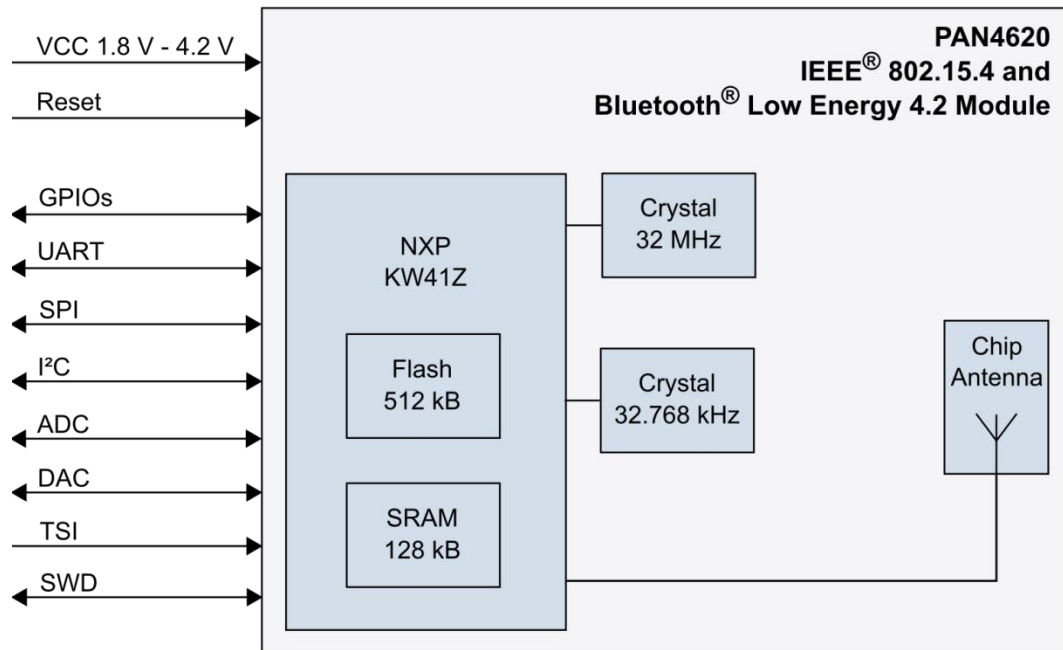
802.15.4

- IEEE[®] standard 802.15.4 compliant
- Supporting software consisting of 802.15.4 MAC/PHY implementation, Simple Media Access Controller (SMAC), and certified Thread[®] stack

Bluetooth Low Energy

- Bluetooth[®] LE 4.2 compliant implementation certified by BT SIG
- Supporting software consisting of BLE host stack and profiles, BLE Mesh, and IPv6 6LoBLE
- Bluetooth Developer Studio Plug-In

BLOCK DIAGRAM



CHARACTERISTICS

- Surface Mount Type (SMT) dimensions: 15.6 mm x 8.7 mm x 1.9 mm
- SoC: NXP[®] Kinetis[®] KW41Z – 2.4 GHz 802.15.4 and BLE 4.2 Wireless Radio Microcontroller
- Core: Up to 48 MHz 32 bit ARM[®] Cortex-M0+
- Memory: 512 kB of flash and 128 kB of SRAM
- Voltage range: 1.8 V to 4.2 V
- Temperature range: -40 °C to 85 °C

DEVELOPMENT TOOLS

For further details to this product, please contact us.

For more information about wireless connectivity products, software, and documentation, please visit

<https://eu.industrial.panasonic.com/products/wireless-connectivity>