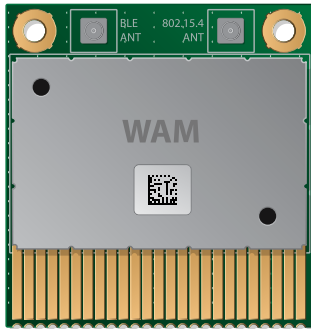




WAM 110 Wireless Application Module



- OEM Wireless Application Module
- 802.15.4 Wireless mesh with JenNet™-IP
- Bluetooth BLE for sensors
- Bluetooth BLE for commissioning and authentication

WAM 110 Data Sheet

The WAM 110 Wireless Application Module is a wireless mesh and Bluetooth zone controller board for OEMs to build into their wireless products.

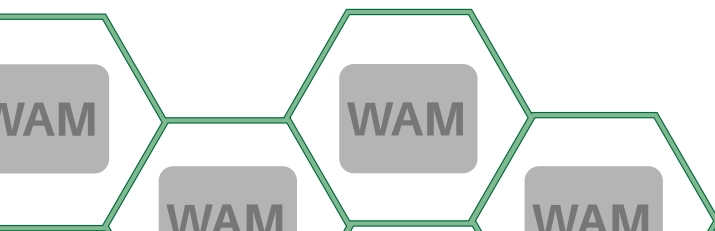
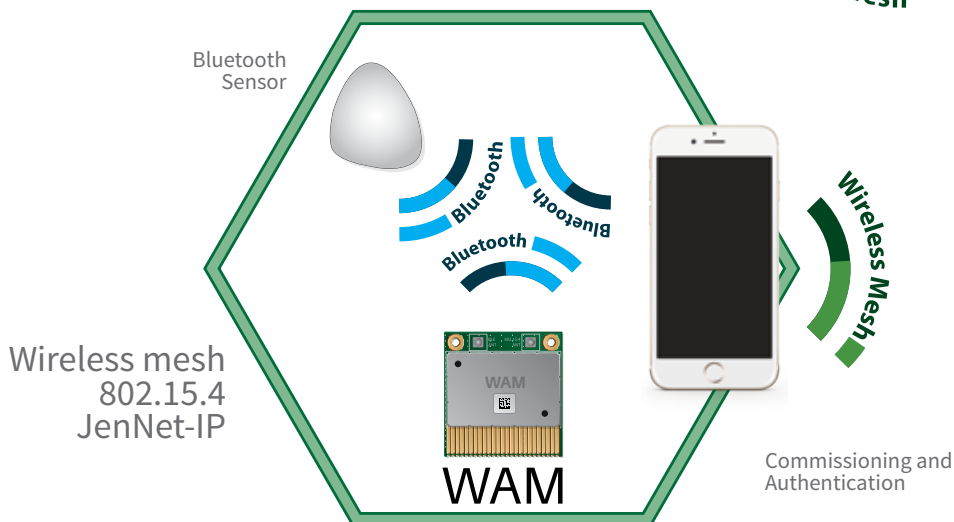
Based on the NXP 5168 single chip microcomputer, the WAM 110 provides 802.15.4 Wireless with JenNet-IP protocol to communicate with T-Star InferStack™ platforms.

Bluetooth BLE, aka Bluetooth Smart is used to connect local devices within the JenNet Wireless Zone such as sensors and actuators. Bluetooth smart phones and tablets are used to commission and authenticate the device.

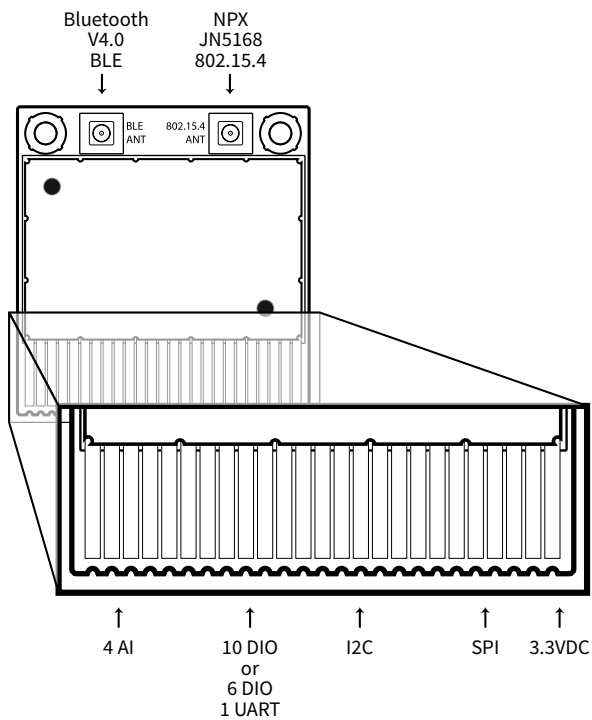
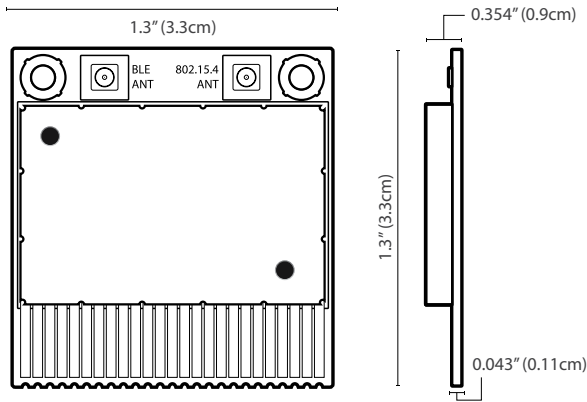
An on board security chip provides a trusted root for the device that sits within the end to end InferStack™ security architecture.

In addition to the Bluetooth network for sensors and actuators the device has 4 analogue in and 10 digital IO lines, I2C and SPI bus for wired interfaces to local devices.

Architecture



Dimensions



Hardware

Processor

- NXP-JN5168 -32 bit RISC CPU 32 MHz

Memory

- 256 KB Flash 32KB SRAM, 4KB EEPROM memory

Wireless

- IEEE 802.15.4 Wireless
- u.FL antenna connection
- JenNet-IP protocol
- 22 dBm Transmit power -100 dBm receiver sensitivity

Bluetooth

- Bluetooth V4.0 (Bluetooth BLE)
- u.FL antenna connection
- 4 dBm Transmit power -93 dBm receiver sensitivity

Security

- 128-Bit AES Security co-processor
- Embedded security IC
- 80 KB EEPROM

Input/Output

- 4 Analogue Input
- 10 Digital IO
- I2C bus
- SPI serial peripheral interface bus master
- 1 UART—multiplexed on 4 DIO

Power

- 2.3 VDC to 3.9 VDC input 3.3 VDC typical

Connections

- 25 edge finger LGA pins at 1.27mm pitch

Environmental

- -25C to 75C operating
- -40C to 25C storage
- RoHS compliant

Ordering Information

Part Number	Description
WAM 110	Wireless Application Module