

# / AZURE SPHERE MT3620 MODULE V3

AVNET®

The Avnet Azure Sphere MT3620 Module supports Microsoft's Azure Sphere end-to-end solution for highly secured, Wi-Fi-connected microcontroller (MCU) devices. The production-ready, certified module supports an on-board chip antenna for cost-optimized systems.

By integrating all the necessary support and RF front-end circuitry onto the small 33 mm x 22 mm module, Avnet has reduced the design time for implementing Sphere-based solutions. More importantly, developers can leverage the module's wireless certifications for their end product, saving considerable certification cost and testing time.

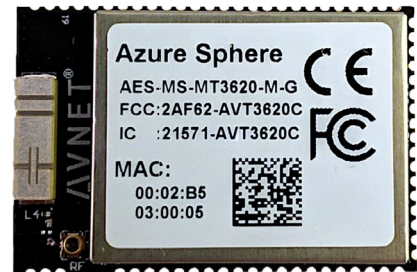
The Azure Sphere MT3620 module is based on the MT3620AN SoC, which supports dual-band 802.11 b/g/n Wi-Fi connectivity, a 500 MHz Arm® Cortex™-A7 core for user applications, and two general purpose 200MHz Arm Cortex-M4F I/O subsystem cores designed to support real-time requirements. The on-chip peripherals (GPIO, UART, I2C, SPI, PWM and ADC) can be mapped to dedicated I/O pins on the module for connection to external sensors, I/O connectors, or other user application circuits.

Microsoft's end-to-end security, OTA update service, and user-friendly Visual Studio development environment add significant value when compared to traditional MCU solutions.

For development with the Avnet module, Avnet's Azure Sphere MT3620 Starter Kit provides extremely versatile expansion options using a wide range of inexpensive add-on boards to facilitate rapid prototyping and fast time to market.

## Target apps

- IoT edge devices
- Consumer appliances
- Smart retail
- Remote access
- Building automation
- Factory automation



DESIGNED  
BY AVNET

## Features

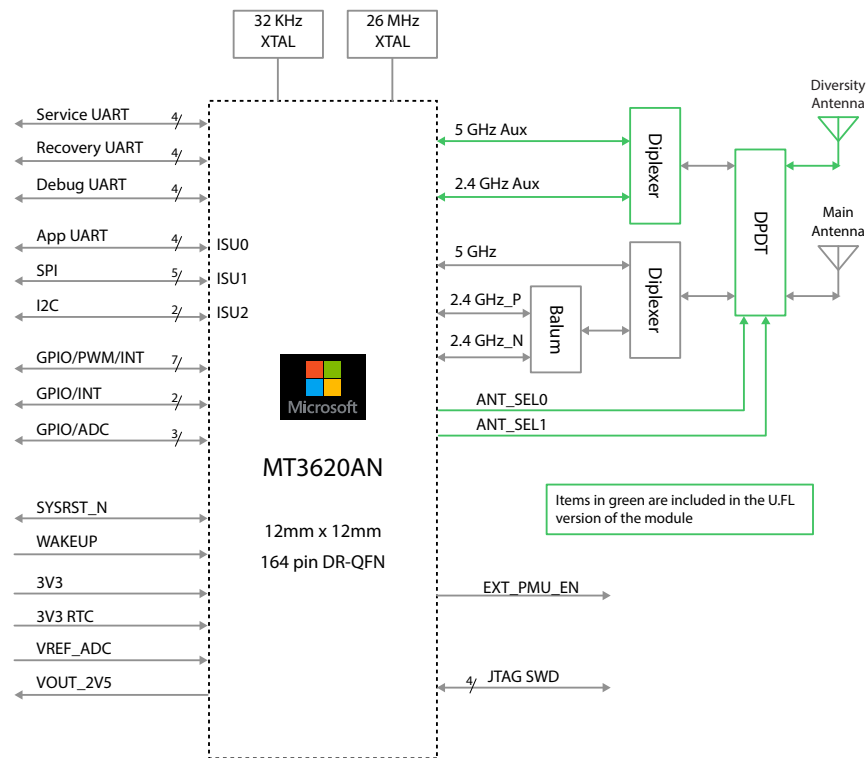
- On-board (chip)
- Based on the MT3620AN SoC
  - 1x 500MHz ARM Cortex A7, 4MB SRAM
  - 2x 200MHz ARM Cortex M4F cores, 64KB SRAM
  - Dual-band 2.4/5GHz 802.11 b/g/n WiFi High-Speed Data Transfer
- Module I/O peripheral support
  - 3x ISU interfaces pre-configured for UART, SPI, I2C
  - ADC/GPIO: 3x 12-bit ADC inputs (or 3 GPIOs)
  - PWM/GPIO: 9x PWM outputs (or up to 24 GPIOs)
  - RTC (requires VBAT supply)
- Antenna
  - Dual-band 2.4/5GHz chip antenna (Pulse W3006)
  - Operating temperature: -30~85°C
- Dimensions: 33mm x 22mm x 3mm
- Certification: FCC / IC / CE / RoHS

For more information on the Azure Sphere MT3620 Modules,

visit: [avnet.me/azure-sphere-family](https://avnet.me/azure-sphere-family)

To purchase kit, visit: [avnet.me/mt3620-module-pdp](https://avnet.me/mt3620-module-pdp)

## Block diagram



## Featured manufacturers



## Parts

Part number	Description	Price and availability
AES-MS-MT3620-M-G-3	Azure Sphere MT3620 Module Version 3	<a href="https://avnet.me/mt3620-module-pdp">avnet.me/mt3620-module-pdp</a>

## Related parts

Part number	Description	Price and availability
AES-MS-MT3620-SK-G-2	Azure Sphere MT3620 Starter Kit V2	<a href="https://avnet.me/mt3620-kit">avnet.me/mt3620-kit</a>

Countries available for purchase: Americas

## Contact information

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