

Avnet Guardian 100 is a wireless edge module that uses Azure Sphere to deliver secure connectivity for devices, helping businesses get the most benefit from existing equipment investments. Based on an Avnet Azure Sphere MT3620 module, Guardian 100 provides an Ethernet or USB interface with existing equipment, plus secure dual-band Wi-Fi connection to the internet.

Guardian's Azure Sphere module provides secure connectivity with cloud services, without exposing the end equipment to potential internet attacks. Data transmissions are encrypted, all OS and application updates are delivered securely via the Microsoft Azure Sphere Security Service, and authentication ensures the module only communicates with trusted hosts. With Avnet Guardian, enterprise customers can more confidently connect existing devices to the cloud, helping them to operate more efficiently, drive innovation, and create a better customer experience.

Beyond retrofitting existing devices, Avnet Guardian can also be used in scenarios where current connectivity does not meet enterprise-level security requirements. Avnet Guardian is a good fit for any industry that operates using mission-critical, capital-intensive equipment.

Businesses can start seeing value right away with plug and play modules that are easy for anyone, including non-technical onsite employees, to install. Avnet Guardian also integrates with Avnet's IoTConnect, a secure, cloud-based platform and a portfolio of pre-built, smart, industry-specific connectivity solutions that businesses can use to quickly implement innovative IoT solutions and gain real-time data insights.

Avnet Guardian includes Azure Sphere. Customers will need an Azure tenant, which is free, to enable the automated Azure Sphere security updates. Azure Sphere can be used with other, non-Azure cloud services or even pushed to a customer's existing, internal data center.

FEATURES

- Avnet Azure Sphere Module based on MT3620AN SoC that features:
 - 1x 500MHz ARM Cortex A7, 4MB SRAM
 - 2x 200MHz ARM Cortex M4F cores, 192KB TCM, 64KB SRAM (per core)
 - On-chip QSPI flash memory (16 MB)
 - Dual-band 2.4/5GHz Wi-Fi (802.11 b/g/n)
 - Dual-band 2.4/5GHz chip antenna (Pulse W3006)
- Ethernet 10BaseT interface, RJ45 connector and magnetics
- USB 2.0 Device interface and USB power (USB type-B connector)
- USB 2.0 Debug/Program interface (internal microUSB connector)
- 7x Status User LEDs: Power, User-1,-2,-3, Debug/Prog USB, Ethernet-A,-B
- 5V to 3.3V DC/DC Power Regulation (2A max, with over voltage protection)
- Operating Temperature: -30°C to 85°C (USB) / 0°C to 70°C (using Ethernet)
- Dimensions: 108mm x 85mm x 32mm (including mounting flanges)

To purchase this kit, visit www.avnet.me/mt3620-guardian



KEY BENEFITS

- **Securely connect existing devices:** Retrofit existing equipment easily and cost-effectively with a comprehensive, highly secure cloud connectivity solution.
- **Streamline operations:** Remotely monitor and manage equipment to increase efficiency, reduce costs, and improve the customer experience.
- **Gain critical insights:** Enable real-time analytics and artificial intelligence to drive innovation and transform your business.

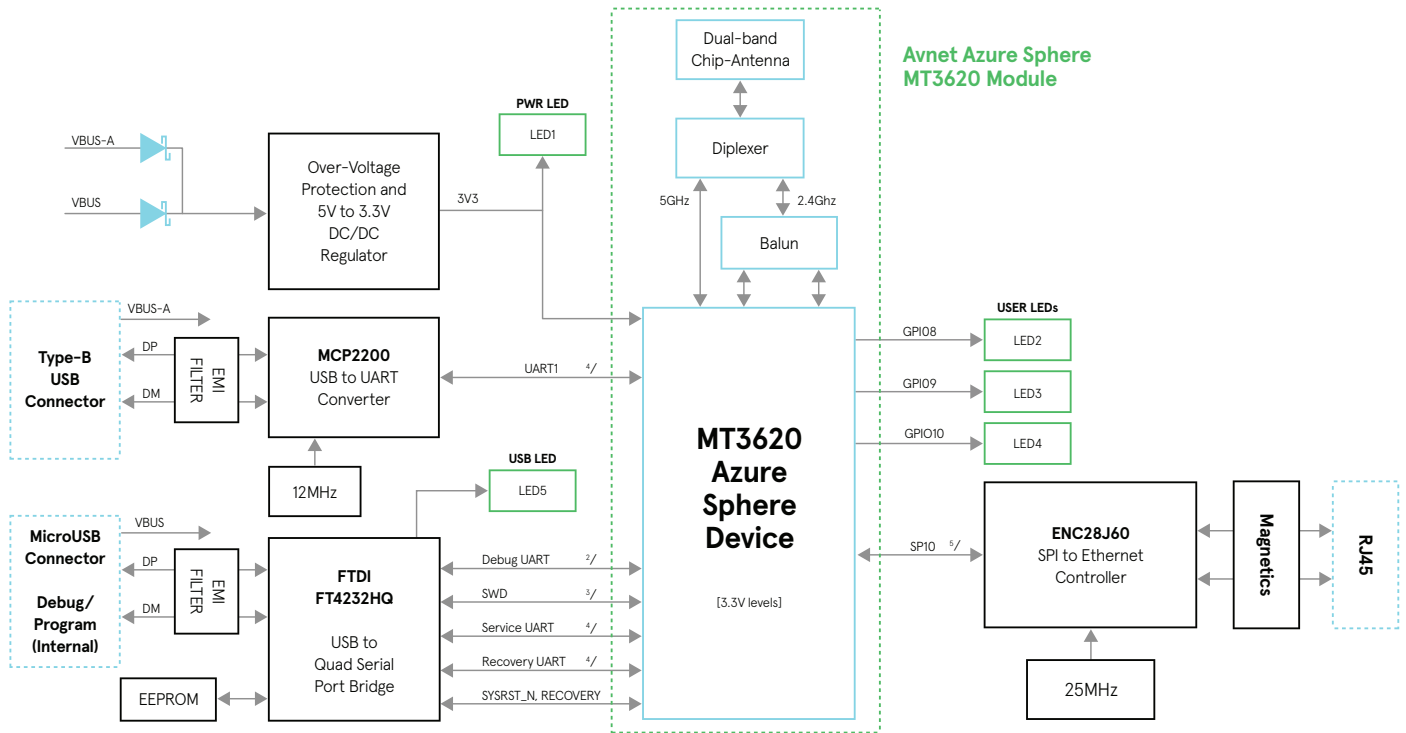
KIT INCLUDES

- Azure Sphere Guardian 100 Edge Device
- USB 2.0 type-A to type-B cable
- Ethernet Cat-5 cable
- Quick Start Card

TARGET APPLICATIONS

- Machine Monitoring/Control
- Asset Monitoring and Predictive Maintenance
- Food Services and Smart Retail
- HVAC and Refrigeration
- IoT Appliances and Devices
- Smart City and Smart Agriculture
- Factory and Building Automation

BLOCK DIAGRAM



FEATURED MANUFACTURERS



PARTS

| Part Number | Description | Price |
|-------------------------|---------------------------|---------|
| AES-MS-MT3620-GUARD-100 | Azure Sphere Guardian 100 | \$99.95 |

RELATED PARTS

| Part Number | Description | Price |
|-------------------|--|---------------|
| AES-MS-MT3620-SK | Azure Sphere MT3620 Starter Kit | \$75 |
| AES-MS-MT3620-M-G | Azure Sphere MT3620 Module (certified) | Contact Avnet |

Countries Available for Purchase: Americas, EMEA, Asia, Japan

CONTACT INFORMATION

North America
2211 S 47th Street
Phoenix, Arizona 85034
United States of America
eval.kits@avnet.com
1-800-585-1602

Europe (Silica)
Gruber Str. 60c
85586 Poing
Germany
marketing@silica.com
+49-8121-77702

Japan
Yebisu Garden Place Tower, 23F
4-20-3 Ebisu, Shibuya-ku
Tokyo 150-6023 Japan
eval-kits-jp@avnet.com
+81-(0)3-5792-8210

Asia
151 Lorong Chuan
#06-03 New Tech Park
Singapore 556741
iot-asia@avnet.com
+65-6580-6000