

Azure Sphere PREVIEW

Comprehensive IoT security solution—including hardware, OS, and cloud components—to help you innovate with confidence

Contact us to get started >



Unlock the potential of IoT with confidence in your security

As billions of new devices are connected, organizations need to secure them to help protect data, privacy, physical safety, and infrastructure. Azure Sphere builds on decades of Microsoft experience in hardware, software, and cloud to provide a turnkey solution for IoT devices. Get defense in depth to embrace IoT innovation with confidence.

Qualcomm announces collaboration with Microsoft to deliver the first cellular enabled Azure Sphere certified chips. >



Defense in depth provides multiple layers of protection to help guard devices against and respond to threats



Deployment flexibility helps you secure existing equipment and build protection into new IoT investments



Over-the-air (OTA) updates make it easy to add new features and improve performance throughout device lifecycles



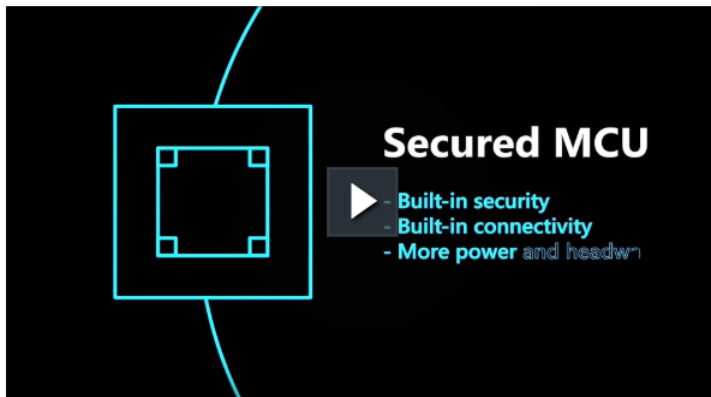
Error reporting and automatic security updates help you stay ahead of new and evolving threats

Get defense in depth for IoT

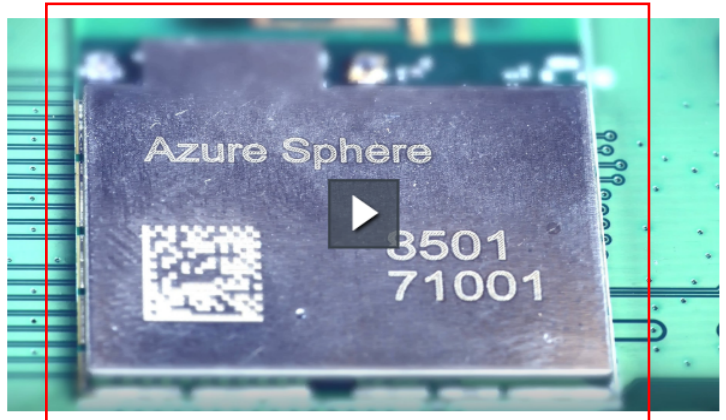
- ✓ **Azure Sphere-certified chips** from our hardware partners have built-in Microsoft security technology to provide connectivity and a dependable hardware root of trust.
- ✓ **Azure Sphere OS** adds layers of protection and ongoing security updates to create a trustworthy platform for new IoT experiences.
- ✓ **Azure Sphere Security Service** brokers trust for device-to-cloud communication, detects emerging threats, and continually renews device security.

Use Azure Sphere with any device

Securely connect your existing equipment



Build and roll out new, connected IoT devices



Fortify IoT with layered security

Azure Sphere is the only solution that delivers the seven essential security properties for the future of connected devices. Build your IoT operations on a chip with robust hardware security, a defense-in-depth OS, and a cloud security service that monitors devices and responds to emerging threats so you don't have to.

[Explore seven properties of highly secure devices >](#)



Prioritize your business objectives

Lighten the load of connecting, managing, and securing IoT devices at scale, and eliminate the need to invest in additional infrastructure or staff. Azure Sphere helps you optimize development and delivery, using a flexible software delivery model and development tools. Connect to any cloud, public or private.

[See how Azure Sphere enables new experiences >](#)

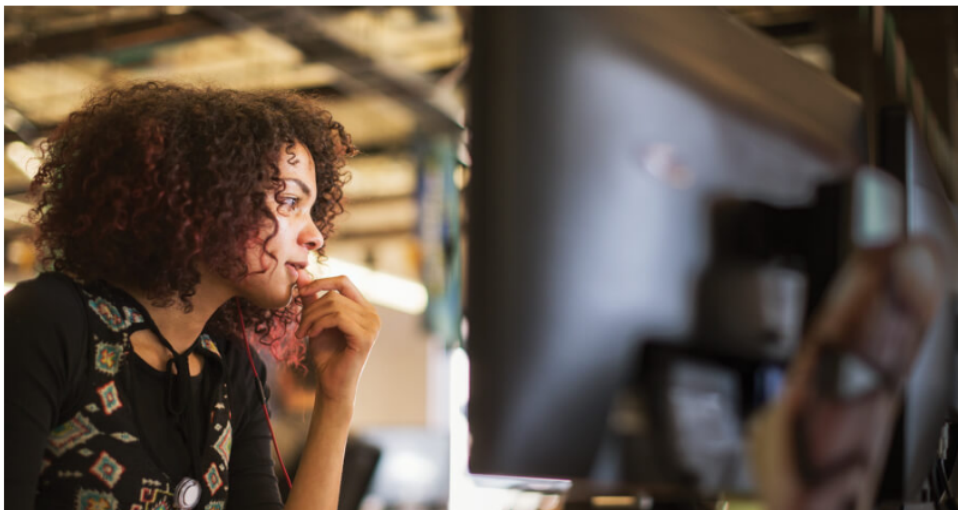


Build a future of securely connected devices

Deliver next-generation experiences with built-in connectivity and security. By embracing IoT to develop new products and services, you can drive innovation, delight customers, improve your margins, and increase your value.

[Learn what's possible with IoT and Azure Sphere >](#)

Setting a new standard for IoT device security



- ✓ Azure Sphere protects every device with seven properties of highly secured, internet-connected devices.
- ✓ Ensure device integrity and prevent malicious actors from taking control of your devices or compromising your data with defense in depth.
- ✓ Keep devices secured as new threats emerge and restore the health of compromised devices with automated OS and security updates.
- ✓ Azure Sphere devices only run signed, authentic software, mitigating the risk of threats like malware and application tampering.



[Learn more >](#)

Our hardware ecosystem

A global ecosystem of Microsoft partners delivers revolutionary new IoT hardware—from MCUs and crossovers to modules, development kits, and guardian devices—to bring Azure Sphere to a broad range of customers and applications.

Silicon Chips

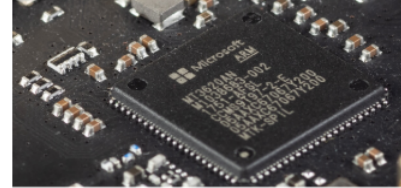
Modules

Development Kits

Guardian Devices

Media Tek 3620

MediaTek's new cross-over class of MCU includes built-in Microsoft security technology, built-in connectivity, and combines the versatility and power of a Cortex-A processor with the low overhead and real-time guarantees of a Cortex-M class processor.



[More information >](#)

Trusted by companies across industries for all types of devices



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approach. Azure Sphere will allow us to really button up that last leg of our stack—hardware—to ensure we have the best protection against any potential security risks."

Jason Slater, Technology Solutions Architect, PURELL SMARTLINK Technology

[Read the story >](#)



Start using Azure Sphere

Get your [hardware development kit](#) and follow steps to install Azure Sphere.

Learn more with [documentation and quickstarts](#).

Build your first [application](#).

Documentation, learning resources, and community

Documentation

Explore quickstarts, how-to guides, tutorials, and API reference documentation.

[Explore now >](#)

White papers

Read and download Azure Sphere whitepapers

[Download now >](#)

IoT Show

Watch live-streamed events about how to build IoT solutions, and learn more about IoT scenarios like intelligent edge, DevOps, and asset tracking.

[Start watching >](#)

IoT tech community

Ask questions and get support from Microsoft engineers and Azure community experts.

[Interact with the community >](#)

Device Partner Center: Azure Sphere Resource Center

Azure Sphere partners can explore product and technical overviews, pricing and licensing, and next steps to engage on Azure Sphere.

[Grow your partnership >](#)

Frequently asked questions about Azure Sphere

Can I buy just one component of Azure Sphere—the Azure Sphere–certified MCU chip, the Azure Sphere OS, or Azure Sphere Security Service? [▼](#)

Does Microsoft manufacture Azure Sphere chips? [▼](#)

Does Azure Sphere require an Azure subscription or monthly payments? [▼](#)

Can Azure Sphere help me secure my existing devices? [▼](#)

Does my entire environment need to be on Azure to use Azure Sphere? [▼](#)

How does Azure Sphere relate to Windows for IoT? [▼](#)

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Trusted

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