

/IOTCONNECT[®]

/IOTCONNECT Amazon Sidewalk Solution

Challenges

Connect devices reliably - without complex infrastructure

Customers building Amazon Sidewalk-enabled devices face significant complexity moving from concept to production. While prototyping is supported, it is constrained to limited scale (up to 1,000 devices), requires per-device certificate handling, and involves manual, one-at-a-time provisioning—making it unsuitable for manufacturing or large pilots. Teams must also navigate multiple hardware configurations, radio options, and example variants, each with different build targets and onboarding steps. The transition from prototype to production introduces an additional hurdle, requiring a completely different Amazon Sidewalk manufacturing flow with HSMs, control logs, SMSNs, and bulk import tasks, often forcing customers to rework processes, tooling, and cloud integration just as they are preparing to scale.

Avnet /IOTCONNECT Solution

Unlock seamless IoT connectivity at scale

The /IOTCONNECT Amazon Sidewalk Solution reduces this complexity by providing standardized assets (device templates, dashboard templates, decoders, and example-specific documentation) aligned with STM32 Sidewalk SDK examples across supported board and radio configurations. For prototyping, it enables faster validation and demos through clearly documented onboarding flows and ready-to-use integrations within /IOTCONNECT. As customers move toward production, the solution is designed to transition beyond prototypes by engaging the /IOTCONNECT team to integrate the official Amazon Sidewalk manufacturing flow directly into the customer's AWS environment, helping bridge the gap between development and commercial deployment while maintaining continuity in device models, data decoding, and platform integration.

Benefits



»» Unified Device Management

The solution provides a single /IOTCONNECT portal to register, monitor, and manage Amazon Sidewalk-enabled STM32 devices, eliminating the need to build and maintain custom backend services.

»» GPS-Free Location Resolution

By integrating with AWS IoT Core Device Location, the solution enables location awareness using BLE, Wi-Fi, or GNSS data without requiring power-hungry GPS hardware, extending battery life for low-power devices.

»» Secure Manufacturing at Scale

The solution supports secure factory provisioning through HSM-based certificate generation, Sidewalk signing tools, and automated control log consolidation, enabling scalable and compliant mass production.

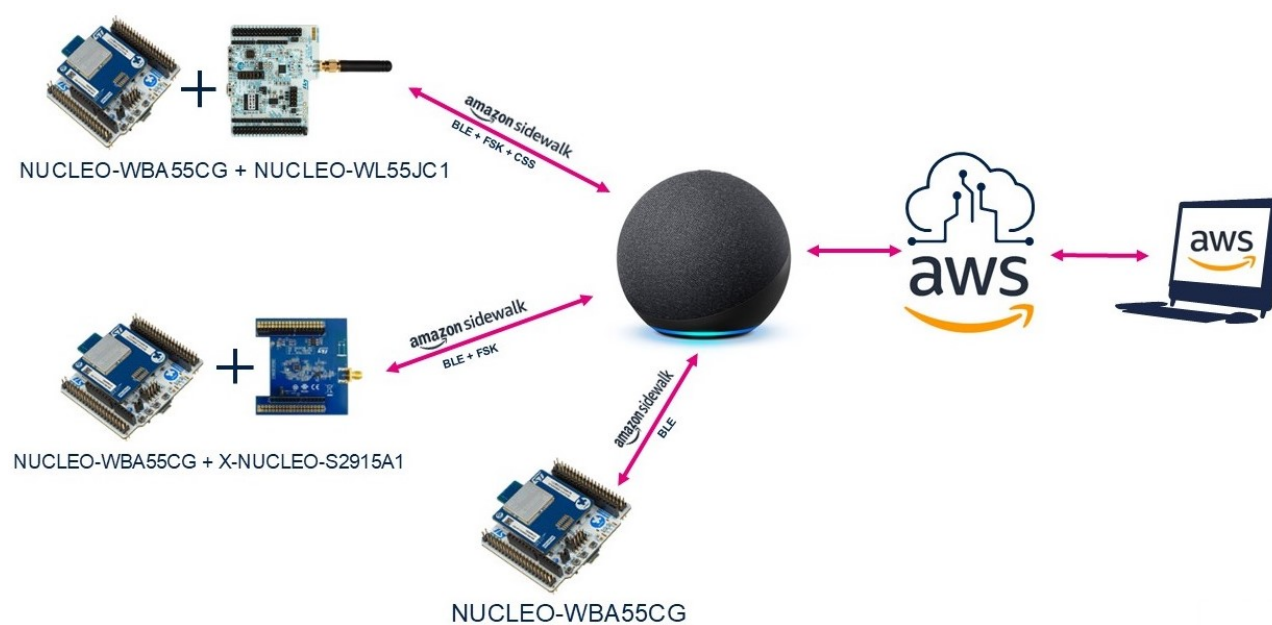
»» Accelerated Sidewalk Qualification

Avnet manages the “Works with Amazon Sidewalk” qualification process, including donor qualification when applicable, helping reduce testing effort and shorten time to market.

/IOTCONNECT Amazon Sidewalk Solution

Avnet's /IOTCONNECT is a comprehensive IOT Platform that simplifies the complexity of Amazon Sidewalk device connectivity and management. This SaaS offering is specifically tailored for developers and OEMs to accelerate their journey from prototype to mass production.

By leveraging the native wireless device onboarding capabilities of /IOTCONNECT and our specialized STM32 Sidewalk C-SDK integration, our team provides end-to-end support for bridging embedded hardware development with secure cloud operations. We ensure your fleet is fully compliant with the "Works with Amazon Sidewalk" program while utilizing /IOTCONNECT as your "single pane of glass" for device management.



Unified Tracking Solution

The Challenge:

Cold chain tracking demands end-to-end visibility, yet connectivity gaps and high costs make it difficult to maintain reliable monitoring throughout the supply chain.

Results:

- Initial 3,000-unit production run complete; 7,000 units in active shipment
- 100,000+ unit production run planned post-regulatory approval
- Multi-year Oxit engineering engagement spanning firmware, RF, certification & cloud
- Active Sidewalk registration optimization with Amazon's Sidewalk team

Features

The /IOTCONNECT Amazon Sidewalk Solution simplifies device onboarding, management, and scaling in a single, unified offering. Built for STM32-based devices, it helps organizations move from prototype to production faster while reducing complexity and operational effort.

1. Guided End-to-End Support

The solution is delivered through a structured engagement that guides customers from early evaluation through deployment and production, helping teams move forward with confidence at every stage.

2. Streamlined Production Onboarding

Built-in support for Sidewalk production requirements helps simplify large-scale device onboarding, reducing manual effort and smoothing the path to manufacturing readiness.

3. Flexible Buying Options

The solution can be purchased through AWS Marketplace with flexible pricing and billing options, making it easier to align costs with project milestones and business needs.

/IOTCONNECT is available for subscription and a free trial on AWS Marketplace [HERE](#)



Get started with Amazon Sidewalk enabled Avnet /IOTCONNECT solutions on AWS

Contact our IoT experts – <mailto:lot@Avnet.com>

