

Qualcomm Aware™ Platform

The Qualcomm Aware Platform empowers developers and enterprises to revolutionize industry value chains, delivering real-time intelligence and visibility through simple, security-rich, and scalable cloud-based services and powerful, tailored hardware solutions designed with industries, enterprises, and developers in mind.

Qualcomm Aware is a comprehensive IoT platform that combines industry-leading silicon, differentiated cloud services, and developer-friendly tools to accelerate the digital transformation of industries

Thanks to a massive ecosystem of module, ODM, and OEM partners that enable devices to be built with particular use cases in mind, developer-friendly APIs to simplify and enable device-to-cloud connections, and pre-integrations with a number of key enterprise resource management applications, Qualcomm Aware is designed with flexibility and ease of use at the forefront to help ensure continuous asset visibility and awareness.

The comprehensive design of the Qualcomm Aware Platform means that developers and enterprises can quickly and easily solve common operational and visibility problems through the combination of cutting-edge technology and application layer innovation to deliver:

- Highly accurate location services
- Industry-leading silicon
- Power-optimized transmissions
- Sensor fusion for built-in motion, tampering, temperature, tilt, fall detection, and more
- End-to-end security and privacy features

These technologies are collectively delivered through simple APIs and actionable insights can be viewed in real-time through cloud-based dashboards, whether on the Qualcomm Aware Platform or a number of other enterprise resource planning solutions enterprises may already be using.

Comprehensive service platform delivered through the cloud

By combining multiple data inputs gathered through devices enabled with Qualcomm Aware into a single data stream, users have real-time visibility of their assets' status through the platform's dashboards or through their own dashboards via cloud API integrations for actionable insights, visibility, and proactive management.



Highly accurate location services in any environment

Signal and sensor based positioning methods, with optimizations for reporting frequency, geofencing, alerts, accuracy, and bandwidth. A hybrid approach to signal switching ensures always-on, end-to-end location in any environment, even in difficult signal environments.



Industry-leading silicon and technology

Superior connectivity from device to cloud, across a range of network and signal types, with support for extensible sensors to provide more context to the status and condition of goods and assets.



Power-optimized transmissions

Silicon-optimized devices and cloud processing yield power-efficient transmissions with enhanced security to help ensure continuous visibility throughout a shipment journey and extended device life.



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Qualcomm Aware Platform Applications

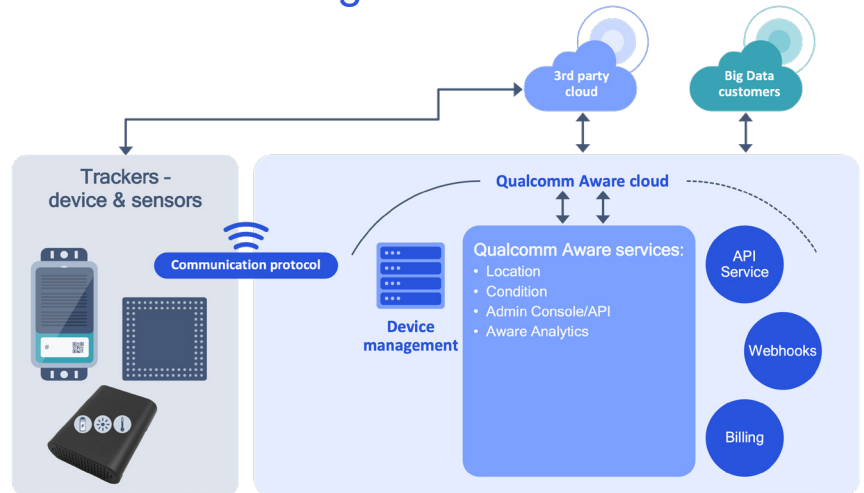
- Retail
- Operations & Logistics
- Energy & Utilities
- Supply Chain
- Healthcare
- Manufacturing



Features

- Premier terrestrial positioning through cell and Wi-Fi, Bluetooth® LE, and more backed by a robust global signal database
- Power-efficient multi-constellation GNSS for non-terrestrial positioning capability
- Intelligent signal switching for location accuracy and precision at low power
- Signal jamming and spoofing detection for reliable location results
- Dynamic device configuration for location frequency, method, granularity depending on use case and form factor
- Global coverage in more than 200 countries
- Security-rich end-to-end connectivity from device to the cloud
- Support for low-power and extended-range coverage using NB-IoT and eMTC technologies with 2G fallback
- Sensor fusion capabilities to provide contextual condition monitoring
- Includes monitoring for temperature, light, humidity, pressure, and motion
- Real-time motion, tilt, fall, and vibration detection with operational alert triggers
- Cloud-based sensor configuration allows for flexibility in reporting intervals and prolonged device use
- Cloud-based analytics garner real time data insights and visibility into a device journey and condition

Platform Block Diagram



Platform Solutions

- Monitoring of mobile and stationary assets and goods to understand condition, infer utilization, and ensure traceability.
- Real-time and ubiquitous location intelligence for assets, goods, containers, and pallets
- End-to-end supply chain visibility
- Applications across retail & logistics, energy & utilities, healthcare, manufacturing, and more
- Integration with existing ERP customer dashboards for ease of use and integration with existing operations

Platform Specifications

Qualcomm Aware Platform	
CPU	Arm® Cortex®-A7 CPU Arm® Cortex®-M0 CPU
Cellular Connectivity	GSM, LTE Cat-M1 + Cat NB2, NB-IoT
Wireless Connectivity	2.4G Wi-Fi only (IEEE 802.11b/g/n)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS, GNSS assistance service
Bluetooth Technology	Bluetooth, Bluetooth Low Energy 5.2 (option)
Positioning Technology	GNSS + Cell + Wi-Fi (2.4G Only)

To learn more visit:
aware.qualcomm.com

