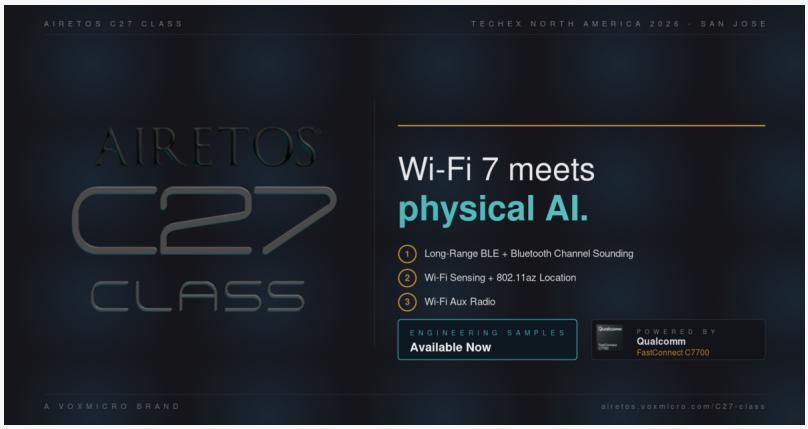
Industrial Wi-Fi 7 Module Converges Long-Range BLE, Sensing, and Aux Radio for Physical AI — AIRETOS C27 from VOXMICRO

Industrial Wi-Fi 7 module on Qualcomm FastConnect C7700: BLE Long Range, Channel Sounding, Wi-Fi Aux Radio, 802.11az location. Engineering samples now.



C27 Wi-Fi module for the Physical AI

SAN JOSE, CA, UNITED STATES, May 19, 2026 /EINPresswire.com/ -- VOXMICRO today released the AIRETOS® C27 Class, an industrial Wi-Fi 7 and Bluetooth® 6.0 wireless module powered by the Qualcomm® FastConnect™ C7700 Connectivity System. The release is timed to TechEx North America at the San Jose McEnery Convention Center, May 18–19, whose 2026 program introduced a dedicated Physical AI track addressing the integration of AI with robotics, edge devices, digital twins, industrial systems, and autonomous infrastructure. VOXMICRO is meeting with industrial OEMs, robotics integrators, and physical-AI platform developers exploring the convergence of Wi-Fi 7, long-range Bluetooth, sensing, and auxiliary-radio capabilities in a single industrial-grade module. Engineering samples are available now to qualified OEMs through direct engagement with the VOXMICRO sales team.

> Industrial OEMs designing for physical AI no longer need a Wi-Fi module plus a long-range radio plus a sensing radio plus a ranging tag. The AIRETOS C27 is one industrial Wi-Fi 7 module that does all."
>
> *Chris Bountis, EVP Business Development at VOXMICRO*

The AIRETOS C27 brings together three previously-separate radio domains in one industrial Wi-Fi 7 + Bluetooth 6.0 module. The story is not that Wi-Fi 7 is faster than the generation it succeeds — it is that the AIRETOS C27 collapses long-range Bluetooth ranging, Wi-Fi sensing and location, and a dedicated auxiliary radio into the same module footprint that previously served Wi-Fi alone. For industrial OEMs designing the next generation of physical-AI systems, the redesign target shifts from "add another radio" to "do more with one industrial-grade module." In several deployment

classes the AIRETOS C27 competes for the same bill-of-materials budget that an OEM previously allocated to a Wi-Fi module plus a separate sub-GHz long-range or low-power wide-area client radio.

The first pillar is long-range Bluetooth ranging. The AIRETOS C27 is built on the Qualcomm FastConnect C7700 silicon foundation that supports Bluetooth 6.0 with Bluetooth Channel Sounding and BLE Long Range (Coded PHY). Channel Sounding enables sub-meter ranging between Bluetooth-enabled devices, and BLE Long Range extends connectivity across distances that previously required a dedicated long-range radio. For asset tracking, factory-floor coordination, and equipment localization, this is one antenna interface where there were two.

The second pillar is sensing and location. AIRETOS C27 supports Wi-Fi Location (IEEE 802.11az) and Channel State Information Capture. The same Wi-Fi 7 radio that moves the data senses the space, locates devices within it, and exposes channel-state information to higher-layer applications — motion detection, presence sensing, gesture recognition, and centimetric ranging when paired with capable infrastructure. The radio that carries the network also becomes a perception layer for the system on top of it.

The third pillar is the dedicated Wi-Fi Aux Radio. AIRETOS C27 supports a separate Wi-Fi Aux Radio that performs background scanning concurrent with the primary Wi-Fi 7 radios, and that listens for inbound traffic while the primary radios are in standby. The result is improved spectrum awareness and wake-from-sleep responsiveness without compromising the data plane — relevant for battery-driven and duty-cycled industrial endpoints where the radio is asleep most of the time but must respond quickly when called.

The AIRETOS C27 Class is engineered around the Qualcomm® FastConnect™ C7700 Connectivity System and supports two pin-compatible Qualcomm silicon options on a single module footprint, giving industrial OEMs cost-tier flexibility and supply assurance without redesign or re-qualification. The Class is offered in a primary LGA module-down form factor for embedded host PCB integration, with slotted M.2 E-Key, M.2 B-Key, and mPCIe carriers also available on the same architecture for chassis-mounted and field-swappable deployments. As with the AIRETOS class methodology, the C27 routes its RF signals to dedicated pads in the module's peripheral pad array, leaving antenna selection, placement, and isolation to the host design — giving the system designer direct control over antenna integration in the target enclosure. AIRETOS engineering rigor — industrial −40 °C to +85 °C operating temperature range, a product longevity commitment projected in excess of ten years, and disciplined regulatory work — extends a connectivity silicon designed for compute and consumer electronics into the industrial systems VOXMICRO serves.

Target applications include autonomous mobile robots (AMRs), automated guided vehicles (AGVs), collaborative robots and mobile manipulators, smart-factory automation and predictive maintenance, asset tracking and warehouse logistics, smart-building sensor networks, portable industrial and medical equipment, and the broader class of physical-AI systems that fuse

connectivity with perception.

Engineering samples of the AIRETOS C27 Class are available now to qualified industrial OEMs through direct engagement with the VOXMICRO sales team. Production characterization data, regulatory coverage, evaluation kits, and design-in support will be announced with general availability. Sample inquiries: airetos.voxmicro.com/C27-class.

About AIRETOS
AIRETOS® is the wireless module brand of VOXMICRO. AIRETOS modules are engineered for industrial, robotic, mobility, and infrastructure systems requiring long-cycle product support and engineering rigor. The AIRETOS C27 Class extends the portfolio into Wi-Fi 7 and Bluetooth 6.0 with multi-form-factor coverage from embedded LGA module-down to slotted M.2 and mPCIe carriers. Learn more at airetos.voxmicro.com.

About the Qualcomm FastConnect C7700 Connectivity System
The AIRETOS C27 is powered by the Qualcomm® FastConnect™ C7700 Connectivity System — a 2x2 Wi-Fi 7 and Bluetooth 6.0 connectivity platform delivering up to 5.8 Gbps peak Wi-Fi 7 PHY rate with 320 MHz channel bandwidth, 4K QAM modulation, Multi-Link Operation (MLO), Wi-Fi Location (802.11az), Channel State Information Capture, Wi-Fi Aux Radio, Bluetooth Channel Sounding, BLE Long Range (Coded PHY), and LE Audio. Qualcomm and Qualcomm FastConnect are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

About VOXMICRO
VOXMICRO is an embedded wireless RF technology company operating the AIRETOS® module brand and the OxfordTEC® antenna brand. VOXMICRO designs and manufactures wireless components for industrial, robotic, mobility, and infrastructure systems. Headquartered in Diamond Bar, California. Learn more at voxmicro.com.

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