



Broadcom Connects the AI Edge with Comprehensive Multi-Gig Broadband and Wi-Fi 8 Innovations

June 1, 2026

End-to-end broadband and wireless connectivity with embedded NPU deliver responsive and agile intelligence at the edge with enhanced privacy protection and security

PALO ALTO, Calif., June 01, 2026 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO), a global technology leader that designs, develops, and supplies semiconductor and infrastructure software solutions, today showcased its broadband Edge AI portfolio. The lineup of AI-ready broadband solutions includes a 50G PON gateway SoC, a comprehensive Wi-Fi 8 product family, and a joint 5G and Wi-Fi 8 fixed wireless access (FWA) platform solution. Designed to enhance intelligence and security across smart homes and enterprises, these solutions deliver the deterministic low latency, localized processing, and robust reliability essential for next-generation connected AI applications.

The introduction of new applications, such as instantaneous, conversational AI assistants, requires highly demanding network performance. Truly fluid conversations with AI agents depend not only on performance and bandwidth, but also on ultra-low end-to-end latency from the cloud to the end-user's device. When aggregated across the entire network path, even a few milliseconds of delay can disrupt the user experience. Broadcom's newest integrated Wi-Fi 8 and broadband solutions are engineered to maximize performance while minimizing total latency and making the edge more intelligent. The CPU and neural processing unit (NPU) capabilities can enable these broadband devices to operate as intelligent agentic orchestrators. Operators and OEMs can leverage the chips' capabilities to dynamically route compute between the edge and the cloud, while simultaneously serving as the local agentic compute engine.

This ecosystem of devices also ensures ultra-fast connectivity even in dense urban environments where Wi-Fi airspace is heavily congested and broadband infrastructure is shared.

"The true potential of the intelligent broadband edge requires a fundamentally new foundation for the smart home and the smart enterprise," said Vijay Nagarajan, vice president of marketing in Broadcom's Wireless and Broadband Communications Division. "By deploying NPUs across our Wi-Fi 8 and broadband solutions, we empower service providers to secure user privacy, reduce network congestion, and deliver the multi-gigabit, sub-millisecond connectivity that enables the AI era."

Broadcom is enabling an intelligent, secure, and unified edge that dynamically directs AI workloads for optimal processing efficiency. Built on five successive waves of Wi-Fi 8 innovation and dedicated broadband platforms, the broadband Edge AI portfolio includes:

- **Wi-Fi 8 Foundation:** A complete client-to-access Wi-Fi 8 silicon ecosystem with a field of use license for automotive and IoT segments.
- **Residential Base:** Highly integrated dual-band SoCs and an accelerated processing unit (APU) that combine high-performance computing, advanced networking, and Edge AI acceleration for the residential market.
- **Enterprise AI:** A unified Wi-Fi 8 and switching platform featuring a dual-band Wi-Fi 8 solution, multi-gigabit Ethernet, and an APU optimized for enterprise applications.
- **10G Carrier Mass Market:** A 10G PON and Wi-Fi 8 residential gateway platform designed for hyper-competitive broadband markets.
- **Mesh & Ethernet Routers:** A versatile family of highly integrated Wi-Fi 8 SoCs for Ethernet routers, mesh systems, and extenders for the residential market.
- **Next-Generation PON:** The world's first 50G ITU PON Gateway SoC featuring an embedded NPU, completing the end-to-end 50G PON Edge AI ecosystem.
- **Fixed Wireless Access:** A joint next-generation FWA platform developed with Samsung, extending the deterministic performance and ultra-reliable connectivity of Wi-Fi 8 to 5G broadband subscribers.

By deploying embedded localized AI processing units for residential and enterprise applications, Broadcom has created a broadband fabric that will enable service providers, enterprises, and OEMs to power the intelligent devices of tomorrow.

For more info on Broadcom's Edge AI, please visit [here](#).

About Broadcom

Broadcom Inc. (NASDAQ: AVGO) is a technology leader that designs, develops, and supplies semiconductors and infrastructure software for global organizations' complex, mission-critical needs. Broadcom combines long-term R&D investment with superb execution to deliver the best technology, at scale. Broadcom is a Delaware corporation headquartered in Palo Alto, CA. For more information, visit www.broadcom.com.

Broadcom, the pulse logo, and Connecting Everything are among the trademarks of Broadcom. The term "Broadcom" refers to Broadcom Inc., and/or its subsidiaries. Other trademarks are the property of their respective owners.

Press Contact:
Khanh Lam
Global Communications
press.relations@broadcom.com
Telephone: +1 408 433 8649

