Broadcom Accelerates Multi-Gig Broadband with Optimized 10G PON and Wi-Fi 8 Solutions for Mass Market

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PALO ALTO, Calif., April 30, 2026 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO), a global technology leader that designs, develops, and supplies semiconductor and infrastructure software solutions, today announced its fourth wave of Wi-Fi 8 chips and an optimized 10G PON chip, solidifying its broadband industry leadership by extending the benefits of IEEE 802.11bn for service providers in hyper-competitive average revenue per user (ARPU) constrained broadband markets. By combining 10G PON with Wi-Fi 8, operators can deliver modern, fiber-based connectivity at scale, providing a technically robust and economically viable path to migrate from legacy copper and cable technologies.

Following the successful launch of its flagship residential and enterprise platforms, this latest expansion provides a value-focused residential Wi-Fi 8 and 10G PON gateway to accelerate mass market transition to the latest Wi-Fi generation. End users have an insatiable appetite for reliable wireless broadband. Broadcom's highly optimized design enables OEMs and service providers to deliver premium Wi-Fi 8 features, which lead to improved reliability, higher capacity, lower latency, and higher throughput—all with a cost structure traditionally reserved for legacy technologies. The high-bandwidth 10G PON interface complements the Wi-Fi 8 offerings and provides the necessary backhaul foundation to support consistent multi-gigabit performance across the most hyper-competitive service provider markets.

At the heart of this announcement are three new products engineered to balance performance with massive scalability:

BCM68565 - Optimized PON Gateway SoC

The BCM68565 balances overall platform performance with system-level optimizations spanning the Broadcom Wi-Fi 8 radios and PON gateway SoC to provide fiber-based broadband operators with the ideal solution, optimizing power, performance and features for mass-market deployments.

Key features include:

- Integrated 10-Gbps Fiber WAN interface supporting XGSPON, GPON, and Active Ethernet modes
- High-performance CPU complex with support for open source middleware such as RDK and prplWare
- Dedicated network processing engine freeing the CPU complex for operator-specific applications and utilities
- Integrated multi-gigabit and gigabit Ethernet PHYs
- Versatile memory controller supporting DDR4, LPDDR4, DDR5, and LPDDR5
- Best-in-class security with dedicated security processor

BCM67142 & BCM67192 - Highly Integrated Dual-Band Wi-Fi 8 Radio

The BCM67142 and BCM67192 build on the BCM6714 and BCM6719 respectively and integrate a highly efficient hardware offload engine that leverages the host CPU in the BCM68565 to balance performance and system costs. Both chips integrate the 2.4-GHz and 5-GHz radios into a single piece of silicon to drive a smaller footprint and achieve significant savings in BOM costs.

Key features include:

- Integrated multi-chain 2.4-GHz and 5-GHz functionality, simplifying system design and lowering cost
- On-chip 2.4-GHz power amplifiers (PAs) for reduced external components and improved RF efficiency
- Highly efficient integrated hardware offload engine reduces loading on the host CPU
- Advanced eco-modes and power optimization for ultra-low energy consumption
- Third-generation digital pre-distortion reduces peak power by 25%

"With our latest Wi-Fi 8 and PON products, Broadcom is making 'Ultra-High Reliability' accessible in hyper-competitive broadband markets," said Mark Gonikberg, senior vice president and general manager of Broadcom's Wireless and Broadband Communications Division. "The highly-optimized, single-chip dual-band radios and a cost-optimized PON SoC catalyze the adoption of Wi-Fi 8 in high-volume markets, ensuring faster, more reliable and affordable wireless broadband for the global consumer."

Industry-Leading Integration and Performance

This architectural breakthrough introduces a new level of efficiency by optimizing the CPU and memory resources between the broadband SoC and Wi-Fi chip. In addition, the integration of 2.4-GHz and 5-GHz Wi-Fi radios significantly reduces the bill of materials, simplifies board design, and lowers power consumption – ideal for delivering Wi-Fi 8 to hyper-competitive broadband markets.

As a result, fiber gateway platforms based on the BCM68565, BCM67142, and BCM67192 solutions accelerate the adoption of Wi-Fi 8 globally and raise the bar for service providers in competitive broadband markets.

Availability

Broadcom is currently sampling the BCM68565, BCM67142, and BCM67192 to early access customers and partners. For more information on Broadcom's Wi-Fi 8, please visit www.broadcom.com/wifi8.

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. We combine 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.

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