



Broadcom Unveils World's First Integrated 5G and Wi-Fi 8 FWA Platform in Collaboration with Samsung Electronics

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PALO ALTO, Calif., May 27, 2026 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO), a global technology leader that designs, develops, and supplies semiconductor and infrastructure software solutions, today announced its collaboration with Samsung Electronics Co., Ltd. on a new, broadband-optimized reference platform for the global fixed wireless access (FWA) market, integrating Broadcom's BCM6776 Wi-Fi 8 System-on-Chip (SoC) with Samsung's B1320 5G Modem.

This industry-first platform unifies 3GPP Release 17 connectivity with the emerging Wi-Fi 8 (IEEE 802.11bn) standard. As global broadband demand shifts toward higher performance standards, Broadcom's latest SoC and Samsung's modem focus on delivering high reliability and consistent throughput. Designed for mass-market scalability, the platform provides a high-performance, cost-competitive blueprint that allows mobile operators to offer fiber-level broadband to accelerate service innovation and ecosystem growth.

Technical Leadership: 5G Meets Wi-Fi 8

The Broadcom BCM6776 is a highly-optimized tri-band Wi-Fi 8 SoC targeting high-volume retail and mass-market access points. It includes quad-core Arm network processor and supports 2-stream 40 MHz channels in the 2.4 GHz band and 4-stream 160 MHz channels in the 5 and 6 GHz bands, delivering a complete Wi-Fi 8 platform in a single chip. By unifying the CPU and Wi-Fi 8 radio, Broadcom enables OEMs to significantly reduce bill of materials (BOM) costs, simplify board design, and achieve a 50% reduction in active power consumption compared to previous generations.

The Samsung B1320 is a highly-integrated and power-efficient 5nm chipset solution that supports 3GPP Release 17. It is capable of achieving 5G downlink speeds of 3.43 Gbps and uplink speeds of 1.17 Gbps. Combining Samsung's 5G modem with a quad-core Arm CPU and the BCM6776's network processor, the platform can support full Wi-Fi to 5G throughput. The platform also includes a Power Class 1.5 RF transceiver, power management, and a GNSS receiver. It also supports NR-NTN and NB-NTN for satellite communications.

"At Computex 2026, we are highlighting that the future of home internet can be both accessible and affordable," said Joonsuk Kim, Executive Vice President and Head of CP Development at Samsung Electronics. "This platform is designed to deliver reliable performance across a wide range of environments, helping operators bring high-quality connectivity experiences to subscribers."

"Broadcom is proud to lead the Wi-Fi 8 transition alongside Samsung and our valued ODM partners," said Vijay Nagarajan, Vice President of Marketing, Wireless and Broadband Communications Division at Broadcom. "This partnership is a game-changer for the FWA market. The combination of Wi-Fi 8 and 5G prioritizes coordinated reliability, giving operators a tool that delivers a consistent experience to every corner of the home."

Product Features

The Samsung B1320 is a broadband-optimized 5G platform with the following features:

- 3GPP Release 17
- 4Rx/2Tx radio chain support
- Power Class 1.5 support (TDD bands)
- LPDDR4x / LPDDR5x support
- 1.6 GHz quad-core ARM Cortex-A55 CPU
- 5 Gbps USXGMII, PCIe Gen 3, USB 2.0
- GNSS
- NR-NTN and NB-NTN support for n255 and n256 (L- and S-bands)

The Broadcom BCM6776 is a single-chip Wi-Fi SoC and multi-band radio supporting the following:

- High performance quad-core CPU complex
- Dedicated network processing engine freeing the CPU complex for operator-specific applications and utilities
- Integrated 2x2 2.4 GHz and 4x4 5 GHz and 6 GHz Wi-Fi 8 MAC/PHY/Radio functionality, simplifying system design and lowering cost
- On-chip 2.4 GHz power amplifiers (PAs) and support for third-generation digital pre-distortion for reduced external components and improved RF efficiency
- Versatile memory controller supporting DDR4, LPDDR4, DDR5, and LPDDR5
- Dual PCIe Gen3 controllers to enable simultaneous tri-band applications with a single additional chip
- Integrated multi-gig PHY

A Global Ecosystem of Support

The launch is supported by the world's leading original equipment manufacturers (OEMs), who are already integrating the B1320 / BCM6776 platform into their next-generation gateway portfolios.

"HUMAX Networks is delighted to pioneer the next-generation 5G CPE market alongside global technology leaders Broadcom and Samsung. At the recent MWC 2026, we successfully showcased the industry's first Wi-Fi 8 solution, which integrates Samsung's cutting-edge 5G technology with Broadcom's next-generation silicon. Through our ongoing partnership, we remain committed to driving market innovation and consistently delivering top-tier experiences and innovative devices to our global customers," said Jerry Lee, CEO of Humax Networks.

"We are delighted to collaborate with Broadcom and Samsung to develop our next generation Wi-Fi 8 gateway addressing MSO CBU/FWA market. This solution is capable of delivering a smarter, more secure, and future-ready network optimized solution to meet MSO/FWA customers' increasing demands of cost competitive 5G NR connectivity," said Johnson Hsu, SVP & GM of WNC's Connectivity & Solutions BG.

Availability

Global carrier trials and OEM sampling of the Samsung B1320 / Broadcom BCM6776 FWA platform are underway.

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.

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