Broadcom Announces Availability of World's First Wi-Fi 7 Ecosystem Solutions

April 12, 2022

Connected by Broadcom, next generation smartphones and access point devices double speeds and deliver reliable latency performance

SAN JOSE, Calif., April 12, 2022 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ: AVGO) today announced sample availability of its complete end-to-end chipset solutions for the Wi-Fi 7 ecosystem, spanning Wi-Fi routers, residential gateways, enterprise access points, and client devices. These Wi-Fi 7 chips more than double the speed of Wi-Fi 6 and 6E solutions on the market today, while simultaneously delivering reliable low-latency communications and extended range.

Wi-Fi 7, the most powerful Wi-Fi standard yet, will greatly improve user experience. It doubles Wi-Fi channel bandwidth with the introduction of 320 MHz channels, making it the perfect complement to the expanded worldwide Wi-Fi spectrum in the 6 GHz band. In combination with the upcoming launch of Automatic Frequency Coordination (AFC), Wi-Fi 7 uses optimal spectrum allocation to enable high-power access points and extends the 6 GHz transmit range in both indoor and outdoor environments.

Driven in large part by pandemic-driven lifestyle changes, the demand for high performance Wi-Fi continues to grow at unprecedented rates, with 60% of consumers upgrading their home Wi-Fi in 2021, and 75% planning to purchase additional Wi-Fi devices in 2022.[1] With increased remote work, and growing demand for immersive gaming and streaming, consumers need higher network capacity and stable, deterministic performance. This makes Wi-Fi 7 an ideal technology for residential customers. 320 MHz channels, together with 4096-QAM modulation, more than double the throughput of Wi-Fi 6E, improve coverage, and keep Wi-Fi performance a step ahead of the broadband speeds that DOCSIS 4.0 and multi-gigabit PON technologies bring to the home. And as emerging augmented reality (AR) and virtual reality (VR) applications drive the next generation of the internet, Wi-Fi 7 sustains high speeds and low latency across a large number of devices.

Enterprise and residential networks will also greatly benefit from the advanced multi-link operation (MLO) capabilities of Wi-Fi 7. MLO, which allows devices to aggregate channels and to rapidly switch between channels, is ideal for high-density and congested networks. MLO allows networks to guarantee commercial-grade quality of service, and enables Wi-Fi as a time-sensitive networking technology for industrial and IoT applications as well. Wi-Fi 7 technology will be critical for delivering fast, reliable video streaming and other applications that require reliable speeds in congested environments.

"Broadcom is once again leading the next generation of Wi-Fi with a full suite of Wi-Fi 7 ecosystem solutions. Our Wi-Fi 7 products and diverse customer partnerships continue the accelerated momentum created by the one billion Wi-Fi 6/6E chips that Broadcom has shipped over the past three years," said Vijay Nagarajan, vice president of marketing for the Wireless Communications and Connectivity Division at Broadcom. "Wi-Fi 7, with its focus on low latency, high reliability, and high speed communications, is the perfect complement to multi-gigabit broadband technologies, while enabling the next iteration of the internet and AR/VR devices."

"Aside from higher data rates, lower latency, and better network capacity, it is Wi-Fi 7's spectrum flexibility across three bands, its emphasis on the large 6 GHz band, and new techniques like MLO that will greatly improve Wi-Fi's deterministic performance," said Phil Solis, research director at IDC. "This is valuable to many different product types and especially to primary devices such as smartphones that have the combination of volume and heavy data usage across a wide variety of applications in both consumer and enterprise settings."

"We forecast that in five years for both the consumer Wi-Fi infrastructure and in the Enterprise Access Point markets, Wi-Fi 7 revenue will exceed that of any other Wi-Fi technology," said Chris DePuy, technology analyst at 650 Group. "Wi-Fi 7 takes advantage of the new 6 GHz spectrum. The emergence of 6 GHz is so compelling that we expect well over half of revenues for both the consumer and enterprise markets to come from Wi-Fi systems based on 6 GHz devices."

PRODUCT HIGHLIGHTS

Broadcom's Wi-Fi 7 ecosystem product portfolio includes BCM67263, BCM6726, BCM43740, BCM43720 and BCM4398.

The BCM67263 is optimized for the residential Wi-Fi access point market. Key features include:

- Support for 4 streams of Wi-Fi 7
- Single radio that supports 6 GHz band
- Up to 11.5 Gbps PHY rate
- Up to 320 MHz channel bandwidth
- 4096-QAM modulation
- Multi-link operation (MLO)
- Full compliance to IEEE and WFA Wi-Fi 7 specifications

The BCM6726 is optimized for the residential Wi-Fi access point market. Key features include:

- Support for 4 streams of Wi-Fi 7
- Single radio that supports 2.4 GHz, 5 GHz, or 6 GHz bands
- Up to 5.75 Gbps PHY rate
- Up to 160 MHz channel bandwidth

- 4096-QAM modulation
- Multi-link operation (MLO)
- Full compliance to IEEE and WFA Wi-Fi 7 specifications

The BCM43740 is optimized for the enterprise Wi-Fi access point market. Key features include:

- Support for 4 streams of Wi-Fi 7
- Single radio that supports 2.4 GHz, 5 GHz, or 6 GHz bands
- Up to 11.5 Gbps PHY rate
- Up to 320 MHz channel bandwidth
- 4096-QAM modulation
- Multi-link operation (MLO)
- Full compliance to IEEE and WFA Wi-Fi 7 specifications

The BCM43720 is optimized for the enterprise Wi-Fi access point market. Key features include:

- Support for 2 Streams of Wi-Fi 7
- Single radio dedicated for scanning in the 2.4 GHz, 5 GHz, or 6 GHz bands
- Up to 2.88 Gbps PHY rate
- Up to 160 MHz channel bandwidth
- 4096-QAM modulation
- Multi-link operation (MLO)
- Full compliance to IEEE and WFA Wi-Fi 7 specifications

The BCM4398 is a highly integrated Wi-Fi 7 and Bluetooth 5 combo chip optimized for mobile handset applications. Key features include:

- Support for 2-stream Wi-Fi 7
- 320 MHz channel bandwidth
- 6.05 Gbps PHY rate
- 4096-QAM modulation
- Client multi-link operation (MLO)
- Compliance to IEEE and WFA Wi-Fi 7 standards, as well as Bluetooth Denver standard

AVAILABILITY

Broadcom is currently sampling its Wi-Fi 7 chips to early access partners and customers in mobile, enterprise, service provider and retail segments. Please contact your local Broadcom sales representative for samples and pricing.

SUPPORTING QUOTES

Raymond Hsiung, Vice President, Sales & Marketing, Arcadyan
“Wi-Fi 7 will build on the global adoption of the 6 GHz spectrum delivering greater speeds and higher reliability to the ever-increasing demand for Wi-Fi in the home. Arcadyan will build a complete portfolio of Wi-Fi 7 products based on Broadcom’s solutions to enable the multi-gigabit whole-home Wi-Fi experience.”

Tenlong Deng, **GM of Networking & Wireless Devices BU, ASUSTek Computer Inc.**
“Asus is excited to partner with Broadcom to build a full portfolio of products to bring this next generation Wi-Fi 7 standard to market. Wi-Fi 7 technology delivers on key performance metrics of high throughput, low latency, and high reliability to deliver the world’s best gaming experience for our Republic of Gamers (ROG) community through cutting edge technology that pushes the boundaries to create a world without limits.”

Nabil Bukhari, Chief Technology Officer and Chief Product Officer, Extreme Networks
“Opening the 6 GHz spectrum marked significant advancements for Wi-Fi, particularly the impact it has had on our customers’ businesses. We’ve seen hospitals advance patient care because they can now flawlessly run bandwidth-intense medical applications, and large sports stadiums provide services like touchless transactions and mobile concessions. Wi-Fi 7 will only build on that success by offering new features like multi-link operation, which will provide a boost to mobile applications demanding low latency and high throughput. Extreme is proudly collaborating with Broadcom to continue to push the boundaries of Wi-Fi forward to create new ways for customers to bring innovative new services to market.”

David Henry, President & GM of Connected Home Products and Services, NETGEAR
“As a leader in networking products and services for more than 25 years, NETGEAR has always been among the first to implement new Wi-Fi technology and Wi-Fi 7 is no exception. We look forward to combining our expertise in creating best-in-class Wi-Fi products with technology from our longtime partner, Broadcom, to maximize the benefits of Wi-Fi 7 and bring to market offerings that allow our customers to do more than they ever thought possible with their internet-connected devices.”

Ahmed Selmani, Senior Executive Vice President, Sagemcom Broadband
“Delivering the higher speed and lower latency performance benefits of Wi-Fi 7 in the 6 GHz spectrum will be critical in keeping pace with the increasing broadband speeds that DOCSIS 4.0 and multi-gigabit PON are delivering to the home. Sagemcom is partnering with Broadcom to integrate

Wi-Fi 7 into our next generation product portfolio to deliver unprecedented performance and value to our customers. As it was with Wi-Fi 6 and 6E, we are aiming to be the first to release Wi-Fi 7 based broadband solutions to the market, as the main integrated partner of Broadcom and by contributing significantly to the technology bring-up and implementation."

James Wang, CEO, Sercomm
"With the introduction of 320 MHz channels in the 6 GHz band and Multi-Link Operation (MLO), Wi-Fi 7 will deliver ultra-high speeds, lower latency, and highly reliable links to power the growing demands on home Wi-Fi networks. Sercomm is excited to continue our partnership with Broadcom and will lead the market in delivering Wi-Fi 7 across our broadband platforms as a trusted supplier to Tier 1 service providers worldwide."

Girish Naganathan, Chief Technology Officer, Technicolor Connected Home
"Technicolor Connected Home has been actively working from the early stages of the Wi-Fi 7 standard definition to design next-gen CPE devices that will allow consumers to enjoy the latest services such as the metaverse, immersive cloud gaming or 4K/8K streaming video. WiFi-7 will take the ubiquitous Wi-Fi experience to a higher level of performance for applications that require ultra-high bandwidth and low latency. Technicolor Connected Home is excited to build on our successful partnership with Broadcom to deliver best in class Wi-Fi 7 CPE with the highest quality of experience to our network service provider customers."

Pingji Li, VP & GM, TP-Link Corporation Limited
"Sincere congratulations to Broadcom for leading the industry and being the first to launch an ecosystem of Wi-Fi 7 solutions. TP-Link looks forward to continuing our strategic partnership by releasing Wi-Fi 7 routers with Broadcom. Wi-Fi speeds have almost reached unimaginable heights and now Wi-Fi 7 will take it a step further where throughput is no longer a limiting factor. In addition, new features like Multi-Link Operation (MLO) will elevate the stability and flexibility of networks to enable new applications like VR, 8K streaming, edge computing, and other premium experiences that create profound impactful changes for all."

Tiago Rodrigues, CEO, Wireless Broadband Alliance
"We congratulate Broadcom in making early availability of the Wi-Fi 7 chipset to help the market to test and experiment with the emerging Wi-Fi 7 standard and promote early adoption. With the availability of Wi-Fi 6E now and Wi-Fi 7 standardizing in the coming years, Wi-Fi broadband connectivity will be the powerhouse for digital growth across enterprises, consumers, carriers, cities and industrial applications."

About Broadcom
Broadcom Inc. (NASDAQ: AVGO) is a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. Broadcom's category-leading product portfolio serves critical markets including data center, networking, enterprise software, broadband, wireless, storage and industrial. Our solutions include data center networking and storage, enterprise, mainframe and cyber security software focused on automation, monitoring and security, smartphone components, telecoms and factory automation. For more information, go to https://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.

[1]https://update.comcast.com/wp-content/uploads/sites/33/dlm_uploads/2022/02/2021-WiFi-Trends-Report.pdf

A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/5a63c8e3-108f-462f-bc62-5dceba1fd7a7

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

Source: Broadcom Inc.

Broadcom Wi-Fi 7 Ecosystem Solutions



Complete end-to-end chipset solutions for the Wi-Fi 7 ecosystem