



NXP Unlocks the 6GHz Spectrum with a Wi-Fi 6E Tri-Band Chipset for Access Devices

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- NXP announces its first Wi-Fi 6E Tri-Band system-on-chip (SoC) to support the 6GHz band that expands spectrum available for Wi-Fi by up to 1.2GHz
- The CW641 is designed for access points and service provider gateways to enable end network devices to take full advantage of the 6GHz spectrum
- NXP answers customer demands for greater capacity in wireless networking and supports 160-MHz channel bandwidth with PHY rates of 4.8Gbps and over 4Gbps of real-world throughput

EINDHOVEN, The Netherlands, Jan. 18, 2021 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI) today announced it is laying the foundation for a new era of Wi-Fi 6 devices that can operate in the 6GHz band with its new [CW641 Wi-Fi 6E Tri-Band system-on-chip \(SoC\)](#). With increasing congestion in the legacy 2.4GHz and 5GHz bands, the US FCC has approved 1.2GHz of unlicensed spectrum for the 6GHz band along with other regions around the world, which will transform the Wi-Fi landscape. NXP is introducing a Wi-Fi 6E device that will make use of this 6GHz band and extend Wi-Fi capacity by bringing higher throughput, increased capacity, reliability, and improved latency.

Designed for access points and service provider gateways, the CW641 unlocks increased speeds of over 4Gbps and multi-user performance in the new 6GHz band, providing greater capacity and lower latency, which dramatically improves the Wi-Fi user experience. Adding 6GHz capabilities to gateway platforms gives service providers options to efficiently partition available bandwidth across devices to ensure optimum user experience for a wide range of applications. Mission critical, high bandwidth, low latency applications like mesh back haul and cloud gaming are ideal for migration to 6GHz, freeing up the 5GHz and 2.4GHz bands for other lower bandwidth applications.

NXP's new Wi-Fi 6E Tri-Band SoC makes it possible to take full advantage of the transformative 6GHz spectrum to boost the performance of in-home mesh networks, streaming high-resolution music and videos, online gaming, video calling, digital downloads, data-heavy web content, and numerous other use cases. Beyond access point applications, the CW641 SoC sets the stage for high performance Wi-Fi 6E applications across consumer, automotive, industrial, and Internet of Things (IoT).

Key features of CW641 include:

- 4x4 Wi-Fi device with 4-spatial streams
- Supports 6GHz, 5GHz and 2.4GHz operation
- 160/80/40/20MHz channel bandwidth
- Peak PHY rate of 4.8Gbps
- Uplink and downlink OFDMA
- Uplink and downlink MU-MIMO

"NXP's Wi-Fi 6E chipset combines multi-gigabyte data rates, low latency, and higher multi-user performance to deliver on customer demands for 6GHz products that address the decade-long need for the greater capacity required in today's wireless networking applications," said Larry Olivas, Head of Marketing for NXP's Wireless Connectivity Solutions. "As our first Wi-Fi 6E SoC to support the 6GHz spectrum, the CW641 enhances the overall Wi-Fi experience by making less congested airwaves available to routers and gateways for multi-device, data-intensive applications. Our new chipset makes it possible to take advantage of this new uncongested bandwidth, which will provide increased performance with less interference for devices on the Wi-Fi 6E network."

"The increased availability of unlicensed 6GHz spectrum for Wi-Fi is the most exciting and transformative change to the Wi-Fi landscape in recent times, bringing about much higher throughput, greater capacity, increased reliability, and improved quality of service, all of which will help enable new wireless services while addressing key challenges currently facing the technology," said Andrew Zignani, Principal Analyst at ABI Research. "However, in order to realize this potential, the Wi-Fi industry requires new Wi-Fi 6E chipsets that can effectively address the varied demands of the market. Solutions such as NXP's latest CW641 Wi-Fi 6E chipset will play a fundamental role in enabling the 6GHz infrastructure rollout, allowing a varied ecosystem of end devices, applications and services to take advantage of this enormous new opportunity for Wi-Fi."

Availability

The [CW641 Wi-Fi 6E Tri-Band SoC](#) is sampling now.

CES 2021 Featurette: How Wi-Fi 6 is Driving the Next Wave of Wireless Innovation

From [ABI Research](#) and NXP, a new research paper titled "[How Wi-Fi 6 is Driving the Next Wave of Wireless Innovation](#)," highlights the benefits that Wi-Fi 6 and Wi-Fi 6E will bring across various verticals, while providing insight into market opportunities, challenges, recommendations, and forecasts for Wi-Fi 6. As a key highlight, this paper also details how emerging chipsets are addressing the future challenges and evolving demands of these markets, while supporting new innovative deployments and case studies.

Additionally, as part of the [NXP Live 2021](#) experience, NXP sits down with ABI Research during a special video fireside chat to discuss the latest in wireless networking tech and explore the challenges and opportunities, new market applications, trends, and predictions from NXP's newly

commissioned study on Wi-Fi 6. This fireside chat will include:

- Rafael Sotomayor, EVP & GM Connectivity and Security with NXP Semiconductors
- Andrew Zignani, Principal Analyst with ABI Research

To download the new paper and to watch the fireside chat, [register here](#).

About NXP's Connectivity Portfolio

With one of the industry's broadest portfolios of wireless technologies, NXP is committed to accelerating our vision of a connected world that anticipates and automates. When combined with the processing power of the [EdgeVerse](#) platform, NXP is uniquely positioned to enable smart connected devices – making lives easier, safer, and more convenient. Whether it's connecting people to the Internet, joining IoT devices to the cloud, or communicating with cars in new and unexpected ways, NXP's portfolio allows customers to advance their most innovative ideas with confidence and a sense of trust. By collaborating with our partners, we are connecting our world and delivering solutions that advance society together.

About NXP Semiconductors

NXP Semiconductors N.V. enables secure connections for a smarter world, advancing solutions that make lives easier, better, and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the automotive, industrial & IoT, mobile, and communication infrastructure markets. Built on more than 60 years of combined experience and expertise, the company has approximately 29,000 employees in more than 30 countries and posted revenue of \$8.88 billion in 2019. Find out more at www.nxp.com.

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A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/1e7d1c49-328b-47d8-a300-dbdf41ad80d0>



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Source: NXP USA, Inc.