

Microchip's New 5 GHz Power Amplifier Module Extends the Range and Reduces Production Costs of WLAN Applications Based on IEEE 802.11ac Wi-Fi® Standard

SST11CP22 Delivers Ultra Low EVM at High Power for Wi-Fi 802.11ac Access Points, Routers and Set-Top Boxes

CHANDLER, Ariz., March 17, 2015 /PRNewswire/ -- [NASDAQ: MCHP] — Microchip Technology Inc., a leading provider of microcontroller, analog and Flash-IP solutions, today announced its new <u>SST11CP22 5 GHz power amplifier module</u> (PAM) for the IEEE 802.11ac ultra high data rate Wi-Fi[®] standard. This PAM delivers 19 dBm linear output power at 1.8% dynamic EVM (Error Vector Magnitude) with MCS9 80 MHz bandwidth modulation. Additionally, the SST11CP22 delivers 20 dBm linear power at 3% EVM for 802.11a/n applications, is spectrum mask compliant up to 24 dBm for 802.11a communication, and has less than - 45 dBm/MHz RF harmonic output at this output power, making it easier for the system board to meet FCC regulations.



To learn more about Microchip's RF power amplifiers visit <u>http://www.microchip.com/Power-Amps-031715a</u>.

Achieving the maximum data rate and longest range while minimizing current consumption is essential to Wi-Fi MIMO access-point, router and set-top-box system designers. The SST11CP22's low EVM and high linear power facilitate MIMO operation and significantly extend the range of 802.11ac systems in ultra-high data rate transmission mode. The module, housed in a space-saving 4x4 mm, 20-pin QFN package, includes an output harmonic rejection filter and is 50 Ohm-matched—requiring only four external components. It is easy to use and reduces board size. Additionally, the integrated linear power detector provides accurate output power control over temperature and 2-to-1 output mismatch. These

features are critical for 802.11ac Wi-Fi set-top boxes, routers, access points and wireless video streaming devices that operate at high data rates.

"Microchip's RF power amplifiers have a strong position in the WLAN market, due to their reliability combined with high-power efficiencies that can only be achieved using InGaP/GaAs HBT," said Daniel Chow, vice president of Microchip's Radio Frequency Division. "The release of the SST11CP22 now provides the same reliable operation with extra low EVM, ease of use, and low harmonic emission. This new PAM will extend the range and reduce the production costs of ultra-high data rate 802.11ac systems."

Development Support

Developers can begin designing today with the SST11CP22 Evaluation Board (Part # SST11CP22-GN-K), which is available now, via any Microchip sales representative.

Pricing & Availability

The SST11CP22 RF Power Amplifier Module is available today in a 4x4 mm, 20-pin QFN package for \$0.92 each in 10,000-unit quantities. Sampling and volume production are both available now. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <u>http://www.microchip.com/SST11CP22-031715a</u>.

Resources

High-res Images Available Through Flickr or Editorial Contact (feel free to publish):

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Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, analog and Flash-IP solutions, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at <u>http://www.microchip.com/Homepage-031715a</u>.

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Tags / Keywords: 802.11ac, Power Amplifier Module, RF Power Amplifier, Wi-Fi, WLAN, Ultra High Data Rate, 3 Gbps

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