



NXP Extends its Leadership in 5G Infrastructure with 2nd Generation RF Multi-Chip Modules That Amp Up Frequency, Power and Efficiency

December 2, 2020

- New-generation Airfast RF Multi-Chip Modules (MCMs) extend frequency coverage to 4.0 GHz, leveraging the performance of NXP's latest LDMOS technology and integration design techniques
- Higher output power than the previous generation supports the deployment of more powerful 5G mMIMO radios to cover larger urban areas
- Increased efficiency of up to 45% at 2.6 GHz helps reduce the overall electricity consumption of the 5G network

EINDHOVEN, The Netherlands, Dec. 02, 2020 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI) today announced the availability of its 2nd generation of comprehensive Airfast RF power Multi-Chip Modules (MCMs) designed to support the evolution of 5G mMIMO active antenna system requirements for cellular base stations. Focused on accelerating the coverage of 5G, the new all-in-one power amplifier module family is based on NXP's latest LDMOS technology that offers higher output power, extended frequency coverage, and higher efficiency—all within the same footprint as NXP's previous generation of MCMs.

The new AFSC5G26E38 Airfast module is a prime example of the increased performance delivered in the 2nd generation MCM family. The device delivers 20% more output power compared to the previous generation, addressing the need for broader 5G coverage per base station tower, without increasing the radio unit size. It also features a power-added efficiency of 45%, 4 points higher than the previous generation for an overall reduction in the 5G network electricity consumption. Highlighting the performance of NXP's latest LDMOS generation in high frequencies, the new AFSC5G40E38 addresses the 5G C-band from 3.7 to 4.0 GHz and has recently been [selected by NEC Rakuten Mobile in Japan](#).

"NXP's latest multi-chip modules provide an efficiency boost resulting from the latest enhancements to LDMOS and enhanced integration," said Paul Hart, Executive Vice President and General Manager of NXP's Radio Power. "Our aggressive drive for integration brings more features into each module, which means fewer components for our customers to source, assemble and test. The result is a higher power yet more cost-effective, compact design. This translates into faster time to market for our customers and mobile network operators who are tackling the need for 5G expansion."

A Comprehensive Multi-Chip Module Portfolio For 5G Expansion

NXP's RF power Multi-Chip Modules include LDMOS ICs, paired with an integrated Doherty splitter and combiner and a 50-ohm in/out matching. This high level of integration removes RF complexities and eliminates multiple prototype passes, while the reduction of component count helps improve yields and decrease qualification cycle time. The 2nd generation complements the initial series released last year, extending the frequency and power levels. Both generations share the same pin-out format to enable RF designers to quickly scale from one design to another, reducing overall development time.

The 2nd generation of Airfast MCMs is comprised of [10 new devices](#) covering 5G frequency bands from 2.3 to 4.0 GHz, from 37 to 39 dBm average output power. The devices are qualified now and will be supported by NXP's new [RF Circuit Collection](#), a digital library of RF power reference circuits.

NXP's 5G Access Edge Portfolio

From antenna-to-processor, NXP offers a robust portfolio of technologies for powering the 5G Access Edge that delivers best-of-class performance and security for infrastructure, industrial, and automotive applications. This includes the company's Airfast family of RF power solutions and its Layerscape family of programmable baseband processors for wireless data links, fixed wireless access, and small cell devices. To learn more, visit nxp.com/5G.

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.

NXP, Airfast and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. All rights reserved. © 2020 NXP B.V.

For more information, please contact:

Americas & Europe

Jason Deal
Tel: +44 7715228414
Email: jason.deal@nxp.com

Greater China / Asia

Ming Yue
Tel: +86 21 2205 2690
Email: ming.yue@nxp.com

NXP-Comms

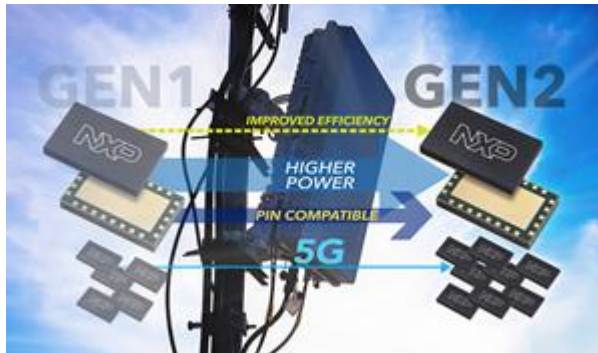
NXP-Corp

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/32fdb131-2a67-4c00-8d57-67fa75db111f>



Source: NXP
USA, Inc.

5G Infrastructure with 2nd Generation RF Multi-Chip Modules



NXP Extends its Leadership in 5G Infrastructure with 2nd Generation RF Multi-Chip Modules That Amp Up Frequency, Power and Efficiency