

5G Radios Shrink With NXP's New Top-Side Cooling For RF Power

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- New top-side cooling packaging technology for RF power enables smaller, thinner and lighter radio units, supporting faster and easier deployment of 5G base stations
- · Simplifies design and manufacturing without compromising performance

EINDHOVEN, The Netherlands, June 06, 2023 (GLOBE NEWSWIRE) -- NXP Semiconductors (NASDAQ: NXPI) announced today a family of top-side cooled RF amplifier modules, based on a packaging innovation designed to enable thinner and lighter radios for 5G infrastructure. These smaller base stations can be more easily and cost-effectively installed, and blend more discretely into their environment. NXP's GaN multi-chip module series, combined with the industry's first top-side cooling solution for RF power, helps to reduce not only the thickness and weight of the radio by more than 20 percent, but also the carbon footprint for the manufacture and deployment of 5G base stations.

"Top-side cooling represents a significant opportunity for the wireless infrastructure industry, combining high power capabilities with advanced thermal performance to enable a smaller RF subsystem," said Pierre Piel, Vice President and General Manager for Radio Power at NXP. "This innovation delivers a solution for the deployment of more environmentally friendly base stations, while also enabling the network density needed to realize the full performance benefits of 5G."

NXP's new top-side cooled devices deliver significant design and manufacturing benefits, including the removal of the dedicated RF shield, use of cost-effective and streamlined printed circuit board, and separation of thermal management from RF design. These features help networking solution providers create slimmer and lighter 5G radios for mobile network operators, while reducing their overall design cycle.

NXP's first top-side cooled RF power module series is designed for 32T32R, 200 W radios covering 3.3 GHz to 3.8 GHz. The devices combine the company's in-house LDMOS and GaN semiconductor technologies to enable high gain and efficiency with wideband performance, delivering 31 dB gain and 46 percent efficiency over 400 MHz of instantaneous bandwidth.

The A5M34TG140-TC, A5M35TG140-TC and A5M36TG140-TC products are available today. The A5M36TG140-TC will be supported by NXP's RapidRF reference board series. For more information, see our fact sheet at NXP.com/TSCEVBES or contact NXP Sales worldwide.

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ: NXPI) brings together bright minds to create breakthrough technologies that make the connected world better, safer and more secure. As a world leader in secure connectivity solutions for embedded applications, NXP is pushing boundaries in the automotive, industrial & IoT, mobile, and communication infrastructure markets while delivering solutions that advance a more sustainable future. Built on more than 60 years of combined experience and expertise, the company has approximately 34,500 team members in more than 30 countries and posted revenue of \$13.21 billion in 2022. 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/c2f68a07-3934-49f8-a921-3c28985fcf63



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