

GaN Transistors Come In Silicon-Footprint Packages

[Infineon Technologies'](#) 100-V IGD015S10S1 and 80-V IGE033S08S1 are high-performance CoolGaN G3 transistors offered in industry-standard QFN packaging. The 100-V transistor will be available in a 5-mm x 6-mm RQFN package with a typical on-resistance of 1.1 m Ω , while the 80-V transistor will be offered in a 3.3-mm x 3.3-mm RQFN with a typical resistance of 2.3 m Ω .

GaN technology plays a crucial role in enabling power electronics to reach the highest levels of performance. However, GaN suppliers have thus far taken different approaches to package types and sizes, leading to fragmentation and lack of multiple footprint-compatible sources for customers.

"The new devices are compatible with industry-standard silicon MOSFET packages, meeting customer demands for a standardized footprint, easier handling and faster-time-to-market," said Antoine Jalabert, product line head for mid-voltage GaN at Infineon (see the figure).

The new packages in combination with GaN offer a low-resistance connection and low parasitics, enabling high performance transistor output in a familiar footprint. Moreover, this chip and package combination allows for a high level of robustness in terms of thermal cycling, in addition to improved thermal conductivity, as heat is better distributed and dissipated due to the larger exposed surface area and higher copper density.

Samples of the IGE033S08S1 and IGD015S10S1 in RQFN packages will be available in April 2025. For more information see the [website](#).



Figure. According to the vendor, the IGD015S10S1 and IGE033S08S1 CoolGaN G3 GaN transistors offer a footprint that, for the first time, allows for easy multi-sourcing strategies and complementary layouts to silicon-based MOSFET designs.