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Second-Generation 650-V GaN FETs Are Available In High Volume

Nexperia has announced high volume availability of its second-generation 650-V power GaN FET cascode device family, offering significant performance advantages over previous technologies and competitive devices, according to the vendor. With $R_{DS(ON)}$ performance down to 35 mΩ (typical), the power GaN FETs target single-phase ac-dc and dc-dc industrial SMPSs, ranging from 2 kW to 10 kW, especially server and telecom supplies that must meet 80 PLUS Titanium efficiency regulations. The devices also suit solar inverters and servo drives in the same power range.

This family was introduced last June as reported in How2Power Today. See "Second-Gen Technology Boosts Performance Of 650-V GaN FET Devices".

Available in TO-247 packaging, the 650-V H2 power GaN FETs deliver a 36% shrinkage in die size for a given $R_{DS(ON)}$ value, for better stability and efficiency. The cascode configuration eliminates the need for complicated drivers, speeding time to market. According to the vendor, the devices deliver outstanding performance in both hard-switching and soft-switching configurations.

The Nexperia GAN041-650WSB GaN FETs are now available in high volume. For more information, including product datasheets and quick learning videos, see the GaN FETs page.