

STPOWER Gen3 SiC MOSFETs



Innovative technology for
industrial applications



New levels of transistor system efficiency, switching frequencies, power losses, and thermal management

ST Gen3 SiC MOSFET devices feature a very low $R_{DS(on)}$ and improve performance in terms of switching frequency, energy efficiency, and system size and weight reduction. Our Gen3 SiC MOSFET catalogue offers a range of 650 and 1200 V $V_{(BR)DSS}$ products, ideal for optimizing industrial applications, from motors and robots to various factory automation systems, as well as in power supplies for servers and solar energy conversion systems.

KEY FEATURE AND BENEFITS

- Very low $R_{DS(on)}$ over the entire temperature range
- High speed switching performances
- Very fast and robust intrinsic body diode
- Source sensing pin for increased efficiency
- Very high operation junction temperature capability ($T_j = 200\text{ °C}$)

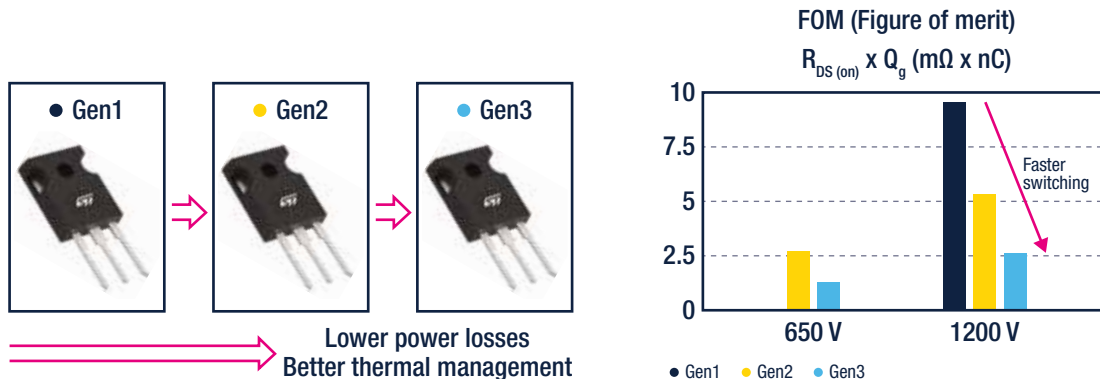
KEY APPLICATIONS

- Switched-mode power supply
- Power supply for renewable energy systems
- DC-DC converters
- Industrial motor control

STPOWER SiC Gen3 MOSFET devices are also available in ST ECOPACK package

To meet environmental requirements, ST offers devices in different grades of ECOPACK packages, depending on their level of environmental compliance. ECOPACK specifications, grade definitions, and product status information are available at: www.st.com. ECOPACK is an ST trademark.

ST SiC Gen3 MOSFET technology improves system performance



STPOWER SiC Gen3 MOSFET products available in different solutions

ST offers SiC Gen3 industrial products in TO-LL*, H²PAK-7, HiP247-4, HiP247, and STPAK packages.

For more detailed information, refer to <https://www.st.com/en/power-transistors/stpower-sic-mosfets/products.html>

$V_{(BR)DSS}$ (V)	$R_{DS(on)}$ typ. (mΩ)
650	From 6.7 to 58
1200	From 27 to 63

Note: * In development



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