

POLs Increase Efficiency For Server, Networking And Telecom Applications

[Infineon Technologies'](#) OptiMOS IR3826(A)M are highly efficient, integrated point-of-load regulators (POLs) offered in 16-A and 23-A versions, for applications such as netcom router and switches, datacom, telecom base stations, server and enterprise storage. These POLs can operate from an input voltage of 12 V (5 V to 17 V) and provide up to 16 A (the IR3826AM) or 23 A (the IR3826M) of continuous current.

They enable high-switching-frequency operation (up to 1.5 MHz) with enhanced efficiency and reduced power losses compared to previous generations of Infineon's offerings. Both current ratings are offered in a PQFN package with a 5-mm x 6-mm footprint for easy scalability (see the figure). Parts are pin-compatible with the previous product offerings to allow a risk-free efficiency upgrade with minimum design effort.

The IR3826(A)M solve the heat challenge without or with minimum airflow in thermally constrained designs. Additionally, these devices support applications that operate with high ambient temperature, e.g., 85°C for telecom. The regulators' state-of-the-art PWM Gen 3 engine allows fixed-frequency operation to reduce noise in multi-rail telecom or high-end netcom applications, like base stations.

The devices are fully RoHS2 compliant without an exemption to accommodate future regulations. High volume production has started. Evaluation boards are also available. Unit pricing is \$2.07 in mid-quantity (4000 pieces) through distribution channels. For more information, see the IR3826M product [page](#) and the IR3826AM product [page](#).

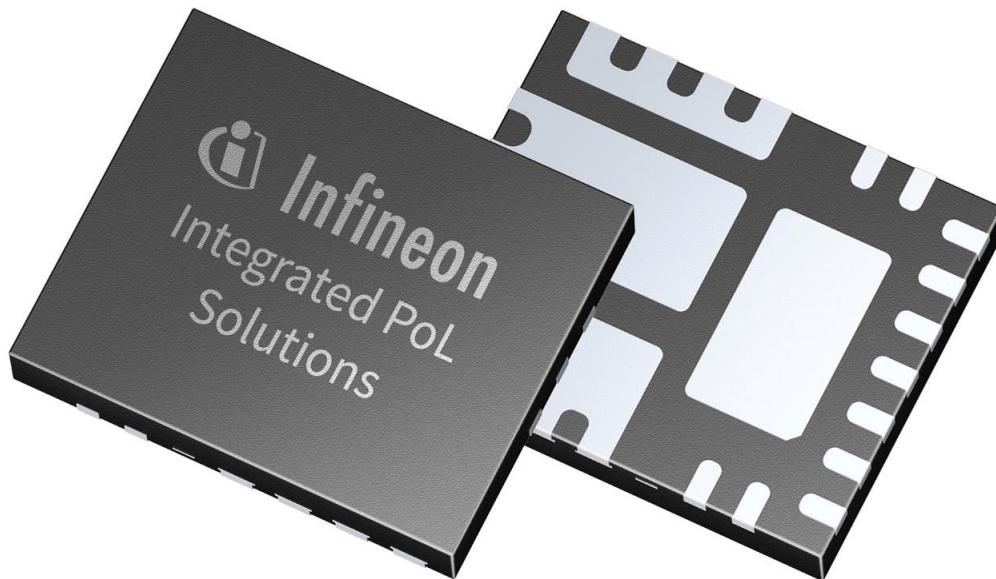


Figure. Based on the company's latest-generation OptiMOS 5 power MOSFETs, the IR3826(A)M integrated point-of-load regulators support a switching frequency up to 1.5 MHz, and handle input from 5 V to 17 V for generating an output from 0.6 V to 5 V at currents up to 16 A (IR3826AM) or 23 A (IR3826M).