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Microsemi Continues Its Leadership in Silicon Carbide Solutions by Launching Innovative New Family of SiC MOSFETs for High-voltage Industrial Applications

New SiC MOSFETs Complemented with SiC Power Modules, Significantly Improving System Efficiency in High-voltage Applications and Delivering Maximum Power Efficiency to Help Customers Develop Lighter, Smaller, More Reliable System Designs

ALISO VIEJO, Calif.—May 20, 2014—Microsemi Corporation (Nasdaq: MSCC), a leading provider of semiconductor solutions differentiated by power, security, reliability and performance, today introduced its new silicon carbide (SiC) MOSFET product family with new 1200 volt (V) solutions. The innovative new SiC MOSFETs are designed for high-power industrial applications where efficiency is critical. These applications include solutions for solar inverters, electric vehicles, welding and medical devices.

Microsemi is well positioned to capitalize on SiC semiconductor market growth. Market researcher Yole Développement estimates that the SiC power semiconductor market will grow 39 percent year-over-year from 2015 to 2020, and Market Research estimates the SiC semiconductor market will grow 38 percent year-over-year to \$5.3 billion by 2022.

New SiC MOSFETs

The new SiC MOSFETs provide patented technology from Microsemi and are designed to help customers develop solutions that operate at higher frequency and improve system efficiency.

Microsemi's patented SiC MOSFET technology features include:

- Best-in-class RDS(on) vs. temperature
- Ultra-low gate resistance for minimizing switching energy loss
- Superior maximum switching frequency
- Outstanding ruggedness with superior short circuit withstand

“Microsemi's 1200V SiC MOSFETs are establishing a new benchmark for performance,” said Marc Vandenberg, general manager for Microsemi's Power Products Group. “Microsemi continues to expand its SiC product portfolio by capitalizing on our in-house SiC fabrication capabilities and delivering innovative high-power solutions to our customers.”

Microsemi's 1200V SiC MOSFETs are rated at 80 milliohms and 50 milliohms and provide customers more development flexibility by offering both industry standard TO-247 and SOT-227 packages:

- APT40SM120B 1200V, 80milliohm, 40A, TO-247 package
- APT40SM120J 1200V, 80milliohm, 40A, SOT-227 package
- APT50SM120B 1200V, 50milliohm, 50A, TO-247 package
- APT50SM120J 1200V, 50milliohm, 50A, SOT-227 package

For more information on the SiC MOSFETs visit www.microsemi.com/sicmosfets.

New SiC MOSFET Power Modules

SiC MOSFETs are also integrated into the company's expanded MOSFET power modules, which are used in battery charging, aerospace, solar, welding and other high-power industrial applications. The new power modules provide higher frequency operation and improve system efficiency. For more information visit www.microsemi.com/sicpowermodules.

New 1700V Schottky Diodes

Microsemi's SiC MOSFETs are also complimented by Microsemi's complete product line of SiC Schottky Diodes. The new 1700V SiC Schottky Diode expands the line beyond the 1200V and 650V. These products are designed with superior passivation technology for ruggedness in outdoor and humid applications. For more information visit www.microsemi.com/sicdiodes.

Availability

Microsemi's new 1200V SiC MOSFETs are available now in TO-247 packages and in July 2014 in SOT-227 packages. SiC MOSFET power modules and the 1700V Schottky Diode is available now. For more information, or to obtain product samples, contact your local distributor or Microsemi sales representative, or email sales.support@microsemi.com. Data sheets are available at www.microsemi.com.

Microsemi SiC solutions, power products, sensor devices, ultra-low power radios and SoC FPGA-based motor control solutions will be displayed at the upcoming PCIM show in Nuremburg, Germany May 20-22, 2014. For more information, visit <http://www.mesago.de/en/PCIM/home.htm>.

About Microsemi

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,400 employees globally. Learn more at www.microsemi.com.

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"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: Any statements set forth in this news release that are not entirely historical and factual in nature, including without limitation statements related to its Silicon Carbide (SiC) MOSFET product family, and its potential effects on future business, are forward-looking statements. These forward-looking statements are based on our current expectations and are inherently subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. The potential risks and uncertainties include, but are not limited to, such factors as rapidly changing technology and product obsolescence, potential cost increases, variations in customer order preferences, weakness or competitive pricing environment of the marketplace, uncertain demand for and acceptance of the company's products, adverse circumstances in any of our end markets, results of in-process or planned development or marketing and promotional campaigns, difficulties foreseeing future demand, potential non-realization of expected orders or non-realization of backlog, product returns, product liability, and other potential unexpected business and economic conditions or adverse changes in current or expected industry conditions, difficulties and costs of protecting patents and other proprietary rights, inventory obsolescence and difficulties regarding customer qualification of products. In addition to these factors and any other factors mentioned elsewhere in this news release, the reader should refer as well to the factors, uncertainties or risks identified in the company's most recent Form 10-K and all subsequent Form 10-Q reports filed by Microsemi with the SEC. Additional risk factors may be identified from time to time in Microsemi's future filings. The forward-looking statements included in this release speak only as of the date hereof, and Microsemi does not undertake any obligation to update these forward-looking statements to reflect subsequent events or circumstances.

Source: Microsemi Corporation