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Motor Driver from Microchip is Automotive AEC-Q100 Qualified, Highly Integrated and Compact; Provides High Performance and High Current

Cost-Effective MCP8063 is World's First 1.5 Ampere, Three-Phase Brushless DC, Sinusoidal Motor Driver in a 4x4 mm Package With the AEC-Q100 Quality Certification

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. **(NASDAQ: MCHP)**, a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the **MCP8063**—a highly integrated, cost-effective, automotive AEC-Q100-qualified **motor driver** that delivers superior performance in a small, 8-pin, 4x4 mm DFN package. It is also the world's first to combine all of those features with 1.5A peak phase current for the 180-degree sinusoidal drive of a variety of three-phase brushless DC motor and fan applications. This integration reduces cost and PCB area, and the high sinusoidal-drive performance provides high efficiency, low acoustic noise and low mechanical vibration for energy savings and quiet operation. Additionally, the MCP8063 includes safety features such as thermal shutdown, over-current limiting and lock-up protection.

The designers of a broad range of motor applications in markets such as the automotive, IT, industrial and home-appliance sectors are faced with increasing regulatory and consumer demands for continued reductions in cost, space, noise and power consumption; with better performance and safety. The integrated features of the MCP8063 motor driver solve these problems cost effectively, while providing a wide operating temperature range of -40 to +125 degrees Celsius. Additionally, it supports the sensorless driving of BLDC motors, which eliminates the cost and space of a Hall sensor.

"Customers requested a compact, high-performance motor driver with high current and a wide temperature range, while adhering to the AEC-Q100 quality standard," said Bryan J. Liddiard, marketing vice president of Microchip's Analog and Interface Products Division. "Our new MCP8063 delivers on that request, providing a complete single-chip solution for a wide variety of three-phase, brushless DC applications at attractive price points."

The MCP8063 motor driver works stand-alone or in conjunction with Microchip's large portfolio of PIC® microcontrollers and dsPIC® digital signal controllers. This offers a high degree of flexibility for everything from simple voltage control to closed-loop motor speed control using high-performance algorithms, such as sinusoidal sensorless drive.

Development Support

To enable development with the new MCP8063 motor driver, Microchip also announced the **MCP8063 12V 3-Phase BLDC Sensorless Fan Controller Demo Kit** (part # ADM00575), which is available today for $49.99 each. Additionally, this tool comes with a user-friendly

configuration GUI. Microchip also supports its motor control and driver portfolios with a full range of development solutions, including firmware, algorithms, application notes, development tools, evaluation boards and reference designs. Visit Microchip's **Motor Control and Drive Design Center** at **http://www.microchip.com/get/BTNR** to access the complete repository.

Pricing and Availability

The MCP8063 motor driver is available today for samples and volume production, at the attractive price point of $1.12 each in 5,000-unit quantities. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **http://www.microchip.com/get/JMXV**. To purchase products mentioned in this press release, go to **microchipDIRECT (http://www.microchip.com/get/99RH)** or contact one of Microchip's authorized distribution partners.

Resources

High-res Images Available Through Flickr or Editorial Contact (feel free to publish):

- Chip Graphic: **http://www.microchip.com/get/4CL6**
- Circuit Diagram: **http://www.microchip.com/get/EPCM**
- Kit Photo: **http://www.microchip.com/get/5710**

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Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **http://www.microchip.com/get/X652**.

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