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Synchronous Buck MOSFET Drivers Announced by Microchip Technology

MOSFET Drivers Provide Maximum Efficiency; Are Available in Small SOIC and 3 mm x 3 mm DFN Packages

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the MCP14628 (http://www.microchip.com/get/40078592349537) and MCP14700 (http://www.microchip.com/get/400785962615741) synchronous Buck MOSFET Drivers, which complement market trends toward "green" products by providing maximum efficiency in small packages. With both available in small 8-pin SOIC and 3 mm x 3 mm DFN packages, the new devices drive two N-Channel MOSFETs arranged in a non-isolated, synchronous Buck converter topology. They feature excellent latch-up immunity, enabling extremely robust applications in the consumer and computing markets, such as digital power conversion, DC-to-DC power supplies, three-phase BLDC motor control and telecom equipment.

The MCP14628 MOSFET driver includes an enhanced light-load efficiency mode that conserves energy when the power supply is not in full use. The dual-input MCP14700 driver is ideally suited for controllers that utilize 3.0V TTL/CMOS logic, and can control the high and low sides independently, which optimizes the timing between the two sides and further maximizes efficiency. Additionally, the MCP14700 driver's timing can be adjusted to a wide range of external MOSFETs, giving designers more flexibility to use different types of MOSFETs in their applications.

"Microchip has a full line of MOSFET drivers in popular packages, at competitive prices," said Bryan J. Liddiard, vice president of marketing with Microchip's Analog and Interface Products Division. "The MCP14628 and MCP14700 MOSFET drivers provide robustness, latch-up immunity, and small packages, making them ideally suited for space-constrained switching applications requiring the utmost efficiency."

Device Packaging, Pricing & Availability

The MCP14628 and MCP14700 MOSFET drivers are available in 8-pin SOIC and 3 mm x 3 mm DFN packages, for $1.17 and $1.33 each respectively, in 10,000-unit quantities. Samples can be ordered today, at http://www.microchip.com/get/400785977546296. Volume-production-quantity orders can be placed today, at http://www.microchip.com/get/400785994097222. For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website at http://www.microchip.com/get/4007860125.

About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and

faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at http://www.microchip.com/get/400786065740741.

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Photo and Circuit Diagrams available through editorial contact or Flickr (feel free to publish):

Photo

http://www.microchip.com/get/400955310185185

MCP14700 Digital DC-to-DC Converter Application Circuit Diagram

http://www.microchip.com/get/400953858796296

MCP14700 3-Phase BLDC Motor Application Circuit

http://www.microchip.com/get/400953873726852

Tags / Keywords: Microchip, PIC, microcontroller, MCU, MOSFET driver, MCP14628, MCP14700, synchronous Buck driver, latch-up immunity, switching power supply, DC-to-DC, three-phase BLDC motor, digital power conversion

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