

# New Power MOSFET Drivers From Microchip Feature Thermally Efficient, Small Packages For Improved Efficiency

MCP14A005X and MCP14A015X Allow Fast Transitions of Large Capacitive Loads With Minimal Space Requirements

CHANDLER, Ariz., Jan. 27, 2015 /PRNewswire/ -- [NASDAQ: MCHP] — Microchip Technology Inc., a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the first power MOSFET drivers in a new product family—the MCP14A005X and MCP14A015X. These drivers feature an entirely new driver architecture for high speed operation, the first in the MCP14A product line. Available in SOT-23 and 2 x 2 mm DFN packages, the new devices are among the smallest packaged MOSFET drivers on the market today. The small packaging enables higher power densities and smaller solutions, while the design targets fast transitions and short delay times that allow for responsive circuit operation. Additionally, these MOSFET drivers include low input threshold voltages that are compatible with low voltage MCUs and controllers, while still maintaining strong noise immunity and hysteresis.



To learn more about Microchip's MCP14A005X and MCP14A015X MOSFET drivers, visit <a href="http://www.microchip.com/MCP14A005X-MCP14A015X-Page-012715a">http://www.microchip.com/MCP14A005X-MCP14A015X-Page-012715a</a>

The MCP14A005X and MCP14A015X MOSFET drivers low input threshold is compatible with various Microchip PIC<sup>®</sup> microcontrollers (MCUs) and dsPIC<sup>®</sup> Digital Signal Controllers (DSCs), even when operating at lower voltages. This enables customers to design applications with MCUs operating as low as 2.0V, using the MOSFET driver to boost the output signals to 18V, reducing power loss in the controller and minimizing conduction loss in the power MOSFET. The threshold levels balance the need for noise immunity with the ability to function with a wider variety of controller products, including Microchip's devices. These drivers are designed for use in power supply, lighting, automotive and consumer

electronics markets, including embedded power conversion, brushed DC motor, unipolar stepper motor and solenoid/relay/valve control applications, among others.

"Microchip is focused on our customers, in every product line at all levels of complexity," said Bryan J. Liddiard, marketing vice president of Microchip's Analog and Interface Products Division. "While much of the MOSFET driver market is maintaining high input threshold voltages associated with aging 3.3V and 5.0V logic definitions, Microchip is aware of customer needs for products which work below that level. In addition, these MOSFET drivers address market needs for speed and size, providing innovation in a product line with simple, elegant functionality."

## **Pricing & Availability**

The MCP14A005X and MCP14A015X are available now for sampling and volume production in SOT-23 and 2 X 2 mm DFN packages, at prices ranging from \$0.50 to \$0.61 each, in 10,000-unit quantities.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <a href="http://www.microchip.com/MCP14A005X-MCP14A015X-Page-012715a">http://www.microchip.com/MCP14A005X-MCP14A015X-Page-012715a</a>. To purchase products mentioned in this press release, go to <a href="microchipDIRECT">microchipDIRECT</a> 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: <a href="http://www.microchip.com/Chip-Graphic-012715a">http://www.microchip.com/Chip-Graphic-012715a</a>
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# **About Microchip Technology**

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 <a href="http://www.microchip.com/Homepage-012715a">http://www.microchip.com/Homepage-012715a</a>.

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