

Microchip Technology Announces Tiny, 0.5A MOSFET Drivers in SOT-23, 2 mm x 3 mm DFN Packages

Single-Output Devices Have Operating Voltage Range of 4.5V - 18V and Excellent Latch-up Immunity

CHANDLER, Ariz .-- (BUSINESS WIRE)--

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the MCP1401 and MCP1402 (MCP140X) single-output MOSFET drivers. The inverting MCP1401 and non-inverting MCP1402 MOSFET drivers are rated for a peak output current of 0.5A, over a wide operating voltage range of 4.5V - 18V. They have excellent latch-up immunity and are available in miniature, 2 mm x 3 mm DFN and 5-pin SOT-23 packages.

Because the MCP140X MOSFET drivers are available in such small packages, designers can position the gate driver close to the MOSFET's physical gate connection, which minimizes gate bounce caused by the parasitic PCB layout. This also minimizes gate rise-and-fall times, propagation-delay times and shoot-through current, all of which help to increase system efficiency and reduce power dissipation.

"With the constant push for smaller and more efficient designs, the need for equally small gate drivers is clear," said Bryan Liddiard, vice president of marketing with Microchip's Analog & Interface Products Division. "The MCP1401 and MCP1402 MOSFET drivers were designed to meet these needs, and to provide the robustness and latch-up immunity required for modern switching applications."

"Microchip is pleased to expand its MOSFET driver family into the high output current, smallpackage segment with the MCP1401 and MCP1402 devices," said Ray DiSilvestro, productline marketing manager with Microchip's Analog and Interface Products Division. "These drivers complement market trends toward 'green' products that enable greater efficiency in smaller packages."

The MCP1401 and MCP1402 MOSFET drivers are well suited for a variety of consumer electronic, industrial and medical applications that use power supplies. Examples include personal computers (PCs), laptops, portable measurement devices and centrifuges, among others.

Packaging, Pricing & Availability

The MCP1401 and MCP1402 MOSFET drivers are both available in a 2 mm x 3 mm DFN package, for \$0.55 each in 10,000-unit quantities. Both devices are also available in a 5-pin SOT-23 package, for \$0.50 each in 10,000-unit quantities. Samples are available today at

<u>http://sample.microchip.com</u>, and volume production orders can be placed today at <u>www.microchipdirect.com</u>.

For less space-constrained applications with higher peak output-current limits, Microchip offers the 4.5A MCP1403/4/5 dual and 6A MCP1406/7 MOSFET drivers. The MCP1403/4/5 devices are available in 8- and 16-pin SOIC and PDIP, as well as 6 mm x 5 mm DFN packages; the MCP1406/7 drivers in 8-pin SOIC, PDIP and 6 mm x 5 mm DFN packages, as well as a 5-pin TO220 package. Prices range from \$0.68 each to \$1.43 each in 10,000-unit quantities, depending upon device and package option. These devices are also available for sampling and purchasing today at http://sample.microchip.com and www.microchipdirect.com, respectively.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <u>www.microchip.com/MCP140X</u>.

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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 <u>www.microchip.com</u>.

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Photo and Circuit Diagram available through editorial contact

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