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Microchip Offers Lowest Profile 5A Power Module for Telecom, Industrial and SSD Applications

2 mm Package Height of New MIC45404 is Optimal for Vertically Constrained Systems

CHANDLER, Ariz., March 21, 2016 /PRNewswire/ -- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, now offers an integrated switching power module designed specifically for height-constrained telecom, industrial and solid-state drive (SSD) applications. The new **MIC45404** comes in a thermally enhanced package that incorporates inductors and passive components into a single, molded power converter. The slim 10 x 6 x 2 mm package saves space in customers' designs, simplifies board design, and eliminates concern over passive components that may introduce unexpected electromagnetic interference (EMI).

"Eliminating the need to select key components and simplifying the board layout to meet EMI specifications are benefits that address requirements our customers have voiced," said Keith Pazul, senior manager of Microchip's Analog Power and Interface Division. "Microchip's low-profile MIC45404 is the newest extension of our power module product family that offers our customers one of the highest input voltage ratings and power densities available in the market."

According to IHS, the global power module market is projected to comprise nearly one third (30 percent) of the power semiconductor market by 2019, growing at twice the rate of power discretes (from 2014 to 2019). Microchip is well-positioned in this market, in part because it has developed a process that puts all passives on a thermally enhanced lead frame that reduces the distance between the components, which minimizes radiated emissions and improves thermal dissipation.

The MIC45404 incorporates one of the thinnest integrated magnetic inductors available in a 19V, 5A point-of-load buck converter. Integrated components include the controller, metal-oxide semiconductor field-effect transistors (MOSFETs), feedback path, and pulse width modulation (PWM) switching regulator. The low profile of the MIC45404 module allows it to be placed on the back of a PCB, on a daughter card, or other placement where vertical height may be constrained in point-of-load power conversion, telecom and industrial applications.

Pricing and Availability
The MIC45404 is available today for sampling and volume production, starting at $4.22 each in 10,000-unit quantities. The MIC45404 is offered in a 10 x 2 x 6 mm QFN package and offers pin-selectable output voltages, switching frequencies, and current limits providing further design flexibility and space savings. To learn more about Microchip's MIC45404, please visit **www.microchip.com/MIC45404.**

Development Support
Microchip today also introduced the MIC45404 Evaluation Kit (part #MIC45404YMP-EV) which enables application development with the integrated switching power module. This kit is available now for $55.00 from **microchipDIRECT** and any of Microchip's authorized worldwide distributors.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **www.microchip.com/MIC45404.** To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

Resources
High-res images available through Flickr or editorial contact (feel free to publish):

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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 **www.microchip.com.**

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Tags / Keywords: Power module, integrated inductor, buck converter, buck regulator, DC-DC, efficiency, step-down, point-of-load, POL, low profile power supply.

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