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Synchronous Boost Regulators from Microchip Enable Less Than 0.7V Operation with Any PIC(R) Microcontroller

Regulators Enable Use of PIC Microcontrollers with a Single Battery Cell

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog, and Flash-IP solutions, today announced the MCP1623 and MCP1624 (MCP1623/4) Synchronous Boost Regulators, which bring low-voltage support to any PIC(R) microcontroller, providing a customizable solution for single-cell battery applications. Featuring a start-up voltage of 0.65V and an operating voltage down to 0.35V, the MCP1623/4 regulators reduce the number of batteries needed in a typical design even enabling designs to be powered from a single Alkaline, NiMh, NiCd, or disposable Lithium battery cell.

The MCP1623/4 Synchronous Boost Regulators extend battery life with up to 96% typical efficiency, shutdown current of less than one micro Ampere in all states and a true load-disconnect shutdown. The devices have an operating input voltage of 0.35 to 5.5V and an adjustable output voltage range of 2.0 to 5.5V. In reducing the number of batteries required, the MCP1623/4 regulators enable more environmentally friendly designs, with lower shipping and operating costs. The devices include over-temperature protection and provide 500 kHz PWM operation, enabling the use of smaller coils, with the MCP1624 providing automatic PWM/PFM switching.

"As customers continue to strive to create smaller, lighter, more compact designs, the ability to operate from a single battery is increasingly valuable," said Steve Drehobl, vice president of Microchip's Security, Microcontroller and Technology Development Division. "The MCP1623/4 regulators enable designers to reduce the size and number of batteries without increasing costs. These regulators can be utilized with any PIC microcontroller for < 0.7V VDD operation, which dramatically increases system flexibility."

Packaging, Pricing & Availability

The MCP1623/4 Synchronous Boost Regulators are available in a 6-pin, SOT-23 package, for less than $0.20 each, in volume. Samples are available today, at http://www.microchip.com/get/9V78. Volume-production-quantity orders can be placed today, at microchipDIRECT (http://www.microchip.com/get/8DBQ). For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at http://www.microchip.com/get/7QSQ.

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 Web site at http://www.microchip.com/get/CK5S.

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