April 21, 2015

Power Monitoring IC From Microchip Adds Advanced Features for High-Accuracy Power Measurement in Commercial and Industrial Designs

Industry Effort to Improve Power Management Schemes in Power-Hungry and Advanced Applications Leads to Introduction of MCP39F511 Power Monitoring Device

CHANDLER, Ariz., April 21, 2015 /PRNewswire/ -- [NASDAQ: MCHP] — Microchip Technology Inc., a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today added a new member to its power-monitoring IC portfolio, the **MCP39F511**. This highly integrated and accurate single-phase power-monitoring IC, designed for the real-time measurement of AC power, combines the most popular power calculations with unique advanced features, making it ideal for use in high-performance commercial and industrial products such as lighting and heating systems, smart plugs, power meters and AC/DC power supplies.

To learn more about the MCP39F511, visit **http://www.microchip.com/MCP39F511-042115a**. View a short video on Microchip's metering products, here: **http://www.microchip.com/Metering-042115a**.

"The MCP39F511 power-monitoring IC is an ideal complement to Microchip's successful energy measurement portfolio," said Bryan J. Liddiard, marketing vice president of Microchip's Analog and Interface Products Division. "We listened to our customers' feedback and added the most requested features to better support engineers in their next generation of designs, including power-hungry applications such as data centers and advanced applications such as smart energy and the growing Internet of Things."

To address industry requirements for better accuracy across current loads, additional power calculations, and event monitoring of various power conditions, the MCP39F511 power-monitoring IC provides all of the popular standard power calculations combined with advanced features. The import and export of active energy accumulation, four-quadrant reactive energy accumulation, zero-crossing detection and dedicated PWM output have now been integrated on-chip, along with the ability to measure active, reactive and apparent power, RMS current and RMS voltage, line frequency, and power factor.

Allowing for more accurate power measurements, which is critical to higher-performance designs, this new device is capable of just 0.1 % error across a wide 4000:1 dynamic range. Additionally, its 512 bytes of EEPROM allow operating-condition storage. The MCP39F511 also includes two 24-bit delta-sigma ADCs with 94.5 dB of SINAD performance, a 16-bit calculation engine, and a flexible two-wire interface. A low-drift voltage reference, in addition to an internal oscillator, is integrated to reduce implementation costs. This unique combination of features and performance allows designers to add highly accurate power-monitoring functions to their end applications with minimal firmware development, speeding development time.

Development Support
The MCP39F511 is supported by Microchip's **MCP39F511 Power Monitor Demonstration Board** (Part # ADM00667), which is available now for $150 via any Microchip sales representative or authorized worldwide distributor, or from **microchipDIRECT (http://www.microchip.com/microchipDIRECT-042115a).**

Pricing & Availability
The MCP39F511 is available now for sampling and volume production, in a 28-lead, 5x5 mm QFN package. It is priced at $1.82 each, in 5,000-unit quantities. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **http://www.microchip.com/MCP39F511-042115a**. 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):

- Chip Graphic: **http://www.microchip.com/Chip-Graphic-042115a**
- Block Diagram: **http://www.microchip.com/Block-Diagram-042115a**
- Tool Photo: **http://www.microchip.com/Tool-Photo-042115a**

Follow Microchip

- RSS Feed for Microchip Product News: **http://www.microchip.com/RSS-042115a**
- Twitter: **http://www.microchip.com/Twitter-042115a**
- Facebook: **http://www.microchip.com/Facebook-042115a**
- YouTube: **http://www.microchip.com/YouTube-042115a**

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 **http://www.microchip.com/Homepage-042115a**.

Note: The Microchip name and logo is a registered trademark of Microchip Technology Incorporated in the U.S.A. and other countries. All other trademarks mentioned herein are the property of their respective companies.

Tags / Keywords: Power Monitoring, Energy Measurement, Power Measurement, AC/DC Supplies, SMPS, Power Distribution Units, Energy Monitoring, Energy Metering, Power Meter, Internet of Things

Editorial Contact:	**Reader Inquiries:**
Eric Lawson	1-888-624-7435
480-792-7182	**http://www.microchip.com/MCP39F511-042115a**
eric.lawson@microchip.com	

Logo - https://photos.prnewswire.com/prnh/20141115/158835LOGO

SOURCE Microchip Technology Inc.