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Reduce Costs and Bill of Materials with Single Power Monitoring IC that Measures Power from 0V to 32V

Improve accuracy using industry's first two-channel device with native 16-bit resolution

CHANDLER, Ariz., July 19, 2018 (GLOBE NEWSWIRE) -- Managing and reducing power consumption is crucial in low-voltage, high-power applications such as Field-Programmable Gate Arrays (FPGAs), Graphics Processing Units (GPUs) and embedded computing devices. These devices must first accurately measure power before they can manage it, but precision power measurement solutions are often costly and require multiple ICs or power configurations to measure different rails. To meet these needs, Microchip Technology Inc. (NASDAQ:MCHP) today introduced new two- and three-channel power monitoring devices that measure from 0V to 32V on a single chip, offering designers solutions that are easy to adopt and improve power measurement accuracy. The two-channel device is also the industry's first with native 16-bit resolution, providing leading flexibility across a wide measurement range.

The PAC1932/33 devices include precisely what is needed to measure power on a single Integrated Circuit (IC), integrating multiple channels in a single package for applications such as Point of Sale (POS) systems, ATMs and building automation. This reduces costs for system designers while also consolidating their Bill of Materials (BOM), as the measurement of sub 1V to 20V voltage rails normally require separate components to measure each rail efficiently. The devices' ability to measure voltage rails under 1V to as high as 32V also relieves developers from having to reconfigure measurement resolution between low and high current load events.

As the industry's only two-channel device with 16-bit power measurement, the PAC1932 can measure without host intervention for 17 minutes, relieving developers from adjusting voltage or current range to measure power and energy. The devices include two 16-bit Analog-to-Digital Converters (ADCs) that can measure voltage and current simultaneously, enabling developers to extract a true power measurement. As a result, developers can better design systems to efficiently save power.

"As applications continue to seek ways to reduce power consumption, precision DC power measurement has grown as a key element for energy savings," said Bryan Liddiard, vice president of Microchip's Mixed Signal and Linear Division. "Just as the four-channel PAC1934 improved power measurement for Windows 10 devices, the new two- and three-channel power monitoring ICs offer improved power measurement for low-voltage, high-power applications in markets such as embedded computing and networking."
For more information, visit: **www.microchip.com/PAC1932**

Development Tools
The PAC1932/33 work in conjunction with Linux® and Windows® 10 software drivers. The PAC1932/33 is register-compatible with the ADM00805 evaluation board, which can be used to start development with a graphical user interface reporting V_{SENSE}, V_{BUS}, power and accumulated power.

Pricing and Availability
The two-channel PAC1932 power monitoring IC is available now for sampling and in volume production starting at $0.78 each in 10,000-unit quantities. The three-channel PAC1933 power monitoring IC is available now for sampling and in volume production starting at $0.94 each in 10,000-unit quantities.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website. To purchase products mentioned in this press release, go to Microchip's full-service channel **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

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

- Application image: **https://www.flickr.com/photos/microchiptechnology/43307826311/**
- Chip shot**: https://www.flickr.com/photos/microchiptechnology/43097092211/**
- Block diagram: **https://www.flickr.com/photos/microchiptechnology/43097092121**

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 **www.microchip.com**.

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