

## Increase Software Power Measurement Accuracy to 99 Percent in Windows 10 Devices with New Power Monitoring IC from Microchip

The PAC1934 Provides Accurate Software Usage Data for Windows 10 Devices Including Laptops, Tablets and Mobile Phones

CHANDLER, Ariz., Sept. 19, 2017 (GLOBE NEWSWIRE) -- The PAC1934, a precision power and energy monitoring chip, is now available from Microchip Technology Inc. (NASDAQ:MCHP). The chip works in conjunction with a Microchip software driver that is fully compatible with the Energy Estimation Engine (E3) built into the Windows 10 operating system to provide 99 percent accuracy on all Windows 10 devices that have batteries. Combining Microchip's PAC1934 and Windows 10 driver with Microsoft's E3 service can improve the measurement of battery usage from different software applications by up to 29 percent.

"With its wide measurement range, Microchip's PAC1934 can measure power of the display, CPU, storage, network, total and other system components with high accuracy," said Jessie Labayen, principal program manager at Microsoft. "This is a significant enhancement to the Windows 10 Energy Estimation Engine's software estimation and it is a big step forward for system providers and everyday consumers."

The PAC1934 is designed to measure voltage rails as low as 0V and as high as 32V. It is this ability that allows the chip to accurately measure power usage from simple Core Processing Unit (CPU) tasks all the way up to software running on devices that connect through a USB Type-C™ connector. The PAC1934 is a four-channel device with 16-bit power measurement and a 17 minute plus accumulation register, making it ideal for determining power consumption and energy usage without the need for voltage or current range adjustments.

"Windows 10 devices need a power monitoring IC that is accurate and easy to adopt in order to display the most accurate information about software power usage," said Bryan Liddiard, vice president of marketing for Microchip's Mixed Signal and Linear Division. "Consumers won't necessarily know Microchip is behind the scenes, but people across the globe will have more reliable battery life statistics because of this new device."

The device has capabilities that could also make it an integral part in future software upgrades. Through bidirectional measurement—meaning it has the ability to measure both battery charging and battery discharge—it is well suited for upcoming USB Type-C charging topologies as they are developed and become more widely used. In addition, the device functions as a standard high-side current sensor for use in server, networking, automotive

and industrial applications. Microchip is also actively working to support the PAC1934 in Linux<sup>®</sup> for various applications.

For more information, visit: www.microchip.com/PAC1934

## Pricing and Availability

The PAC1934 power monitoring IC is available now for sampling and in volume production starting at \$1.22 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 easy-to-use online sales channel microchipDIRECT or contact one of Microchip's authorized distribution partners.

## Resources

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

- PR graphic: www.flickr.com/photos/microchiptechnology/36908298370/in/dateposted/
- Chip Graphic: www.flickr.com/photos/microchiptechnology/37306757385/in/dateposted/

Video available through YouTube or editorial contact (feel free to post): www.youtube.com/watch?v=yYxB 49TUL8&feature=youtu.be

## **About Microchip Technology**

Microchip Technology Inc. (NASDAQ:MCHP) is a leading provider of microcontroller, mixedsignal, 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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