June 18, 2014

Industry's First 5 Kohm Digital Potentiometers with Specified 36V Operating Voltage; Support Wide Signal Swings

DigiPots Also Feature High Terminal/Wiper Current Support and An Extended Temperature Range; Ideal for Industrial, Automotive and Audio Applications

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today expanded its 36V **digital potentiometer** (digipot) portfolio with two new volatile, I^{2}C™ devices—the **MCP45HV31** and **MCP45HV51** (MCP45HV31-51). These are the industry's first digipots to offer a 5 kohm resistance with a specified operating voltage of 36V. Additionally, they provide 10V to 36V analog operation and 1.8V to 5.5V digital operation for systems requiring wide signal swings or high power-supply voltages. The MCP45HV31-51 digipots support both 7-bit and 8-bit resistor configurations, and a high terminal/wiper current, including the ability to sink/source up to 25 mA on all terminal pins for driving larger loads. These features, combined with an extended temperature range of -40°C to +125°C, make the MCP45HV31-51 well suited for a broad range of high-voltage and high-temperature applications, including those in the industrial, automotive and audio markets.

The MCP45HV31's 7-bit resistor network resolution enables 127 resistors and 128 taps, while the MCP45HV51's 8-bit configuration supports 255 resistors and 256 taps. Additionally, both digipots provide RAB resistance options of 5, 10, 50 and 100 kohms. Both devices also feature a 1 µA typical serial-interface inactive current, and a 2 MHz typical bandwidth operation (-3 dB) at the 5 kohm resistance level.

"With their support of the wide operating voltages and extended temperature ranges that are common in industrial and automotive power supplies, these new digital potentiometers allow Microchip to address a broad range of applications," said Bryan J. Liddiard, marketing vice president of Microchip's Analog and Interface Products Division. "These digipots are well suited to any application that operates on higher system voltages."

Development Support

Microchip's **20-Pin TSSOP and SSOP Evaluation Board** (part # TSSOP20EV) allows system designers to quickly evaluate the operation of these new MCP45HV31-51 digipots, in their 14-pin TSSOP package option.

Pricing and Availability

Both digital potentiometers are available today for samples and volume production, in 14-pin TSSOP and 20-pin, 5x5 mm QFN packages. The **MCP45HV31** is $0.99 each and the

MCP45HV51 is $1.09 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/get/FAHU**. To purchase products mentioned in this press release, go to **microchipDIRECT (http://www.microchip.com/get/DKA2)** 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/get/JWFP**
- Block Diagram: **http://www.microchip.com/get/UNMW**

Follow Microchip

- RSS Feed for Microchip Product News: **http://www.microchip.com/get/82TT**
- Twitter: **http://www.microchip.com/get/XDWC**
- Facebook: **http://www.microchip.com/get/0P4D**
- YouTube: **http://www.microchip.com/get/N3PQ**

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/get/TCRU**.

Tags / Keywords: digital potentiometer, digipot, high voltage, volatile, I2C, wide voltage range, high terminal/wiper current, extended temperature range

Microchip Technology Inc.
Editorial Contact:
Eric Lawson, 480-792-7182
eric.lawson@microchip.com
Reader Inquiries:
1-888-624-7435
http://www.microchip.com/get/FAHU

Source: Microchip Technology Inc.