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Measurements of Lower Temperature, Outdoor and Industrial Applications Achieve Greater Accuracy With Microchip's MCP990X Multi-Channel Temp Sensor Family

Remote Diode Measurement With Resistance Error Correction Enables Accurate Readings of Up to 20 inches away From the IC

CHANDLER, Ariz., March 28, 2016 /PRNewswire/ -- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the **MCP990X** family of System Management Bus (SMBus) temp sensor ICs for monitoring of up to four channels in cold, outdoor and industrial low-temperature applications ranging from freezers and refrigerators to base stations and remote radio units. With ±1°C maximum accuracy for both external and internal diode temperatures from -40°C to +65°C, these ICs provide a low-cost, highly flexible solution where precision is needed at lower temperatures.

Advanced features of the MCP990X family include remote diode temperature measurement with resistance error correction that compensates for voltage drops from connectors and long board traces, enabling accurate readings of up to 20 inches away from the IC. Injected system noise from components such as DC-DC converters and backlight inverters is also minimized with a sample-frequency hopping filter, allowing for easier placement and routing. The combination of these features with options for dual, triple and quad temperature monitoring provides for a wider range of measurement opportunities for an entire system with a single IC.

"Extending our thermal-management portfolio to include a focus on colder remote and industrial applications gives us a unique offering in the industry," said Bryan J. Liddiard,

marketing vice president of Microchip's Mixed-signal and Linear Products Division. "These devices complement system designs for our extensive line of microcontrollers as well, helping to ease development time based on the sensing and processing needs of end products."

Compact package options that take up less silicon space on the PCB and allow for smaller system solutions and better product design for temperature critical applications include a 2x2 footprint for the **MCP9902** dual channel temperature sensor. The IC is the smallest temperature sensor in Microchip's portfolio and 33 percent smaller than the company's previous generation dual temperature sensor. Additionally, a 3x3 footprint package is available for the **MCP9903** triple and **MCP9904** quad temp sensors.

Development Support
Microchip also introduced the MCP9902 Evaluation Board (part # ADM00615) today, to enable development with the MCP9902 low temp sensor. This board is available now for $35.00 from **microchipDIRECT** **(http://www.microchipdirect.com/ProductSearch.aspx?Keywords=MCP990X)** and any of Microchip's authorized worldwide distributors.

Pricing and Availability
All three members of the MCP990X are available today for sampling and volume production, starting at $0.46 each in 5,000-unit quantities. The MCP9902 is offered in an 8-pin, 2x2 WDFN package. The MCP9903 and MCP9904 are available in a 10-pin, 3x3 DFN package.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website at **http://www.microchip.com/MCP990x.** 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: **www.flickr.com/photos/microchiptechnology/25862280895/sizes/l**
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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.**

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Tags / Keywords: Temperature Sensor, SMBus, Remote Temperature Sensor, Dual Channel, Triple Channel, Quad Channel, Frequency Hopping, Resistance Error Correction, Beta Compensation

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