November 24, 2009

Microchip Offers Industry's Broadest Portfolio of Semiconductors Specified for Operation up to 150 C Ambient

Devices Are Qualified and Tested in Accordance With AEC-Q100 Grade 0 Requirements

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced it has the industry's broadest portfolio of semiconductors specified for operation up to 150 C ambient--including 8- and 16-bit PIC(R) microcontrollers (MCUs) and dsPIC(R) Digital Signal Controllers (DSCs); serial EEPROM devices, and analog products. Qualified and tested in accordance with AEC-Q100 Grade 0 requirements, the devices are optimum for under-the-hood automotive applications; extreme-environment industrial applications, such as down-hole oil drilling and lighting; and for medical applications such as devices that are sterilized in autoclaves. Engineers can now add intelligence directly into high-temperature applications, where the silicon can be mounted directly onto high-temperature assemblies. This enables new applications for electronics that were not possible before. More information is available at Microchip's new online High-Temperature Design Center (http://www.microchip.com/get/401065739467593).

"With increasing market requirements for ICs specified for operation at temperatures greater than 125 C, Microchip's portfolio of devices that are qualified to AEC-Q100 Grade 0 requirements address these market demands," said Dan Termer, vice president of Microchip's Vertical Markets Group. "With the largest and broadest portfolio of ICs for high-temperature applications, Microchip's high-temperature products enable better connectivity, more intelligent motor control, improved system efficiency and lower system cost when compared to mechanical, or previously-available electronic solutions. Additionally, our products are based upon robust, proven Flash technology, and designed-in quality. We will continue to expand the portfolio of ICs to support market requirements."

Microchip's high-temperature portfolio includes:

```
--  20 new 16-bit devices with industry-leading MCU performance, including
    o dsPIC33FJ motor-control and general-purpose devices with integrated
      digital signal processing, CAN connectivity and 12-bit
      Analog-to-Digital Converters (ADCs)
    o PIC24HJ general-purpose MCUs with CAN connectivity and 12-bit ADCs
--  High-performance PIC18F4680 8-bit MCU family with CAN connectivity and
    small footprint, including the PIC18F2585, PIC18F2680 and PIC18F4585
    MCUs
--  Additional 8-bit PIC MCUs include the PIC16F616 and PIC18F1320 families;
    and the miniature, 8-pin PIC12F615 MCU
--  25LC080C through 25LC256 SPI serial EEPROM device families, as well as
    the 24LC01B I2C(TM) serial EEPROM
--  MCP9700 low-power linear active thermistor
```

Applications

The ability to mount silicon directly onto high-temperature assemblies means that Brushless DC (BLDC) motors can be used in place of mechanical, belt-driven actuators for water pumps, engine cooling fans, turbocharger waste gates, and throttle-control applications. This improves fuel efficiency and reduces emissions by enabling intelligent use of more efficient, on-demand technology. Sensors can now be placed directly into automotive gearboxes, engine-coolant systems and oil reservoirs. MCUs featuring CAN and LIN connectivity enable small footprints and efficient bus connections. The elimination of heat shields and extra wiring saves cost and complexity for industrial and automotive applications. Additionally, active electronics can be mounted onto sterile medical instruments and function during the autoclave sterilization process.

Development Support

Designers can use Microchip's complete suite of standard development tools to design with the new high-temperature devices. This includes the unified, feature-rich, user-friendly and free MPLAB(R) IDE; a broad selection of MPLAB and HI-TECH C(R) compilers, with fully functional free versions of both available; a variety of debugging hardware, from the popular PICkit(TM) 3 Debug Express, to the MPLAB ICD 3 In-Circuit Debugger, to the MPLAB REAL ICE(TM) In-Circuit Emulator; and a series of MPLAB Starter Kits. More information on these development tools is available at http://www.microchip.com/get/401065983796296.

Device Pricing, Package Options, Samples & Availability

Information regarding package options, ordering samples and purchasing the devices can be found by contacting any Microchip sales representative or authorized worldwide distributor, or by visiting Microchip's online High-Temperature Design Center (http://www.microchip.com/get/401065739467593). All of the new high-temperature devices are available for purchase today, at microchipDIRECT (http://www.microchip.com/get/401065946875).

About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip Web site at http://www.microchip.com/get/401066025347222.

Photo available through editorial contact, or Flickr (feel free to publish): http://www.microchip.com/get/401194888541667

Tags / Keywords: Microchip, PIC, MCU, microcontroller, dsPIC, Digital Signal Controller, DSC, 8-bit, 16-bit, high-temperature, 150 C, AEC-Q100 Grade 0, semiconductor, MCHP

RSS Feed for Microchip Product News: http://www.microchip.com/get/401066037731481

Source: Microchip Technology Inc.