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Microchip Announces 25% Performance Increase to dsPIC® DSCs for Digital-Power Applications

dsPIC33F "GS" DSCs Feature 50 MIPS Performance, Enable More Digital Power Applications

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog and Flash-IP solutions, today announced a 25% performance increase on its dsPIC33F "GS" series of Digital Signal Controllers (DSCs) for **Switch Mode Power Supplies** (**SMPSs**). Now featuring 50 MIPS performance, the dsPIC33F "GS" series of DSCs include on-chip peripherals for digital-power applications, such as an Analog-to-Digital Converter (ADC), Pulse Width Modulation (PWM) peripheral and analog comparators. The dsPIC33F "GS" family supports applications such as Induction Cooking, Uninterrupted Power Supplies (UPSs), Inverters, Intelligent Battery Chargers, Power Factor Correction, HID Lighting, Fluorescent Lighting, LED Lighting, and AC-to-DC, as well as DC-to-DC Power-Conversion applications.

The dsPIC33F "GS" DSCs are available in 28- to 100-pin packages, with 16 – 64K of Flash. The on-chip ADC operates at up to 4 Msps, and the PWM peripherals provide up to 1 nanosecond resolution, with modes supporting all power-conversion topologies. Additionally, the DSCs feature up to four on-chip analog comparators with integrated on-chip Digital-to-Analog Converters, enabling designers to set trip levels dynamically. The analog comparators can be used to directly control the PWM functions.

"With 50 MIPS of performance, our customers can now aim to achieve better efficiencies in their power-supply applications," said Sumit Mitra, vice president of Microchip's High-Performance Microcontroller Division. "These new devices feature industry-leading on-chip peripherals specifically designed for digital power supplies. Customers can fully control their products using a single 'GS' dsPIC DSC at a lower system cost, with more features."

Development Tool Support

As the new dsPIC33F "GS" DSCs are 100% compatible with existing dsPIC33F "GS" devices, all existing tools and reference designs are supported. This includes Microchip's **Digital LED Lighting Development Kit** (part # DM330014, $249), **Buck/Boost Converter PICtail™ Plus Daughter Board** (part # AC164133, $89.99) and **16-bit 28-pin Starter Board** (part # DM300027, 79.99). Additionally, Microchip offers the most comprehensive set of royalty-free digital-power reference designs in the industry, including those for AC-to-DC power supplies, DC-to-DC converters, solar inverters, UPSs, Interleaved PFC and HID lighting.

Packaging, Pricing & Availability

The dsPIC33F “GS” DSCs are available today for **sampling** and **volume production** in 28- to 100-pin QFN, SOIC, SPDIP, TQFP and VTLA packages. Pricing starts at $2.53 each, in 10,000-unit quantities. For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip’s Web site at **http://www.microchip.com/get/JVX4**. To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip’s authorized distribution partners.

About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, 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, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the **Microchip Web site** (**http://www.microchip.com/get/S32X**).

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High-res Photo and Block Diagram available through editorial contact or Flickr (feel free to publish):

Block Diagram **http://www.microchip.com/get/4WJV**

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