

Microchip Technology Announces Low-Power, High-Accuracy Operational Amplifiers (Op Amps)

Devices Have Quiescent Current of Just 900 nA, Maximum Voltage Offset of Only 150 Microvolts at 25 Degrees C

CHANDLER, Ariz .-- (BUSINESS WIRE) --

Microchip Technology Inc. (NASDAQ:MCHP), a leading provider of microcontroller and analog semiconductors, today announced it has expanded its linear product portfolio into the low power, high-precision arena with the MCP6031, MCP6032, MCP6033 and MCP6034 (MCP603X) operational amplifiers (op amps). The new, sub-microampere amplifiers have a quiescent current of only 900 nA and a bandwidth of 10 kHz, with a maximum voltage offset of just 150 microvolts at 25 degrees Celsius. The highly accurate amplifiers are ideal for handheld, portable electronic devices used in the medical, industrial and consumer markets.

Microchip's low-power CMOS technology and implementation of non-volatile memory for inpackage trimming enables the MCP603X amplifiers' extremely low offset. This minimizes error, especially at higher gains. Additionally, with an operating voltage range of 1.8V to 5.5V, the amplifiers can run off of two 1.5V battery cells under full battery utilization. Their low power consumption extends battery life, and their rail-to-rail input/output structure enables greater dynamic range and better performance across the entire operating-voltage range.

"Microchip continues to leverage its low-power, CMOS technology to provide another family of industry-leading op amps," said Bryan Liddiard, vice president of Microchip's Analog and Interface Products Division. "The MCP603X devices lead the industry with their combination of low power consumption and low-offset performance, and are expected to enable new markets for Microchip in portable instrumentation."

The MCP603X devices are well suited for applications requiring low power consumption, low-voltage operation and high precision, such as portable instrumentation devices used in the industrial (portable gas detectors, pressure-monitoring devices, toll-booth tags, digital multimeters, RFID readers, bar-code scanners); medical (blood glucose meters, wearable heart-rate monitors and body-temperature measurement sensors); and consumer (gaming consoles, set-top boxes and portable audio players) markets.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at www.microchip.com/MCP603X.

Development Support

As with all Microchip amplifiers, the MCP603X amplifiers are supported by Microchip's FilterLab(R) filter-design software, which simplifies active-filter design. The FilterLab

software provides full schematic diagrams of filter circuits with component values, and displays frequency response. It is available for free from Microchip's Web site at www.microchip.com/filterlab.

Packaging & Availability

Samples of the MCP603X amplifiers can be ordered today from http://sample.microchip.com. The MCP6031, MCP6032 and MCP6033 amplifiers are available in 8-pin MSOP and SOIC packages, and the MCP6034 in 14-pin SOIC and TSSOP packages. The MCP6031 is priced at \$0.53 each; the MCP6032 at \$0.71 each; the MCP6033 at \$0.55 each and the MCP6034 at \$1.26 each, all in 10,000-unit quantities. The devices can be purchased now at www.microchipdirect.com.

Microchip Customer Support

Microchip is committed to supporting its customers by helping design engineers develop products faster and more efficiently. Customers can access four main service areas at www.microchip.com. The Support area provides a fast way to get questions answered; the Sample area offers free evaluation samples of any Microchip device; microchipDIRECT provides 24-hour pricing, ordering, inventory and credit for convenient purchasing of all Microchip devices and development tools; finally, the Training area educates customers through webinars, sign-ups for local seminar and workshop courses, and information about the annual MASTERs events held throughout the world.

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 website at www.microchip.com.

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Photo and Circuit Diagram available through editorial contact

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