

Microchip Technology Introduces Low-Power, Auto-Zero Operational Amplifiers (Op Amps)

Op Amps Provide Ultra High Precision and Rail-to-Rail Operation

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

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the MCP6V01/2/3 (MCP6V0X) auto-zero operational amplifiers (op amps). The low-power op amps feature a unique self-correcting architecture that enables ultra high precision, with an input offset voltage of just 2 micro Volts (uV) maximum. They also feature high common-mode rejection, rail-to-rail input/output and low quiescent current; making them ideal for portable, battery-powered instrumentation devices, such as those used in the industrial and medical markets.

With their low operating-voltage range of 1.8V to 5.5V and low typical quiescent current of just 300 microamperes (uA), the MCP6V0X op amps can run off two 1.5V cells with full battery utilization. The devices feature a self-correcting architecture that results in fewer errors, especially at higher gains. Additionally, their rail-to-rail input/output structure enables greater dynamic range. The combined result of these features is better system performance at all operating voltages.

"Microchip continues to leverage its low-power CMOS technology to provide yet another industry-leading op amp family," said Bryan Liddiard, vice president of marketing with Microchip's Analog and Interface Products Division. "The MCP6V0X amplifiers extend our op amp portfolio into the ultra high-precision marketplace, and provide critical intellectual property for continued growth in this area."

Kevin Tretter, senior product marketing engineer with Microchip's Analog and Interface Products Division, continued, "The MCP6V0X op amps' extremely low offset and rail-to-rail performance provide tremendous flexibility, with regard to gain control and dynamic range. We expect these devices to enable new markets in instrumentation."

Applications requiring low power consumption, low-voltage operation, ultra high precision and low drift can benefit from the performance and features offered by the MCP6V0X op amps. Examples include battery-powered devices and instrumentation used in medical applications (e.g. sensor calibration for defibrillators and CT scanners); as well as industrial applications (e.g. high-precision temperature sensing and DC offset correction).

Development Support

Like all Microchip op amps, the MCP6V0X family is supported by the FilterLab(R) Analog Filtering Software Tool and the Mindi(TM) Online Simulator Tool. Available for free from

Microchip's Web site at www.microchip.com/filterlab, the FilterLab analog filtering software tool provides full schematic diagrams of the filter circuit with component values, and displays the frequency responses. Also available for free, the interactive Mindi simulator tool (www.microchip.com/mindi) enables designers to quickly generate circuit diagrams, simulate circuits and specify passive components for a variety of power and battery-charger applications. Circuits developed using the Mindi tool can be downloaded to a PC or workstation, and are often ported directly into system diagrams.

Device Packaging, Pricing & Availability

The MCP6V0X op amps are available for sampling and purchase today. Samples can be ordered at http://sample.microchip.com, and volume production orders can be placed at www.microchipdirect.com. All of the new op amps are available in 8-pin SOIC packages, with the MCP6V02 also offered in a 4 mm x 4 mm DFN package. The MCP6V01 is priced at \$1.26 each in 10,000-unit quantities; the MCP6V02 at \$1.92 each in 10,000-unit quantities; and the MCP6V03 at \$1.31 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 www.microchip.com/MCP6V0X.

Microchip Customer Support

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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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