Press Release

New High-Speed A/D Converters from Microchip Feature Industry's Lowest-Power 16-bit, 200 Mses Stand-Alone ADCs

MCP37DX1-200 and MCP372X1-200 Families Provide Low Power and High Integration of Processing Functions in 124-lead VTLA Packages

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CHANDLER, Ariz., Nov. 12, 2014 [NASDAQ: MCHP] — Microchip Technology Inc., a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced two families of new high-speed A/D converters in the MCP37DX1-200 and MCP372X1-200 families. These families feature 12-, 14- and 16-bit pipelined A/D converters with a maximum sampling rate of 200 Mega samples per second (Msps). The 14- and 16-bit devices feature high accuracy of over 74 dB Signal-to-Noise Ratio (SNR) and over 90 dB Spurious Free Dynamic Range (SFDR), while the 12-bit devices have 71.3 dB SNR and 90 dB SFDR. This enables high-precision measurements of fast input signals. These families operate at very low-power consumption of 490 mW at 200 Msps including LVDS digital I/O. Lower power-saving modes are available at 80 mW for standby and 33 mW for shutdown.

The MCP37DX1-200 and MCP372X1-200 include various digital processing features that simplify system design, cost and power usage for designers. These families also include decimation filters for improved SNR, individual phase, offset and gain adjustment and a fractional delay recovery for time-delay corrections in multi-channel modes. Data is available through the serial DDR LVDS or parallel CMOS interface and configured via SPI. An integrated digital down-converter is included in the MCP37DX1-200 family making it ideal for communications applications. The 12-bit families include an integrated noise-shaping requantizer, which enables users to lower the noise within a given band of interest for improved accuracy and performance. These families are targeted for applications in the communications markets such as base stations, test equipment, and IF receivers, among others.

“Microchip has entered the market of high-performance, high-speed A/D converters while leaping past existing solutions with industry-leading low-power performance,” said Bryan J. Liddiard, marketing vice president of Microchip's Analog and Interface Products Division. “With their low power and high integration of digital processing functions, these new A/D converters are ideal for many communication systems, industrial and other applications.”

Development Support

The MCP37DX1-200 and MCP372X1-200 are supported by Microchip's MCP37XXX-200 16-bit VTLA Evaluation Board (Part # ADM00505, $399.00), Microchip's MCP37XXX-200 12-bit VTLA Evaluation Board (Part # ADM00619, $399.00) and MCP37XXX-200 Data Capture Card (Part # ADM00506, $599.00).

Pricing & Availability

The MCP37DX1-200 and MCP372X1-200 families are available now for sampling and volume production in 124-lead VTLA packages, at prices ranging from $29.58 to $96.07 each, in 5,000-unit quantities.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at http://www.microchip.com/MCP37DX1-200_MCP372X1-200-Page--111214a. To purchase products mentioned in this press release, go to microchipDIRECT or contact one of Microchip's authorized distribution partners.

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