



# Microchip Technology Announces Volatile Digital Potentiometers with SPI Interface

## 7- and 8-bit Devices Are Specified over Extended Temperature Range

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

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the MCP4131/2, MCP4231/2, MCP4151/2 and MCP4251/2 (MCP41/423X and MCP41/425X) digital potentiometers. The volatile, 7- and 8-bit devices have a SPI interface and are specified over the entire extended temperature range of -40 to 125 degrees Celsius. They feature a low static current consumption of just 1 microampere, maximum, and help extend battery life in a variety of consumer and industrial electronic applications.

Unlike their mechanical counterparts, the volatile MCP41/423X and MCP41/425X potentiometers can be controlled digitally, through an SPI interface. This eliminates the need for human interface in order to adjust the wiper setting, which therefore increases system accuracy, flexibility and manufacturing throughput, while decreasing manufacturing costs. The new devices complement the recently announced non-volatile MCP4141/2, MCP4241/2, MCP4161/2 and MCP4261/2 devices, meaning Microchip now provides a comprehensive portfolio of 7- and 8-bit volatile and non-volatile SPI digital potentiometers.

"With MCP41/423X and MCP41/425X devices, Microchip has created another family of low-power digital potentiometers that complement industry trends toward higher-performing devices, in smaller sizes and at lower costs," said Bryan Liddiard, vice president of marketing with Microchip's Analog and Interface Products Division.

John Austin, senior product marketing manager with Microchip's Analog and Interface Products Division, continued, "With extended temperature range operation and availability in several industry-standard packages, we expect the MCP41/423X and MCP41/425X to help designers meet and exceed demands for smaller, better and less-expensive designs."

### Device-Specific Features

The following table lists device-specific features:

| Part #  | # of POTs<br>(Single or Dual) | Resolution | Wiper<br>Configuration |
|---------|-------------------------------|------------|------------------------|
| MCP4131 | Single                        | 7-bit      | Potentiometer          |
| MCP4132 | Single                        | 7-bit      | Rheostat               |
| MCP4231 | Dual                          | 7-bit      | Potentiometer          |
| MCP4232 | Dual                          | 7-bit      | Rheostat               |

|         |        |       |               |
|---------|--------|-------|---------------|
| MCP4151 | Single | 8-bit | Potentiometer |
| MCP4152 | Single | 8-bit | Rheostat      |
| MCP4251 | Dual   | 8-bit | Potentiometer |
| MCP4252 | Dual   | 8-bit | Rheostat      |

## Possible Applications

With low static current consumption of only 1 microampere, maximum, the MCP41/423X and MCP41/425X digital potentiometers are appropriate for consumer and industrial electronic applications, such as power-supply trim and calibration; set-point and process control; closed-loop servo control; PC peripherals; portable instrumentation; instrumentation offset adjust and signal conditioning.

## Packaging, Pricing & Availability

The MCP41/423X and MCP41/425X digital potentiometers are available in a variety of industry-standard packages, including the popular 3 mm x 3 mm DFN package. Samples and volume-production quantities can be ordered today at <http://sample.microchip.com> and [www.microchipdirect.com](http://www.microchipdirect.com), respectively. Package options and pricing are as follows:

| Part #    | Package Options                                      | Pricing<br>(in 10K-unit<br>quantities, for<br>all package<br>options) |
|-----------|--|---|
| MCP4131/2 | 8-pin: SOIC, MSOP, PDIP, 3 mm x 3 mm DFN             | \$0.48 each   |
| MCP4231   | 16-pin: 4 mm x 4 mm QFN<br>14-pin: SOIC, PDIP, TSSOP | \$0.64 each   |
| MCP4232   | 10-pin: MSOP, 3 mm x 3 mm DFN                        | \$0.64 each   |
| MCP4151/2 | 8-pin: MSOP, PDIP, SOIC, 3 mm x 3 mm DFN             | \$0.64 each   |
| MCP4252   | 10-pin: MSOP, 3 mm x 3 mm DFN                        | \$0.67 each   |

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at [www.microchip.com/digipots](http://www.microchip.com/digipots).

## 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](http://www.microchip.com).

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