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Latest Single-Wire Serial EEPROM from Microchip Enables Remote Identification

The AT21CS11 memory device offers an extended voltage range to accommodate lithium-ion battery applications

CHANDLER, Ariz., Nov. 08, 2017 (GLOBE NEWSWIRE) -- A single-wire, two-pin Electrically Erasable Programmable Read-Only Memory (EEPROM) device with a 2.7V to 4.5V operational voltage range is now available from Microchip Technology Inc. (NASDAQ:MCHP). The AT21CS11 is ideal for identifying and authenticating remote items, such as cartridges or cables, where space for electronic components is limited.

Each AT21CS11 contains both a preprogrammed unique serial number and five EEPROM memory sections. Any or all of the memory sections can be permanently locked by the end-equipment manufacturer to allow tracking of products and identifying attachments to assist with counterfeit prevention. The EEPROM device is ideal for customers who need to warranty their product or prevent counterfeits and ensure proper continued operation of their goods through authorized replacements.

The AT21CS11 is the second single-wire EEPROM offered by Microchip. The new device extends the operating voltage to 4.5V making it suitable for lithium-ion battery-powered devices such as disposable medical devices and e-cigarettes.

The new device connects to a system through a Single Input/Output (SI/O) wire that serves as both the communication and the power supply to the part. Needing only one wire and a ground allows makers of Fiber to the Home (FTTH) cable ends to add critical cable characteristic parameters to different cable types. The SI/O wire also enables a simple two-point mechanical snap-in or twist-on connector for disposable devices where larger three-, five- or eight-wire solutions become impractical.

By locating the EEPROM in a detachable cable or cartridge, manufacturers can create attachments that can be easily identified or authenticated. The device has 1 Kbit of EEPROM memory (four sectors of 256 bits each), a 64-bit serial number and 128-bits for extra user-programmable tracking memory. The extra memory allows designers to add unique identification and operating parameters, such as consumption and usage information, in locations that can be remote from the main electronics.

“Microchip is the market leader in EEPROMs across all serial and parallel interfaces,” said Randy Drwinga, vice president of Microchip’s Memory Products Division. “The single-wire options in our lineup allow customers to add EEPROM intelligence to remote devices over the simplest connection possible.”

For more information about the AT21CS11, visit: **www.microchip.com/at21cs11**.

Pricing and Availability
The AT21CS11 is available today for sampling and in volume production in a variety of package options starting at $0.15 each in 10,000 unit quantities. Also available is the AT21CS01/AT21CS11 Single-Wire Evaluation Kit (part #DM160232) for $100.00.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website. To purchase products mentioned in this press release, go to Microchip's easy-to-use online sales channel **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

Resources
High-res images available through Flickr or editorial contact (feel free to publish):

- PR graphic: **www.flickr.com/photos/microchiptechnology/23926936368/sizes/l**
- Chip image: **www.flickr.com/photos/microchiptechnology/37779583131/sizes/l**

About Microchip Technology
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