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Microchip Technology Introduces Serial EEPROMs With Built-in MAC Addresses

EUI-48(TM) and EUI-64(TM) Compatible Devices Provide Easy, Inexpensive Access to MAC Addresses on Most Standard Buses with Serial EEPROM Functionality

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ:MCHP), a leading provider of microcontroller and analog semiconductors, today introduced a family of serial EEPROM devices with built-in EUI-48(TM) and EUI-64(TM) compatible MAC addresses. Designed to work on standard busses, such as SPI, I^2C(TM) and the UNI/O(R) bus, the devices provide easy and inexpensive access to MAC addresses, and feature up to 1.5 Kb of EEPROM that can be used for storing configuration and user settings, or as a scratch-pad area for buffering small amounts of data. The devices can be ordered when needed without volume restrictions and, because they eliminate the need for designers to burn a unique MAC address into every microcontroller (MCU), they enable quick integration and shorter time-to-market at lower costs.

The 24AA02E48, 25AA02E48 and 11AA02E48 serial EEPROM devices have a built-in 48-bit Extended Unique Identifier (EUI) that is needed to identify the network hardware's physical address. These built-in MAC addresses enable designers to buy addresses only when needed, and also eliminate the need for serialization and programming. The address is also EUI-64 compatible, and it is write-protected to ensure tamper-proof designs. Being compatible with standard, well-known busses, these serial EEPROMs can easily be incorporated into existing designs. Additionally, they offer EEPROM features such as high endurance, large operating-voltage and temperature ranges, and low operating and standby currents; enabling robust serial-interface designs with low power draw.

"The networking industry is demanding easily accessible, plug-and-play MAC address memory devices," said Randy Drwinga, vice president of Microchip's Memory Products Division. "Microchip's new MAC-address chips meet this need by providing low-cost, easy access to MAC addresses, along with serial EEPROM functionality. The devices demonstrate our continued commitment to satisfying customer needs with innovative products that help reduce costs and shorten time to market."

Example EUI-48 networking applications for which the new EEPROMs are appropriate include those involving Ethernet, and 802.11 WiFi(TM) and Bluetooth(R) technology, among others. The devices are also well-suited for EUI-64 applications, such as those that utilize the FireWire, ZigBee(R)/IEEE 802.15.4(TM), Microchip's MiWi(TM) and IPv6 protocols. Specific examples include applications in the consumer (home appliances, Internet radios, wireless LANs, DVRs, LCD TVs) and industrial markets (remote sensing, HVAC, Ethernet, metering).

Development Tool Support

Microchip's new MAC address chips are supported by the MPLAB(R) Starter Kit for Serial Memory Products (Part # DV243003). Available today at microchipDIRECT (www.microchipdirect.com) for $79.98, the kit comes with everything needed to quickly develop a robust and reliable serial EEPROM design, including:

- MPLAB Starter Kit for Serial Memory Products board
- CD containing the free MPLAB IDE, an Integrated Serial EEPROM interface tool, the Total Endurance(TM) Software Model and a User's Guide
- USB cable
- Serial EEPROM sample pack

Device Part Numbers, Pricing & Availability

The 24AA02E48 I^2C device is available in 5-pin SOT-23 and SOIC packages for $0.20 each, in 10,000-unit quantities. Samples are available today at http://sample.microchip.com, and volume-production quantities can be ordered today at www.microchipdirect.com.

The 25AA02E48 SPI device is expected to be available in 6-pin SOT-23 and SOIC packages, for $0.31 each in 10,000-unit quantities. The 11AA02E48 UNI/O device is expected to be available in 3-pin SOT-23 and SOIC packages, for $0.25 each in 10,000-unit quantities. Samples of these devices in the 8-pin SOIC package are available today by contacting your local Microchip sales office. Samples of the SOT-23 package and volume production quantities are expected to be available at http://sample.microchip.com and www.microchipdirect.com, respectively, in February 2009.

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

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 http://www.microchip.com. The Support area provides a fast way to get questions answered; the Sample area offers 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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**Photos and circuit diagram available through editorial contact and Flickr:

Product Photo

http://www.flickr.com/photos/microchiptechnology/3094739535/sizes/l/

Application Circuit Diagram

http://www.flickr.com/photos/microchiptechnology/3095580916/sizes/l/

MPLAB Starter Kit for Serial Memory Products Photo

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