

# **NEC Electronics America Highlights Motor Control Solutions at Motor, Drive and Automation Systems Conference 2009**

## **Visit NEC Electronics America in Booth #215**

**SANTA CLARA, Calif., March 3, 2009** – NEC Electronics America, Inc. today announced it will highlight its motor control microcontroller (MCU) solutions in a variety of interactive demonstrations and product displays in booth #215 at the 2009 Motor, Drive and Automation Systems Conference, March 3-4, at the Hilton Disney, Walt Disney World Resort in Orlando.

## **Product Demonstrations**

### **1. Integrated Hardware and Software Auto-Tuning Solution**

This demo showcases NEC Electronics' prototype auto-tuning solution, an integrated hardware and software tool that simplifies the complex and difficult motor-tuning process by automatically measuring motor parameters, generating control parameters, and enabling users to rapidly build a motor control system or quickly evaluate and test characteristics of a prototype motor. In the demo, the auto-tuning tool connects to a computer and permanent magnet synchronous motor, and uses an NEC Electronics 32-bit high-performance V850E/IG3® MCU to measure the motor's parameters. An NEC Electronics 16-bit low-power 78K0R MCU, which runs the target application, then implements those parameters to drive the motor.

### **2. Sensorless Vector Control for Variable-Speed Motor Control**

Sensorless vector control of a variable-speed residential furnace blower will be demonstrated using NEC Electronics' 78K0R/1x3 inverter control MCU. The benefit of sensorless vector control is that it can reduce power consumption, system components and costs compared to sensor-based motor control applications.

### **3. Single-board Motor Control Starter Kits**

NEC Electronics also will demonstrate two starter kits, its MC-78F0712-KIT for 8-bit 78K0 MCUs and its new MC-78K0R-IE3 starter kit for 16-bit 78K0R/IE3 MCUs. Both kits contain easy-to-use development tools to help users drive low-voltage brushless DC motors.

NEC Electronics' MINICUBE® and IECUBE emulators also will be on display. More information about the company's MCU products and development tools can be found at <http://www.am.necel.com/micro/>.

On a worldwide basis, NEC Electronics was the number one supplier of 32-bit microcontrollers in 2007 according to the Gartner Dataquest March 2008 rankings report. All microcontrollers offered by NEC Electronics are fully supported by an extensive variety of third-party and proprietary NEC Electronics development tools.

**About NEC Electronics America, Inc.**

NEC Electronics America, Inc., headquartered in Santa Clara, California, is a wholly owned subsidiary of NEC Electronics Corporation (TSE:6723), a leading provider of semiconductor products encompassing advanced technology solutions for the broadband and communications markets; system solutions for the mobile, PC, automotive and digital consumer markets; and multi-market solutions for a wide range of consumer applications. NEC Electronics America offers local manufacturing in Roseville, California, and the global manufacturing capabilities of its parent company. In the Americas, NEC Electronics America markets and sells industrial-type active-matrix LCD modules from NEC LCD Technologies, Ltd., a global leader in innovative display technologies. More information about the products offered by NEC Electronics America can be found at <http://www.am.necel.com>.

# # #

V850E/IG3 and NEC Electronics America are either registered trademarks or trademarks of NEC Electronics Corporation in the United States and/or other countries. NEC Electronics is a registered trademark or trademark of NEC Corporation. All other marks are property of their respective owners.