

Future Lighting Solutions and NEC Electronics America Introduce World's First Intelligent Constant High-Current Driver with Microcontroller

Flexible System in a Package (SIP) Solution Reduces Board Space and Costs for LED Lighting Applications

SANTA CLARA, Calif., MONTREAL, Canada, May 7, 2008 – Future Lighting Solutions, a division of Future Electronics, Inc., with NEC Electronics America, Inc., today introduced the world's first intelligent constant High-Current Driver (HCD) with microcontroller (MCU). The new HCD/LED MCU can be used in lighting applications that employ multiple LEDs, in addition to industrial control applications such as stepping motors, solenoid drives, and switch-mode power supplies.

“Future Lighting Solutions and NEC Electronics America have developed a ‘smart’ design approach to support the growing performance demands of LED lighting and other applications,” said Bart Ladd, General Manager, Account Development and Applications, NEC Electronics America. “We have combined NEC Electronics’ extensive experience in MCUs with Future Lighting Solutions’ power LED applications knowledge, to produce this new HCD/LED MCU. The solution offers higher integration and greater intelligence, and is supported with a robust design environment that helps designers bring products to market faster and more cost effectively.”

The new device combines an NEC Electronics’ 8-bit All Flash™ microcontroller with a four-channel HCD that helps reduce device size and system costs. This solution delivers efficient power management capability in street illumination, architecture, entertainment, emergency vehicle and display lighting systems.

“Customers will value the flexibility that the μ PD78F8024 solution provides, such as providing output current support to drive the full range of our LUXEON® high-power LEDs,” said Patrick Durand, Worldwide Applications Manager for Future Lighting Solutions. “Engineers who want to maximize control, reliability and power savings for their solid-state lighting applications can also leverage this new MCU’s ability to dynamically change the average current for an LED by communicating with a temperature or ambient light sensor.”

The product’s high level of integration allows for a smaller number of external components to open up board space for other components. In addition to supporting a wide input voltage

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range from 9 to 38-volts, the flexible four-channel architecture also enables designs using both buck and boost regulator topologies.

The μ PD78F8024 HCD/LED MCU is available in a 64-pin LQFP. Samples are available now, starting at US\$3.50 per 1000 unit quantities¹. Evaluation boards will be available in early May. For additional information, visit www.FutureLightingSolutions.com/NEC.

About Future Lighting Solutions

Future Lighting Solutions is a division of Future Electronics Inc., the 3rd largest electronic distributor in the world. We are focused on delivering world-class LUXEON® LEDs, technical solutions and commercial support that facilitate developing and manufacturing “never before possible” LUXEON LED based applications. Future Lighting Solutions brings customers unparalleled LED lighting knowledge, access to expert resources, full system solutions and global logistics support.

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>.

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