

Epson Develops New Low-Power-Consumption Real-Time Clock Modules

- Compatible with wide-ranging power sources –



RX-4035SA



RX-8035LC

- Munich, July 4, 2012 -

Seiko Epson Corporation ("Epson," TSE: 6724) has announced development of the RX-4035SA/LC and RX-8035SA/LC real-time clock modules^(*) - units designed to be compatible with primary batteries, secondary batteries, capacitors (one type of storage cell) and various other power sources. The company plans to begin accepting orders for these new products from the end of July. Volume production is slated to commence for the RX-8035SA from August, and for the RX-4035SA/LC and RX-8035LC from October.

Alongside growing public awareness of the need to conserve energy, manufacturers have made rapid moves to ensure lower power consumption in electronic devices. This trend has sparked increased use of real-time clocks for retaining the current time in electronic devices in place of microcontrollers (which effectively internalize clock function), due to the ability of such clocks to retain the current time with extremely low power consumption.

Conventional real-time clocks use an external special-purpose power management IC to sustain operation of the clock in case the electronic device's main power supply is cut off. However, this can cause battery power loss, prompting calls for solutions toward lower power consumption and greater efficiency. To address these needs, Epson has developed the RX-4035SA/LC and RX-8035SA/LC real-time clock modules with built-in power source switching function, realizing extremely low leakage current and voltage drops, while maximizing battery power.

Epson's new products have the following characteristics:

- In addition to dry cell batteries, button batteries and rechargeable batteries, the power source switching function in this module is compatible with electric double layer capacitors(*2) suitable for use in low power consumption real-time clocks.
- Also onboard is an event recorder function for retaining the current time of electrical devices even during system failures at night, on holidays or other inconvenient times. The event recorder is equipped with two event input terminal systems with built-in chattering-free circuits (*3), enabling recordings of individual events ranging from years to seconds in length.
- These modules are equipped with dual alarms and clock output, realizing clock power consumption for the SA package type of 350nA (Typ.), and for the LC package type of 400nA (Typ.). For clock accuracy, in normal temperature environments two different accuracy levels may be designated -within 13 seconds or one minute per month.
- The RX-4035SA/LC is compatible with SPI interface, while the RX-8035SA/LC is compatible with I2C-Bus(*4) interface.

This real-time clock module series is engineered to contribute significantly to lowering power consumption in electrical devices, while ensuring highly accurate time information. Buoyed by this breakthrough, Epson is determined to continue living up to its reputation as a leading company in quartz devices, striving to offer even stronger support for the safety, comfort and peace of mind of its customers.

See here for a glossary and primary features of these products:

<http://global.epson.com/newsroom/2012/pdf/120625.pdf>

For further details about the RX-4035SA, please see the following link:

http://www.epsontoyocom.co.jp/english/product/RTC/set01/rx4035sa_lc/index.html 

For further details about the RX-8035SA, please see the following link:

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About Epson Europe Electronics GmbH

Epson Europe Electronics GmbH is a marketing, engineering and sales company and the European Headquarters for electronic devices of the Seiko Epson Corporation, Japan.



Since 1989 headquartered in Munich/Germany with 60 employees, Epson Europe Electronics GmbH has several European sales representatives and has a European-wide network of distributors. Epson Europe Electronics provides value added services for Semiconductors and Quartz Devices targeted to the mobile communication, automotive and home visual market. Epson products are recognized for energy saving, low power, small form factors and rapid time to market. Information about Epson Europe Electronics GmbH is available in the Internet under www.epson-electronics.de

About Epson

Epson is a global imaging and innovation leader that is dedicated to exceeding the vision of customers worldwide through its compact, energy-saving, high-precision technologies, with a product line-up ranging from printers and 3LCD projectors for enterprise and the home, to sensors and other microdevices.

Led by the Japan-based Seiko Epson Corporation, the Epson Group comprises more than 78,000 employees in 99 companies around the world, and is proud of its ongoing contributions to the global environment and the communities in which it operates.

<http://global.epson.com/>

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