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## **PRESS RELEASE** GE\_3108\_NEC\_E

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Gleichmann Electronics presents 18 extremely low-power All Flash 8-bit microcontrollers:

### **Operating current in standby mode reduced by 80 percent**

Stuttgart (Germany) – NEC Electronics' 18 new All Flash 8-bit microcontrollers of the 78K0/Kx2-L family, which are ideally suited for controlling small battery powered systems, immediately broaden the product portfolio of Gleichmann Electronics.

The extremely low-power derivatives of the 78K0/KY2-L (16-pin SSOP), 78K0/KA2-L (20-pin SSOP), 78K0/KB2-L (30-pin SSOP) and 78K0/KC2-L (44-pin & 48-Pin QFP ) series are based on the same technology that NEC Electronics already uses for the manufacture of its 16-bit low-power microcontrollers. By means of diverse further optimization measures, a reduction of operating current in the standby mode from, until now, 3.5  $\mu$ A by 80% to now only 0.7  $\mu$ A has been achieved. Even at 1 MHz operating frequency, the operating current is reduced by 40% from 440  $\mu$ A to 260  $\mu$ A.

Further features of the 8-bit MCUs - depending on version with 4 to 32 Kbytes Flash and 384 bytes to 1 Kbyte RAM – include up to two integrated operational amplifiers as options across the family. These can either be used as programmable preamplifiers for the internal 10-bit A/D converters or - because AMP+, AMP- and AMPOUT are available at the port pins - can be used with analog functions. The integration of analog peripheral functions on chip enables the reduction of the number of additional external components required and thereby also reduces the system costs.

Furthermore, unlike conventional products, which normally require a supply voltage of 2.3 V, the integrated A/D converter requires only 1.8 V. This feature also makes the new MCUs ideally suited for use in battery powered systems.

Despite additional operational amplifiers, real-time counters and other new features, full compatibility of the new 8-bit microcontrollers with pin layout and peripheral features of already existing 78K0/KY2, 78K0/KA2, 78K0/KB2 and 78K0/KC2 models is guaranteed.



First samples of the new all flash 8-bit low-power microcontrollers are available Q4 2008 from Gleichmann Electronics. Volume production is expected to begin in April 2009.

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**Gleichmann & Co. Electronics GmbH**

*Founded in 1979, Gleichmann & Co. Electronics GmbH, in the same company group with MSC Vertriebs GmbH, has established itself as one of the leading pan-European distributors of electronic assemblies and components. One of the reasons for the high acceptance by customers and suppliers is the company's early focus on comparatively few, highly sophisticated products such as microcontrollers, programmable logic devices, displays and customer specific power supplies. From this, the resulting in-depth technical know-how of our sales engineers and field application engineers today enables us, if required by the customer, even implementation of complete new designs right up to the finished product. With two of its own ASIC design centers, the Gleichmann research laboratory in Austria and one of the largest and most modern programming centers in Europe, Gleichmann Electronics takes a leading role in terms of service and customer support. More information can be found at: [www.msc-ge.com](http://www.msc-ge.com)*

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