Micronas current transducer family with digital output for automotive and industrial applications

With the CUR 315x family Micronas expands its range of sensors beyond the existing CUR 3105 for contactless current measurement applications which benefit from the combination of high accuracy and digital output signal.

**Freiburg, November 3, 2010** – Micronas (SIX Swiss Exchange: MASN), a leading supplier of innovative application-specific sensor and IC system solutions for automotive and industrial applications, presents the CUR 315x current transducer family based on the Hall-effect principle. These new additions consist of the devices CUR 3150 and CUR 3155.

Both programmable devices employ a digital output instead of an analog output. The output involves a PWM signal with a resolution of as much as 16 bit. The CUR 3150 as well as the CUR 3155 achieve their accuracy by using active compensation measures. In addition to that, the CUR 3155 offers even higher accuracy by a reduced sensitivity error over temperature resulting in a value below 1 percent under optimum conditions,

Both current transducers address applications such as battery monitoring (e.g. in hybrid or electric vehicles), start-stop systems, smart metering and solar inverters.

Combined with a ferromagnetic flux concentrator, the CUR 315x family is capable of determining electric currents in the milliampere range. When using a special conductor configuration, measurements in the heavy current range are also possible without flux concentrator. The bandwidth reaches as high as 2 kHz with programmable magnetic field ranges from ±20 to ±160 mT.

The CUR 315x family comes along with a TO92UT housing capable of being soldered or welded. Other features of the current transducer family include a temperature range from TJ = −40 to 140 °C, the detection of overvoltage and the reverse voltage protection of the supply connection.

Development samples will be available in December 2010. Qualified samples have been scheduled for February 2011. The prices of the CUR 315x devices in unit quantities of 100k range between 0.75 and 0.85 Euros.

Micronas will present the CUR 315x family at the “electronica” in Munich (Hall A6, Booth 315) from 9 to 12 November.

**About Sensor Solutions by Micronas**

Micronas today offers the world’s broadest range of Hall-effect sensors. A Hall-effect sensor detects the presence of a magnet without requiring actual physical contact. Thus, it can be used to sense movement and rotation without requiring contact with the moving object. Other parameters like pressure, force or torque can be sensed by noting the slight movements of a magnet caused by changes of the applied parameter.

While Hall-effect sensors can be made from various materials, Micronas pioneered the market in CMOS Hall-effect sensors and was the first to manufacture in CMOS technology. This technology allows integration of the Hall-effect sensing element with standard electronic devices such as amplifiers, logic circuits, and volatile and non-volatile memories.

Micronas’ expertise in Hall sensors combines perfectly with its CMOS and mixed-signal knowhow to create accurate, intelligent sensors for a broad range of applications. The ever-increasing demand for energy-efficient and highly reliable machines means that demand for these smart sensors will continue to grow.

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**About Micronas**

Micronas (SIX Swiss Exchange: MASN), a semiconductor designer and manufacturer with worldwide operations, is a leading supplier of cutting-edge sensor and IC system solutions for automotive electronics. Micronas offers a variety of Hall sensors and microcontrollers for automotive and industrial applications, such as car dashboard, body control, as well as motor management and comfort functions.

Micronas serves all major automotive electronics customers worldwide, many of them in continuous partnerships seeking joint success. While the holding company is headquartered in Zurich (Switzerland), operational headquarters are based in Freiburg (Germany). For more information on Micronas and its products, please visit [www.micronas.com](http://www.micronas.com).