

# Single Chip Interface Includes Integrated Microcontroller

Graz, Austria, February 24, 2010--SensorDynamics, sensor manufacturer for automotive and industrial applications, today launched the SD 41x, a new single-chip solution for AMR-sensors interface. The low-cost AMR sensors are used across automotive applications; primarily for position and angle measurements.

As the differential output signals of an AMR-sensor are lower than 100 mV, in order to achieve sufficiently high position accuracy, these signals have to be amplified and filtered before being processed in the microcontroller. Additional discrete components required for such amplification have a significant impact on total costs. As SD41x integrates the necessary amplifiers, filters, ADCs and a microcontroller, costs are significantly lowered. The gain, the band width and the resolution of the ADCs are configurable for each application by software, which significantly reduces the usual effort of configuration by external resistors and capacitors. In addition, individual parameters of each sensor module can be easily adjusted and fine tuned at the end of the sensor module manufacturing line. Its ability to configure parameters by software helps shortening the time to market as well. The SD41x comes with a development tool kit that includes an easy to use graphical full-screen configurator, the necessary drivers, the manual and C-code examples.

### Further Products Features

The SD41x is the unique single-chip solution which contains two high precision sigma-delta 14-bit ADCs and one 8-bit microcontroller. In addition, the system has fail-safe properties built in which are important for safety critical and safety relevant applications. Also, voltage regulators, several sleep-down modes and data interfaces (SPI, LIN, PW; UART, DAC) are available.

### Availability and Price

According to AEC-Q100 approved SD41x with integrated 32kB EEPROM in QFN64 is available for the price of 7,78 EUR

for 1k. SensorDynamics can offer a competitive price for volume production.

Evaluation boards and samples can be ordered online at [www.sensordynamics.cc](http://www.sensordynamics.cc).

### About SensorDynamics

SensorDynamics is a semi-fabless semiconductor company that focuses on innovative sensor solutions for high volume applications in automotive, industry and high-end consumer sectors. SensorDynamics develops and supplies fail-safe micro and wireless semiconductor products for automotive, industry and high-end consumer key accounts and is certified under ISO/TS 16949. The company acts as a general contractor with in-house MEMS production and cooperates closely with leading international technology partners. With its headquarters in Lebring near Graz, Austria, SensorDynamics has subsidiaries in Italy and Germany and a world-wide sales network. For more information on SensorDynamics, its products and

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