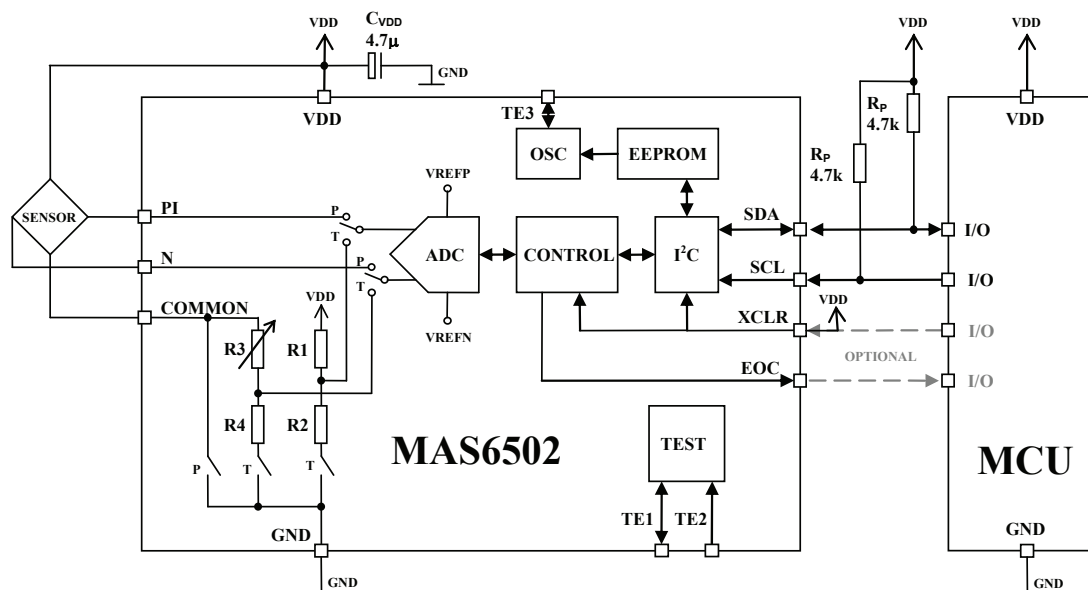
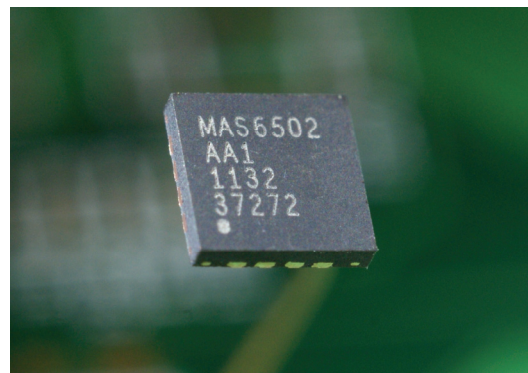


Micro Analog Systems releases Low Power Piezoresistive Sensor Signal Interface IC

Targeted for MEMS based pressure sensor modules

Helsinki, Finland – 06 October 2011 - Micro Analog Systems Oy today announced [MAS6502](#), a 16-bit Piezoresistive Sensor Signal Interface IC primarily intended for MEMS based pressure sensor modules.

The device uses a ratiometric AD-converter principle employing a delta-sigma ($\Delta\Sigma$) conversion technique, giving very good noise performance. Its current consumption is extremely low (2.3 μA) and it can operate at low supply voltage from 2.0 V to 3.6 V which makes it an ideal solution for interfacing a piezo-resistive sensor in power consumption critical portable applications. The effective number of bits (ENOB) of the ADC is 14-bits. The over sampling ratio (OSR) of the $\Delta\Sigma$ -converter has four values to choose from for further optimization between conversion accuracy, speed and current consumption. The external sensor bridge can be used to sense not only pressure but also temperature, using the built-in sensor sampling switches. The MAS6502 communicates via a standard 2-wire I²C serial bus interface.



FEATURES

- Low Standby Current Consumption 0.1 μ A Typ
- Very Low Supply Current: 0.35 μ A...2.3 μ A
- Supply Voltage: 2.0 V...3.6 V
- Ratiometric $\Delta\Sigma$ Conversion
- Selectable Input Signal Ranges (VDD=2.35V):
325 mVPP, 220 mVPP, 150 mVPP, 100 mVP
- Selectable Optional Offset (VDD=2.35V):
33 mV
- Selectable Sensor Resistance Values
5 k Ω , 4.5 k Ω , 4 k Ω , 3.4 k Ω
- Over Sampling Ratio: 512, 256, 128, 64
- Conversion Times 0.8 ms...10.6 ms Typ
- 2-Wire Serial Data Interface (I²C Bus)
- 256 Bit EEPROM Memory
- Good Noise Performance thanks to the $\Delta\Sigma$ Architecture

MAS6502 is available in a QFN-16 4x4x0.75 package as well as tested wafers or dies in wafer pack. For further information and samples please contact Micro Analog Systems Oy.

About Micro Analog Systems

Founded in 1984, Micro Analog Systems Oy is a privately owned fabless semiconductor house located in Helsinki, Finland. MAS supplies Application Specific Standard Parts and ASICs for worldwide customer base. MAS current product portfolio consists of time signal receiver ICs, crystal oscillator ICs and AD converters for sensor applications as well as of other high performance analog ICs.

For More Information

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