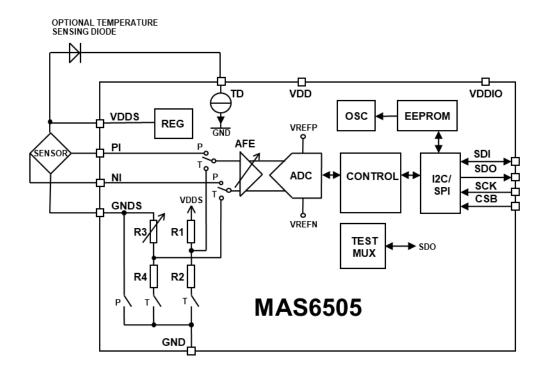


Micro Analog Systems releases Low Power Piezoresistive Sensor Signal Interface IC

Targeted for MEMS based pressure sensor modules

Helsinki, Finland – 19 June 2018 - Micro Analog Systems Oy today announced MAS6505, a 22-bit Piezoresistive Sensor Signal Interface IC primarily intended for MEMS based pressure sensor modules.

The device uses analog front-end (AFE) comprising of a chopper amplifier with very low noise performance (0.27 uVrms). Analog-to-digital converter (ADC) employs a delta-sigma conversion technique to achieve high resolution (22-bit). It can operate from very wide range of supply voltages (1.71V...5.5V) and it has extremely low current consumption (down to 0.8uA, one measurement in a second) which make it an ideal solution for battery powered applications. Two different temperature sensing methods are supported; sensor bridge resistance sensing or using external temperature sensing diode. 512-bit EEPROM memory is available for storing sensor trimming and calibration coefficients on chip. The device is operated using standard I2C and SPI serial bus interfaces.





FEATURES

- Supply Voltage 1.71 V ... 5.5 V
- Low Sleep Current Consumption 24 nA Typ
- Very Low Operating Current 1.3 uA ... 25 uA Typ
- Very Low Noise Analog Front-End 0.27 uVrms
- Ratiometric ΔΣ A/D Conversion
- A/D Conversion Time 1.25 ms ... 40 ms Typ
- Sensor Resistance Range 3 kOhm ... 6 kOhm
- Seven Resolution Options by OSR Selection
- Internal Clock Oscillator
- 2-Wire Serial Data Interface (I2C Bus)
- 4- and 3-Wire Serial Peripheral Interface (SPI Bus)
- 512 Bit EEPROM Memory

MAS6505 is available as tested wafers or dies in waffle 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 company 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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