

9 axis Ultra-Low Power Motion sensor

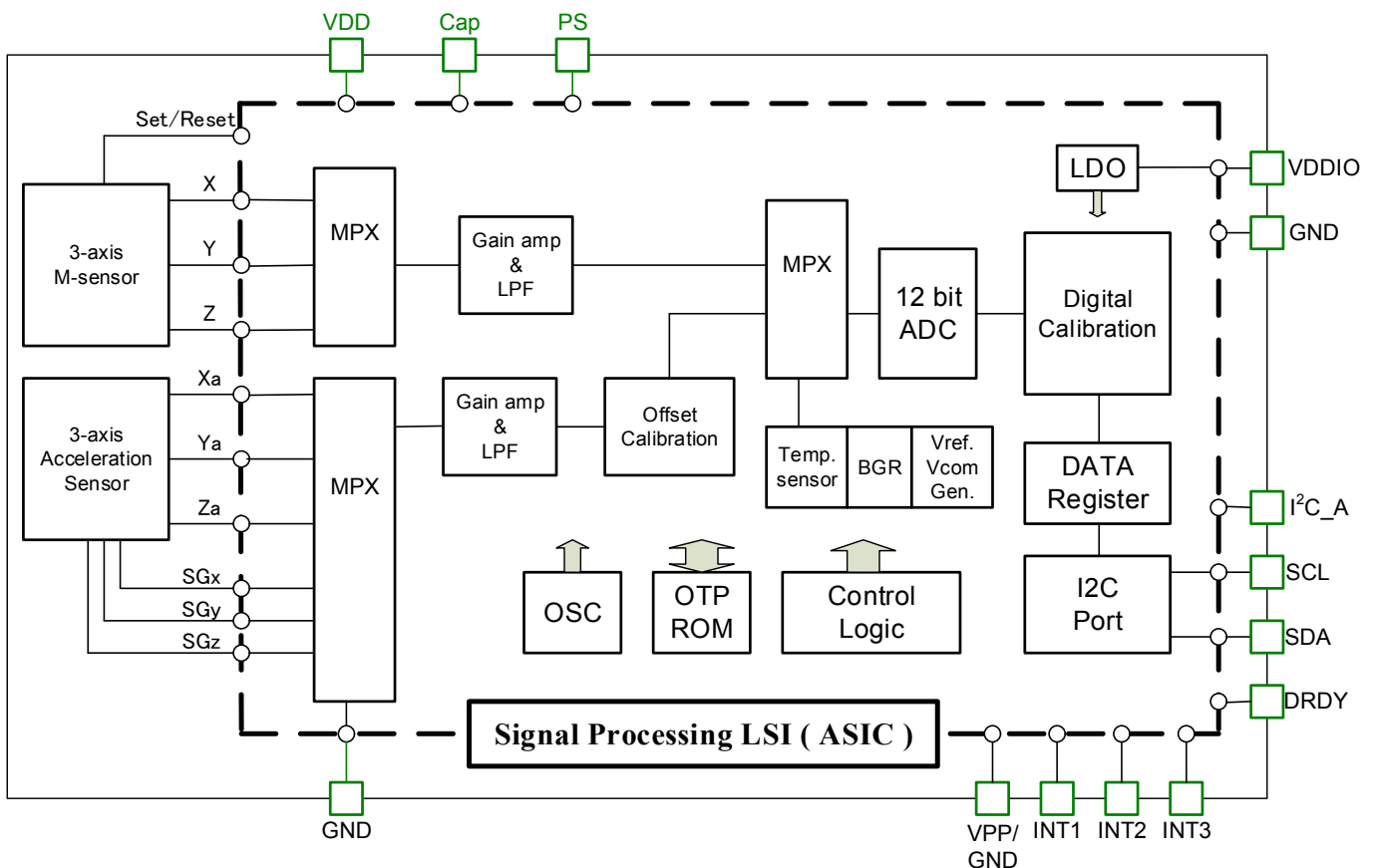
General Description

The HTT7201 is a 9-axis motion sensor which has integrated MEMS accelerometer and magnetometer. The MEMS sensor detects 3-axis acceleration and 3-axis magnetic field. By using tilt compensated e-compass and accelerometer, 3-axis rotational velocity (gyroscope) is also calculated. The signal conditioning LSI provides optimal performance with ultra-low power consumption. Digital output data interface through I2C standard. Factory calibration characterizes sensor parameters such as sensitivity and offset for all temperature range. The accelerometer has a Stress-relaxation structure.

Features

- 9 axis motion sensor: 3 axis accelerometer, magnetometer and rotational velocity
- I2C digital serial interface
- Small, Surface mount Package
- Supply Range : $VDD = 2.4V \sim 3.6V$ (I/O interface : $1.7V \sim VDD$)
- High resolution A/D converter: 12 bits
- Small package: $2.5 \times 2.5 \times 1.1$ mm (14 pin)
- Operating temperature : $-40^{\circ}C \sim 85^{\circ}C$
- Motion detector provides optimum power management
- Low power mode and Power down capability

Block diagram

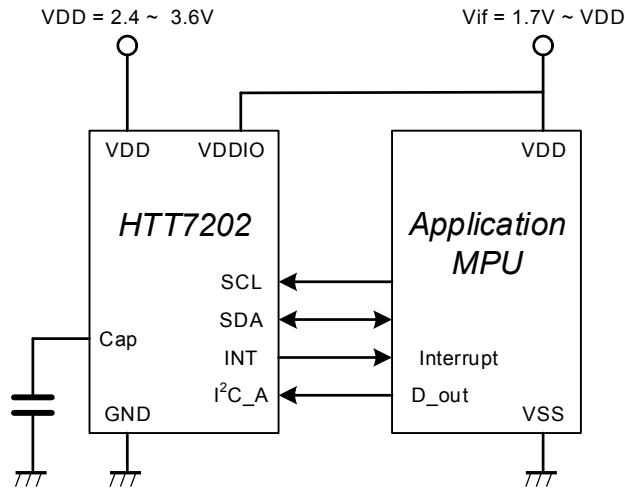


HTT7202

9 axis Ultra-Low Power Motion sensor

9 axis Ultra-Low Power Motion sensor

Typical Application circuit



Pin assignment & axis

