

MLX90129 – 13.56MHz Sensor TAG / Data Logger IC



The MLX90129 combines a precise acquisition chain for external resistive sensors, with a wide range of interface possibilities.

It can be accessed and controlled through its ISO15693 RFID front-end or via its SPI port.

For measuring other physical quantities, one or two resistive sensors can be connected to a make batteryless sensing point. Also, the chip can supply a regulated voltage to other components of the application.

Adding a battery will enable the use of the standalone data logging mode. The sensor output data is stored in the internal 3.5kbits user memory. One can extend the storage capacity by connecting an external EEPROM to the SPI port.

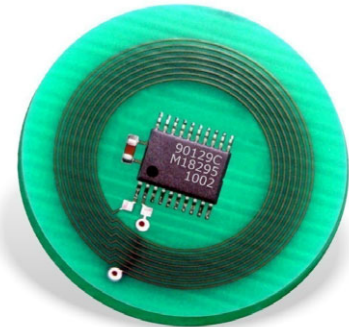
The SPI port can also connect the MLX90129 to a microcontroller which allows more specific applications, like adding actuating capability or RF transmission.

The MLX90129 has been optimized for low power, low voltage battery and battery-less applications.

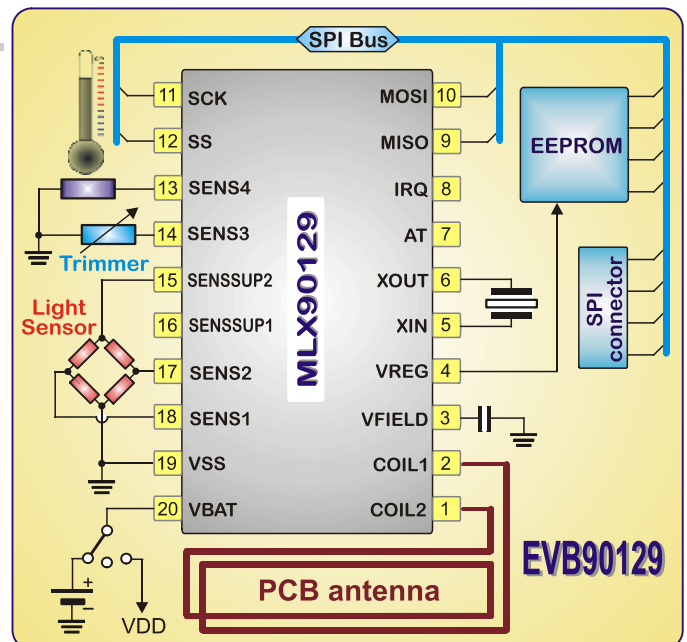
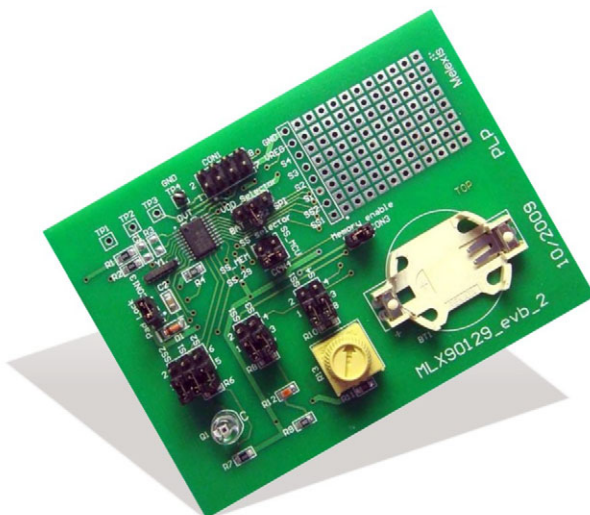
Features and Benefits

- ◆ Versatile A/D interface for resistive sensors
- ◆ ISO-15693 13.56MHz transponder
- ◆ Slave / Master SPI interface
- ◆ 4 k-bit EEPROM with access protection
- ◆ Standalone data logging mode
- ◆ Ultra low power
- ◆ Internal 32.768MHz RC-Oscillator
- ◆ Battery or batteryless applications
- ◆ Low cost and compact design
- ◆ Battery supply: 3V optional
- ◆ Operating temperature range: -40° C to 105° C
- ◆ TSSOP20 Package

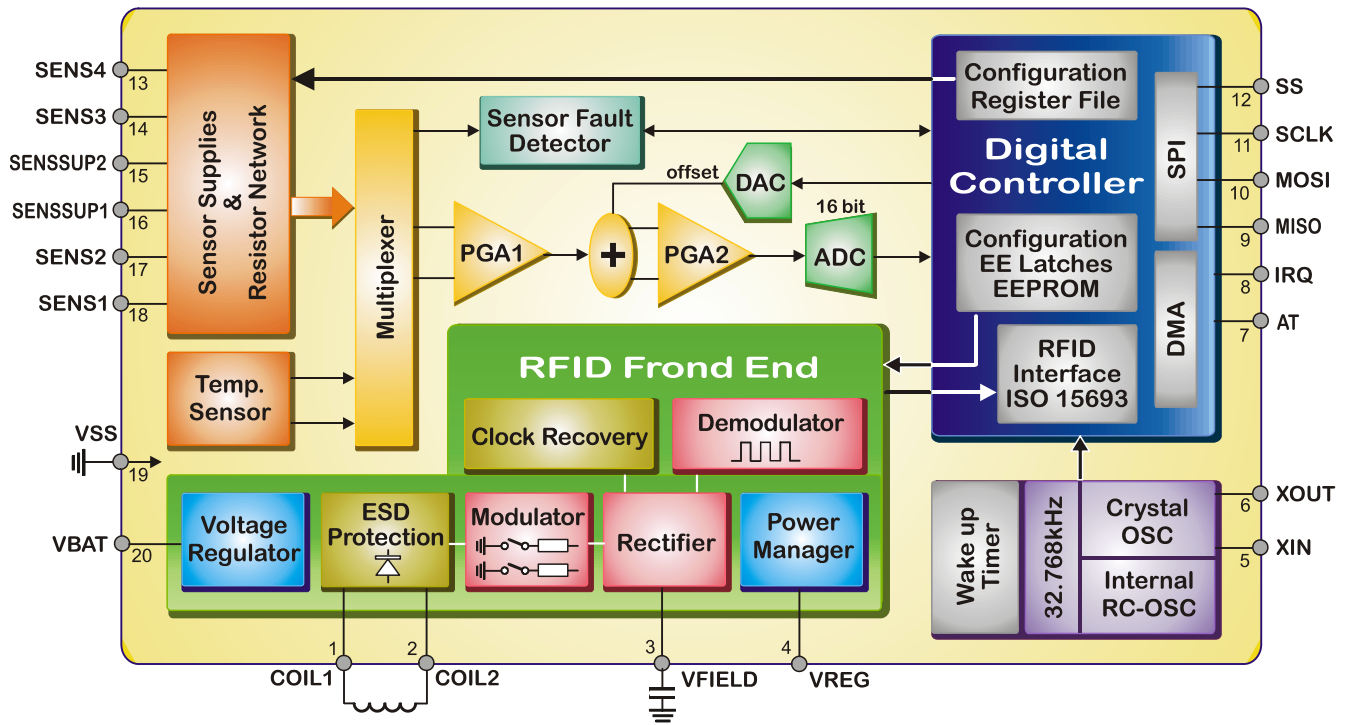
Temperature TAG



Evaluation Board



Blockdiagram MLX90129



Application Examples

