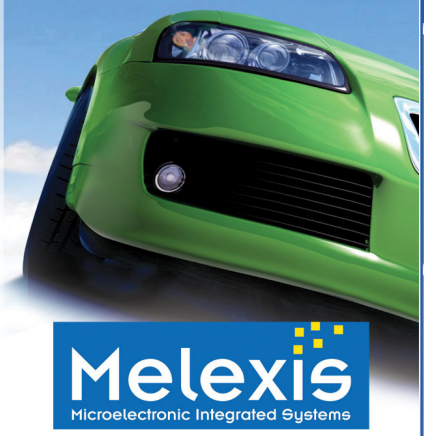
Product Information



MLX90129

13.56MHZ SENSOR TAG IC

The MLX90129 combines a precise acquisition chain, internal temperature sensor, interface for external resistive sensors, SPI port and a RFID tag front-end.

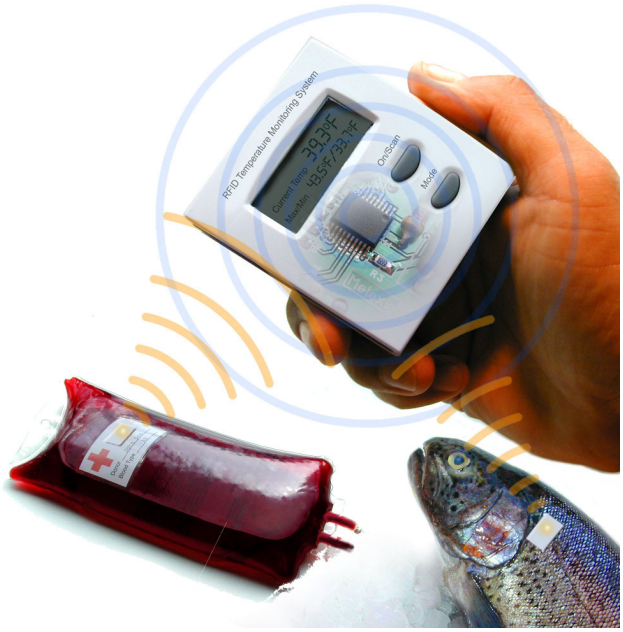
Description

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.

Without any other component than a 13,56MHz tuned antenna, it becomes a RFID thermometer.

For measuring others physical quantities, one or two resistive sensors can be connected to make batteryless sensing point. In this tag mode, the chip can supply a regulated voltage to the 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 E2PROM 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

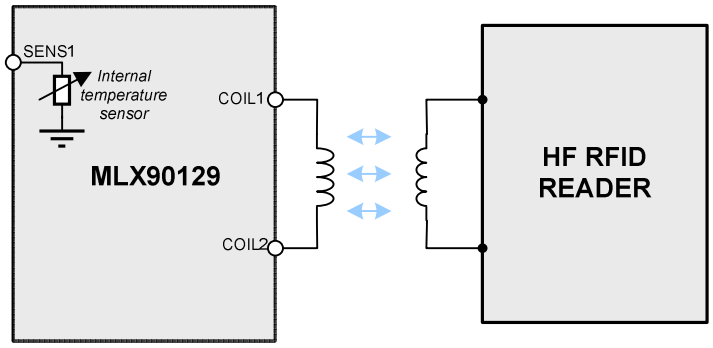
- Versatile A/D interface
- ISO-15693 13.56MHz transponder
- 4 k-bit EEPROM
- Standalone data-logging mode
- Ultra low power
- Battery or battery-less applications

Application example

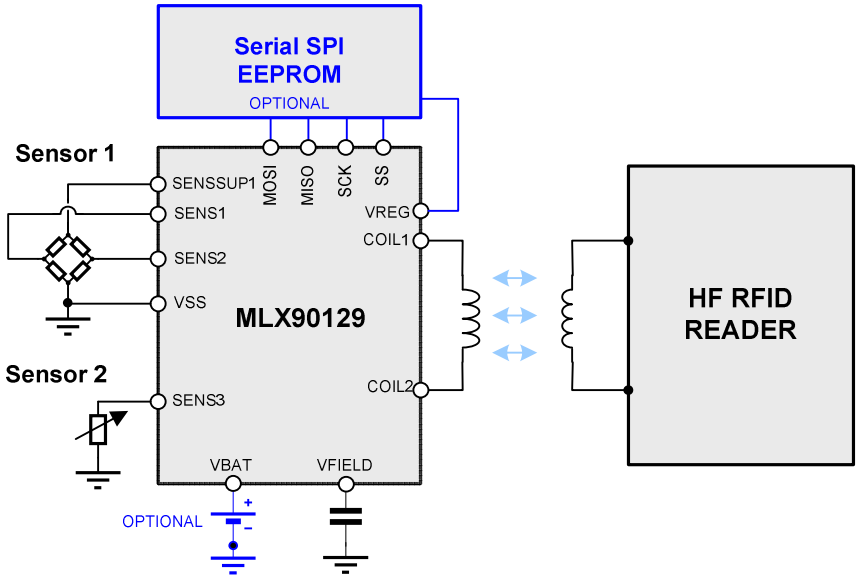
- Cold chain monitoring
- Asset management and monitoring
- Building automation
- Industrial and residential control
- Medical monitoring

Application schematics

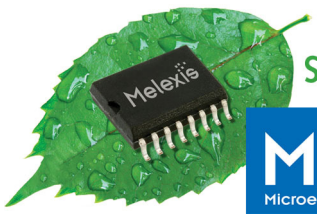
Temperature Sensor tag



Data logger



For additional information email **info@melexis.com**
or go to our website at: **www.melexis.com**



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