

Features

- ▶ Digital signal processing
- ▶ On chip supply shunt regulator
- ▶ Low power consumption
- ▶ Differential PIR sensor input
- ▶ Excellent power supply rejection
- ▶ Insensitive to RF interference
- ▶ Inputs for sensitivity and on time

Applications

- ▶ PIR motion detection
- ▶ Intruder detection
- ▶ Occupancy detection
- ▶ Motion sensor lights

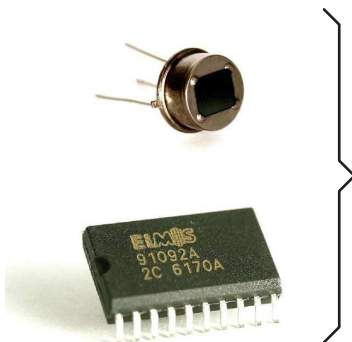
General Description

The E910.97 integrated circuit combines all required functions for a single chip Passive Infra Red (PIR) motion detector. Motion detection is signaled through the push-pull REL output. A digital input OEN enables REL output. The E910.97 interfaces directly to a PIR sensor element via a high impedance differential input. The PIR signal is converted to a 15 bit digital value. The parameters for sensitivity and timing are set by connecting the corresponding inputs to DC voltages. The voltage levels on the inputs are converted to digital values with 7 bit resolution. All signal processing is performed digitally. The E910.97 is assembled with a pyro-ceramic element in a hermetically sealed package.

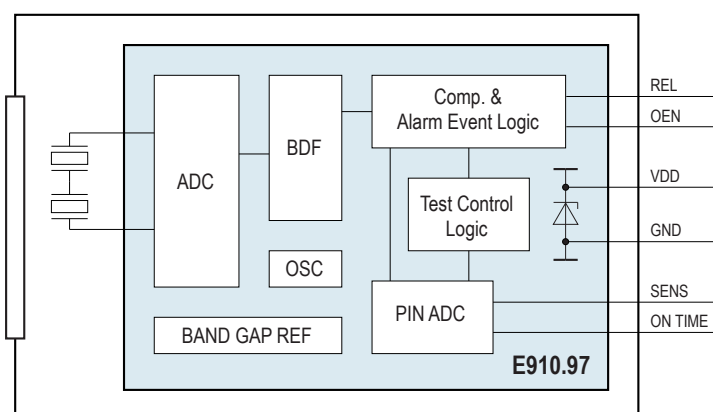
Digital Sensor Assembly with E910.97

The E910.97 PIR Controller results in a single component Solution for a Motion Sensor

Traditional analog PIR Sensor solution



New Smart PIR Detector with E910.97



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