

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, on time and daylight sensor
- ▶ Outputs for relay and LED
- ▶ Instantaneous settling after power up

Applications

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

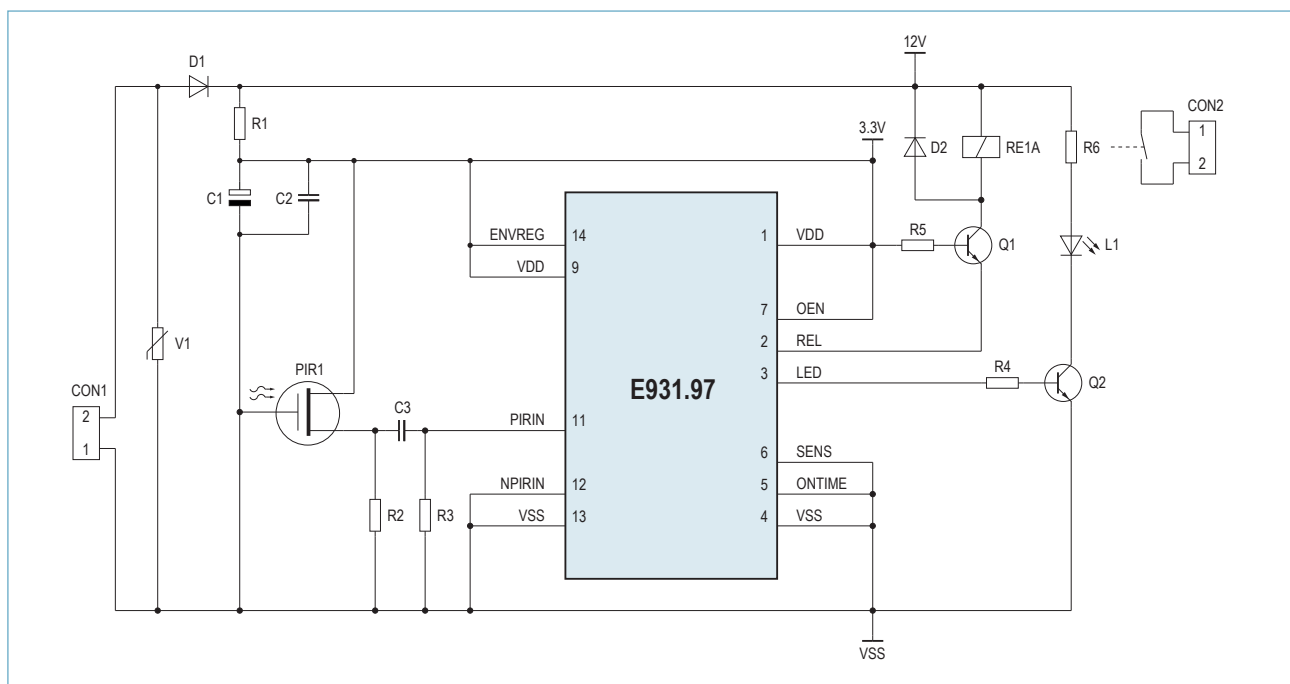
General Description

The E931.97 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. A LED output indicates whenever the PIR Signal is above the selected threshold. The E931.97 interfaces directly to up to two conventional PIR sensors via a high impedance differential input. The PIR signal is converted to a 15 bit digital value on chip. 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.

Ordering Information

Product ID	Temp. Range	Package
E931.97	-25°C to +85°C	TSSOP14/ SOIC14

Application Circuit For Wired Intruder Detector



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