

Features

- ▶ Direct connection to PIR sensor elements
- ▶ Temperature measurement
- ▶ Differential PIR Input
- ▶ Digital Signal Processing (DSP)
- ▶ Single wire serial interface (DOCITM)
- ▶ Operating voltage down to 2.7V
- ▶ Low current consumption
- ▶ High dynamic range
- ▶ High supply rejection

Applications

- ▶ Integration with PIR sensor elements (hybrid modules)
- ▶ High end PIR systems
- ▶ Building Management

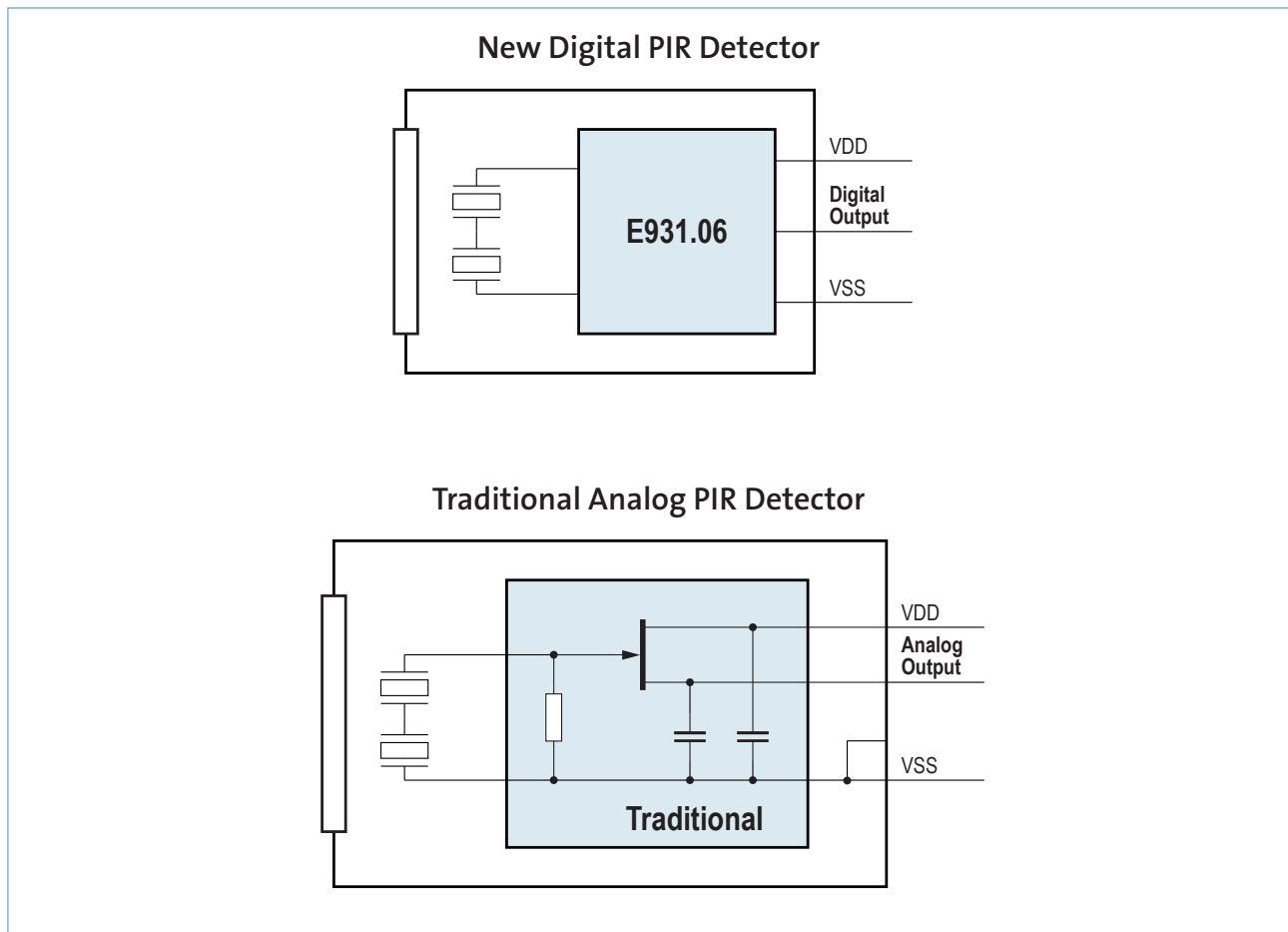
General Description

The E931.06 integrated circuit is designed for interfacing Passive Infra Red (PIR) sensors with micro-controllers or processors. A single wire Data Out, Clock In (DOCI) interface is provided for interfacing with a micro-controller. Multiple devices can easily be operated at the same time. One PIR sensors ceramic elements connect directly to the PIR inputs. The PIR signal is converted to a 14 bit digital value.

The E931.06 contains an on chip temperature measurement circuit with a resolution of better than 0.05K. The PIR sensor voltages and the temperature value are supplied to an external microcontroller through the DOCI interface.

Digital Sensor Assembly with E931.06

The E931.06 PIR Signal processor replaces the JFET and optional discrete components.



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