

## Dual Channel PIR Signal Processor

Production Data - Dec 16, 2016

E931.62



### Features

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

### Applications

- Integration with PIR sensor elements (hybrid modules)
- Gas sensors
- High end PIR systems

### General Description

The E931.62 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.

Up to two PIR sensors elements connect directly to the PIR inputs. The PIR signal is converted to a 14 bit digital value.

The E931.62 contains an on chip temperature measurement circuit with a resolution of better than 0.1K. The PIR sensor voltages and the temperature value are supplied to an external microcontroller through the DOCI™ interface.

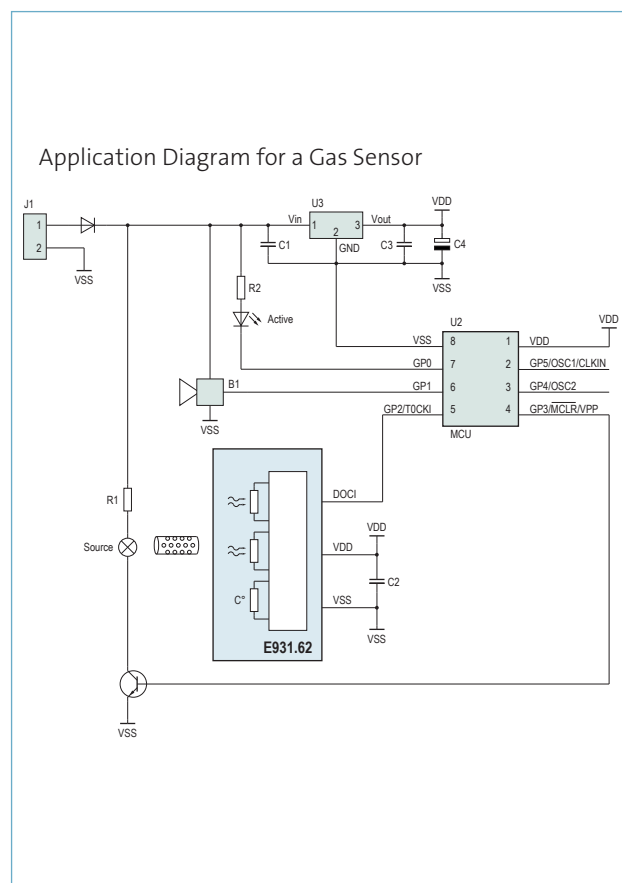
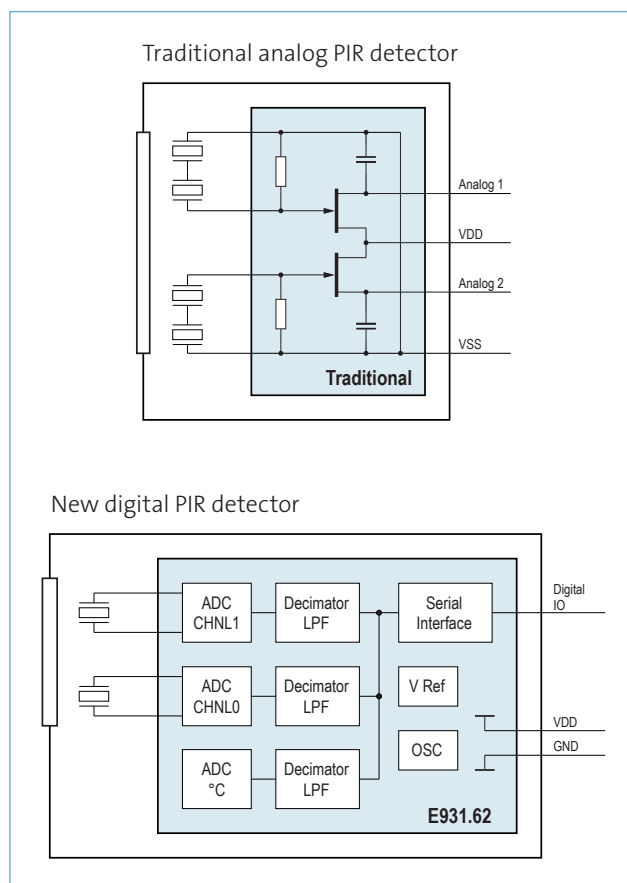
### Ordering Information

| Ordering-No.: | Temp <sub>ST</sub> Range | Package                |
|---------------|--------------------------|------------------------|
| E93162A22W    | -45°C to +125°C          | Wafer B - Entegris Box |

### Digital Sensor Assembly with E931.62

The E931.62 PIR Signal processor replaces the JFETs and optional discrete components.

The pin count of the detector is reduced to 3 pins.



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