

► Contact monitor (8 channel to GND, parallel interface)

FEATURES

- ▶ Supply voltage range VDD 4.75V to 5.25V
- ▶ Monitoring supply voltage range VS 5.25V to 25V
- ▶ Maximum overvoltage protection up to 40V
- ▶ Internal clamp diodes at each input to VS and GND
- ▶ Low standby current (typical $10\mu\text{A}$)
- ▶ Contact status monitoring by comparison of the resistance at the inputs with an internal reference
- ▶ High noise immunity
- ▶ -40°C to $+125^{\circ}\text{C}$ operating temperature
- ▶ SO20w package

APPLICATION

- ▶ Automotive electronics
- ▶ Monitor for mechanical switches
- ▶ Monitor for voltage levels

DESCRIPTION

The IC monitors the status of all switch contacts connected to ground continuously .

The input currents are compared with the current of an internal reference resistor. The IC is designed to operate with an external series resistor RIN0 to RIN7 of $1\text{k}\Omega$. The current, driven through the contacts keeps their resistance low.

The output switches to high when the input resistance increases to above $9\text{k}\Omega$ and switches to low when the input resistance falls below $1.5\text{k}\Omega$. These values are valid within the supply range 5.25V to 25V.

A closed switch corresponds to a low logic level on the outputs OUT0-7.

BLOCK DIAGRAM

