

Analog multiplexer 8:1  
 Contact monitor 8 × to GND, par. out  
 Contact monitor 8 × to VBAT, par. out  
 ▶ Contact monitor 2 × 4, adj., par. out  
 Contact monitor 2 × 4, par. out  
 Non volatile contact monitor  
 Contact monitor 16 ×, ser. out

## ▶ Contact monitor (4 × GND & 4 × VBAT, adjustable, parallel interface)

E910.35

### FEATURES

- ▶ Programmable input current of 1mA / 10mA
- ▶ Supply voltage range VS 5.25 to 25V
- ▶ Supply voltage range VDD 4.75 to 5.25V
- ▶ Maximum overvoltage protection up to 40V
- ▶ Low standby current (typical < 10μA)
- ▶ Contact status monitoring by comparing the switch resistance with the internal reference
- ▶ High noise immunity
- ▶ -40°C to +125 °C operating temperature
- ▶ SO24w package

### APPLICATION

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

### DESCRIPTION

The IC is developed for automotive applications. It continuously monitors the status of two groups of switch contacts connected to GND or VBAT.

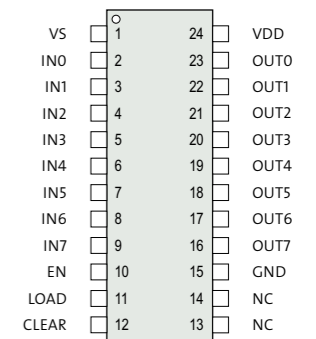
The input currents are compared to internal references. The IC is designed to operate with an external resistor of 1kΩ.

If the switch resistance is less than 1.5kΩ the IC will lead into an active state ('1' for switches to VBAT and '0' for switches to GND). If the resistance will be more than 9kΩ than the IC will switch to the corresponding inactive state. The input current as well as the tristate outputs are activated with the enable pin. Due to the tristate outputs the IC can be used in bus configuration.

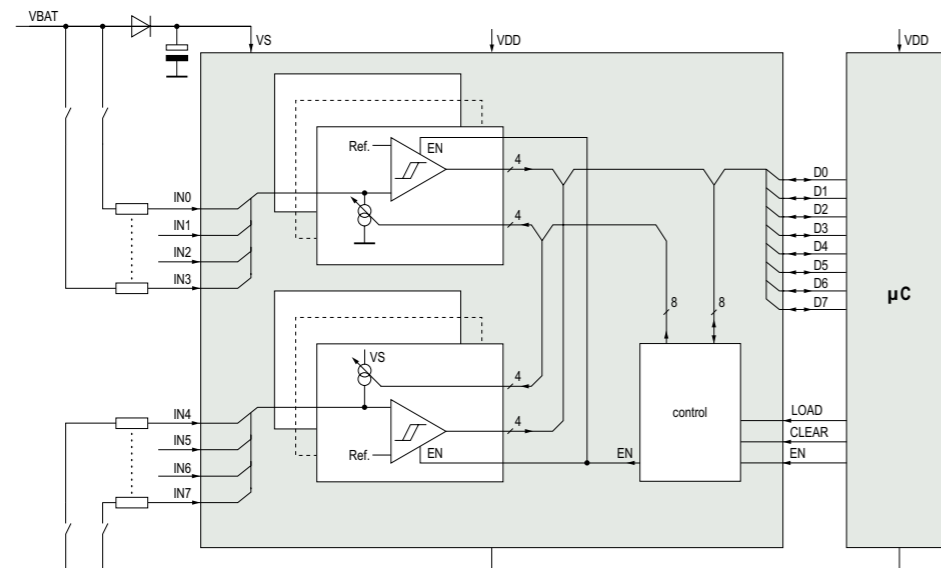
### PINNING

Pin	Name	Description
1	VS	Supply voltage
2	IN0	Input for switch to GND
3	IN1	Input for switch to GND
4	IN2	Input for switch to GND
5	IN3	Input for switch to GND
6	IN4	Input for switch to VBAT
7	IN5	Input for switch to VBAT
8	IN6	Input for switch to VBAT
9	IN7	Input for switch to VBAT
10	EN	Chip enable for input current and tristate outputs, active low
11	LOAD	Set current value register
12	CLEAR	Reset current value register
13	NC	Not connected
14	NC	Not connected
15	GND	Ground
16	OUT7	TTL compatible tristate data port
17	OUT6	TTL compatible tristate data port
18	OUT5	TTL compatible tristate data port
19	OUT4	TTL compatible tristate data port
20	OUT3	TTL compatible tristate data port
21	OUT2	TTL compatible tristate data port
22	OUT1	TTL compatible tristate data port
23	OUT0	TTL compatible tristate data port
24	VDD	Logic supply voltage

### PACKAGE



### BLOCK DIAGRAM



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