► Low side driver (8 channel, parallel interface)

E910.32 | 13

FEATURES

- Supply voltage range VDD 4.75V to 5.25V
- Driver supply voltage range VS 5.25V to 25V
- Low standby current (typical < 1µA)
- 8-bit-parallel structure with memory function
- Bidirectional inputs and outputs
- TTL-compatible input levels with threshold hysteresis
- 8 high current outputs (R_{on} < 3Ω, I_{max} = 350mA per channel, 8 channels capable of delivering I_{max} = 200mA simultaneously)
- Individual output short-circuit protection by switching off the corresponding output
- Integrated free wheeling diodes for inductive loads
- Thermal overload protection by switching off all outputs
- E910.32: –40°C to +125°C operating temperature, CMOS
- E910.13: –40°C to +150°C operating temperature, SOI
- SO24w package

APPLICATION

Driver for:

- Relays
- Lamps / LEDs
- DC and stepper motors
- Bus systems

DESCRIPTION

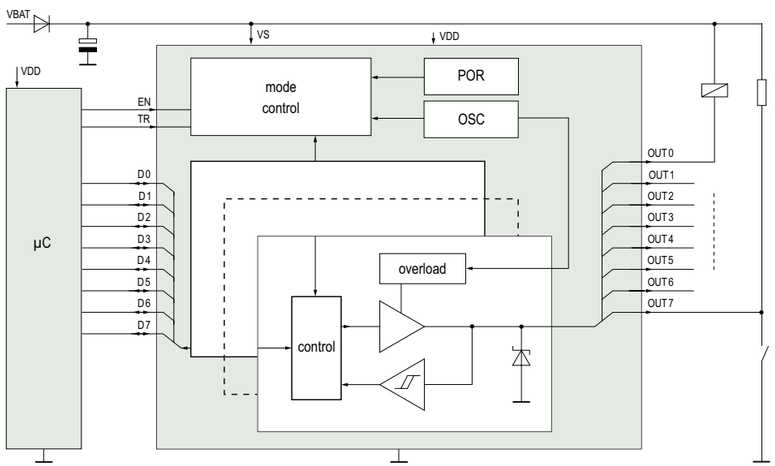
The IC is an 8 channel parallel power driver circuit (low side) with microcontroller compatible bidirectional dataports and output status monitoring.

This IC is designed for driving and controlling medium loads such as relays, lamps, LED, bus systems or other. It has got a bidirectional 8 bit-data bus and 8 identical power outputs.

With its readback capability the status of the load can be determined. That makes easy diagnosis possible and lets the designer even control simple switches.

Two versions are available: 910.32 in standard CMOS technology and 910.13 in SOI technology, which has high immunity against substrate currents.

BLOCK DIAGRAM



PINNING

Pin	Name	Description
1	GND	Ground
2	OUT0	Open - drain low - side driver
3	OUT1	Open - drain low - side driver
4	D0	Bidirectional data port for OUT0
5	D1	Bidirectional data port for OUT1
6	EN	Chip enable, active high
7	TR	Invokes the transfer - mode, active high
8	D2	Bidirectional data port for OUT2
9	D3	Bidirectional data port for OUT3
10	OUT2	Open - drain low - side driver
11	OUT3	Open - drain low - side driver
12	NC	Not connected
13	NC	Not connected
14	GND	Ground
15	OUT4	Open - drain low - side driver
16	OUT5	Open - drain low - side driver
17	D4	Bidirectional data port for OUT4
18	D5	Bidirectional data port for OUT5
19	VS	Driver supply voltage
20	D6	Bidirectional data port for OUT6
21	D7	Bidirectional data port for OUT7
22	OUT6	Open - drain low - side driver
23	OUT7	Open - drain low - side driver
24	VDD	Logic supply voltage

PACKAGE