

- Low side driver 8x, serial
- Low side driver 8x, parallel
- LCD controller

► Low side driver (8 channel, serial interface)

E910.01

FEATURES

- Supply voltage range VDD 4.5V to 5.5V
- Low standby current (typical <math>< 1\mu\text{A}</math>)
- Serial structure for direct μC interfacing
- Cascadable
- Output status detection
- TTL - compatible input levels with threshold hysteresis
- 8 high current outputs
(R_{ON} typ. $1.5\ \Omega$ / $I_{\text{max}}=350\text{mA}$)
- Wide output operating voltage range (5.5 to 25.5V)
- Output open- and short - circuit detection
- Individual output short - circuit protection
- Thermal overload protection
- -40°C to $+125^\circ\text{C}$ operating temperature
- SO20w package

APPLICATION

Driver for:

- Relays
- Lamps / LEDs
- DC and stepper motors

DESCRIPTION

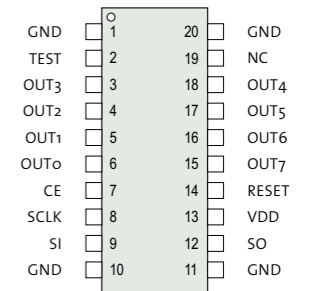
The IC is developed for automotive applications and can also be used in several other application areas. The IC is well suited to drive relays, lamps, bus systems etc. with medium power consumption.

The device provides a serial data bus for communication with a μC and 8 identical power drivers. All outputs are short circuit protected. A thermal shut-off protects the device against thermal overload. Readback capability enables fault detection as well as simple switch monitoring.

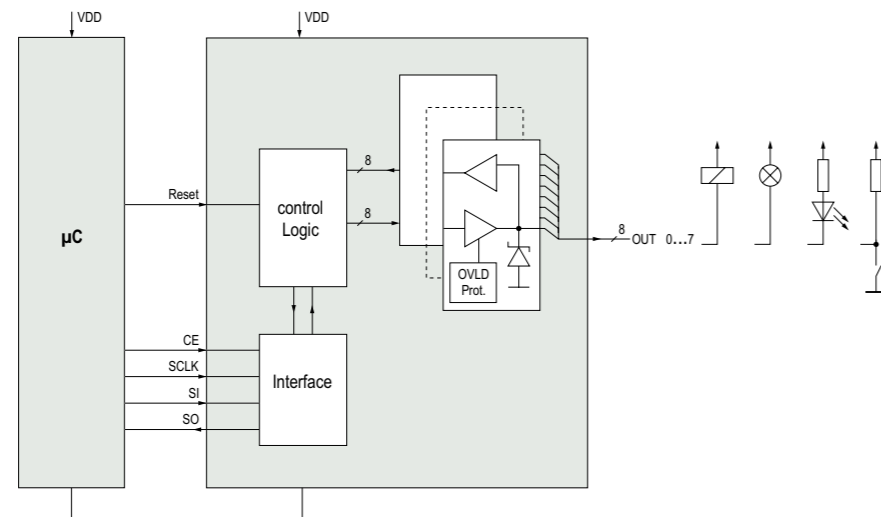
PINNING

Pin	Name	Description
1	GND	Ground
2	TEST	Connect to ground
3	OUT3	Open - drain low - side driver
4	OUT2	Open - drain low - side driver
5	OUT1	Open - drain low - side driver
6	OUT0	Open - drain low - side driver
7	CE	Open - drain low - side driver
8	SCLK	Chip enable - active low (output data is read back on the falling edge of the pulse and only after 8x n falling edges on SCLK is the output data clocked on the next rising edge)
9	SI	Serial clock input
10	GND	Serial data input
11	GND	Ground
12	SO	Ground
13	VDD	Serial data output (high impedance when CE = High)
14	RESET	Supply voltage
15	OUT7	External reset - active low (= internal power on reset)
16	OUT6	Open - drain low - side driver
17	OUT5	Open - drain low - side driver
18	OUT4	Open - drain low - side driver
19	NC	Not connected
20	GND	Ground

PACKAGE



BLOCK DIAGRAM



Note ELMOS Semiconductor AG (below ELMOS) reserves the right to make changes to the product contained in this publication without notice. ELMOS assumes no responsibility for the use of any circuits described herein, conveys no licence under any patent or other right, and makes no representation that the circuits are free of patent infringement. While the information in this publication has been checked, no responsibility, however, is assumed for inaccuracies. ELMOS does not recommend the use of any of its products in life support applications where the failure or malfunction of the product can reasonably be expected to cause failure of a life-support system or to significantly affect its safety or effectiveness. Products are not authorized for use in such applications.

Copyright © 2005 ELMOS Reproduction, in part or whole, without the prior written consent of ELMOS, is prohibited.

www.elmos.de | sales@elmos.de