► LCD controller, driver for grey scale, ECB color displays

E910.37

FEATURES

- Supply voltage range VDD 2.5V to 3.5V
- On-chip generation of VLCD adjustable from 4.5V to 14.5V
- Single chip LCD controller/driver for grey scale/ECB color
- Resolution 67 columns x 101 segments
- On chip temp. sensor
- Two-wire bidirectional serial bus or a serial interface (SPI)
- Selectable multiplexing rates: 1: 67, 1: 33
- Low power consumption, suitable for battery operated systems
- –40°C to +85°C operating temperature
- Slim chip layout, suited for chip-on-glass applications

APPLICATION

- Telecommunication
- Battery powered systems
- Automotive information systems

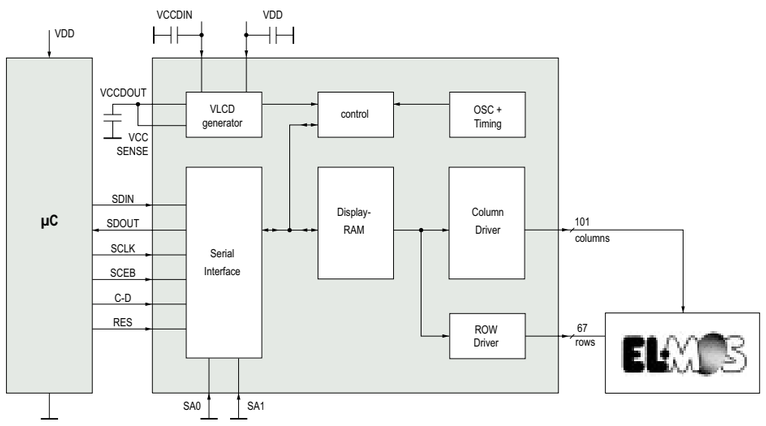
DESCRIPTION

The IC is a low-power CMOS LCD controller/driver, designed to drive grey - scale or ECB color dot matrix graphic displays at multiplex rates of 1:33 or 1:67.

All necessary functions for the display are provided in a single chip, including on-chip generation of VLCD and the LCD bias voltages. This results in a minimum requirement of external components and low power consumption.

The device is compatible to most micro-controller interfaces and communicates via a two-wire bi-directional serial bus or a serial interface (SPI). All inputs are CMOS compatible.

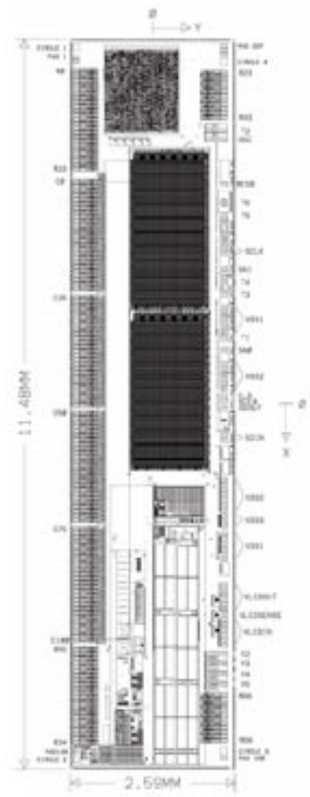
BLOCK DIAGRAM



PINNING

Name	Description
R0 ... R66	LCD row driver outputs
C0 ... C100	LCD column driver outputs
GND1, 2	Supply rails
VDD1	Logic supply voltage
VDD2, 3	Supply voltage for HVGen and temperature readout
VLCDSENSE	Voltage multiplier regulation input (VLCD)
VLCDIN	LCD supply voltage
V5, V4, V3, V2	LCD Intermediate bias levels
SDIN	Serial data line, input
SDOUT	Serial data line, output
SCLK	Serial clock line
SA0	Slave address input
SA1	Interface selection bit
OSC	Oscillator pin
RESB	Reset input
T1	Test 1 input
T2	Test 2 I/O
T3	Test 3 input
T4	Test 4 I/O
T5	Test 5 I/O
T6	Test 6 output
VLCDOUT	VLCD multiplier output
SCEB	Serial command enable
C_D	Data command select

PACKAGE



Gold bump die

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