G1625

7-bit Programmable VCOM Reference with Integrated Nonvolatile Memory

Features

- **Integrated Nonvolatile Memory to Store VCOM Setting**
- **100 Programming Times**
- **I ^{2}C Interface**
- **7-Bit, Adjustable Sink-Current Device**
- **Resistor-Adjustable, Full-Scale Range**
- **2.5V to 3.6V Logic Supply Range**
- **7V to 18V Analog Supply Range**
- **Protections:**
    - **Over Current Protection (OCP)**
    - **Over Temperature Protection (OTP)**
- **TDFN3X3-8 Package**
- **RoHS Compliant**

Applications
- **TFT-LCD Panels**

General Description

The G1625 provides a programmable reference voltage for TFT-LCD panel VCOM adjustment. A 7-bit digital-to-analog converter (DAC) detects current from an external resistor-divider to create the VCOM reference voltage. This voltage is used as the input to a high current drive voltage buffer.

G1625 includes one time programmable (OTP) memory to store the DAC code on the chip, eliminating the need for external EEPROM. The chip supports up to 100 write operations to OTP memory. G1625 has an I^{2}C interface to set the VCOM reference voltage and write into OTP memory.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1625RD1U	DS961	-40°C to +85°C	TDFN 3X3-8

Note: RD: TDFN3X3-8
    1: Bonding Code
    U: Tape & Reel

Pin Configuration

G1625

OUT	1	8	SET
AVDD	2	Thermal Pad	7	SCL
VCOM	3		6	SDA
GND	4	5	DVDD

TDFN3X3-8