# Level Shifters and Voltage Buffers for TFT LCD Panel

#### **Features**

- Five Level Shifters :
- 0V to 5.5V Input Voltage Range
- 0V to 18V Output Voltage Range
- 50mA Continuous Output Current (per channel)
- 250mA Peak Output Current (per channel)
- + 25V/µs Slew Rate
- Propagation Delay 80ns
- 50kHz Input Frequency
- Two Vcom Buffers :
  - Rail-to-Rail Input and Output Voltage Range
  - 50mA Continuous Output Current (per channel)
  - 200mA Peak Output Current (per channel)
- TQFN5X5-32 Package Available

### **Applications**

**■ TFT-LCD Panels** 

#### **General Description**

The G1580 consists of five level shifters and two Vcom buffers target toward the needs of thin film transistor liquid crystal display (TFT LCD). The embedded level shifters can shift digital input signals to the output voltage levels provided by REFH and REFL pins. The REFH and REFL input voltage range can be nearly equal to the supply voltage. The G1580 also incorporates two Vcom buffers. Each buffer is capable of driving heavy capacitive loads and offering fast current loading of 50mA.

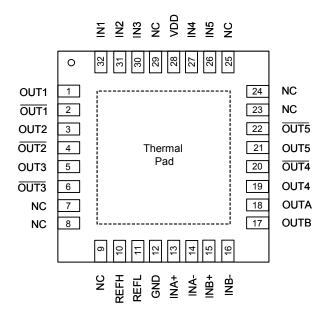
The G1580 is available in the TQFN5X5-32 package.

### **Ordering Information**

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Pb free)
G1580RA1U	1580	-40°C to 85°C	TQFN5X5-32

Note: RA: TQFN5x5-32 1: Bonding Code U: Tape & Reel

## **Pin Configuration**



G1580 TQFN5X5-32

Note: Recommend connecting the Thermal Pad to the GND for excellent power dissipation.