

Programmable 14+1 Channel Voltage Buffers with NVM for TFT LCD

Features

- Supply Operation Range : 6.5V to 18V
- 14+1 Channels :
 - 14 Channel Rail-to-Rail Programmable Gamma Buffers
 - ◆ 10 bits Resolution for each Channel
 - ◆ 25mA Output Current for each Channel
 - ◆ 2 Banks Registers Using Bank_Sel to Select which Bank Data Output
 - 1 Channel Rail-to-Rail Vcom Buffer:
 - ◆ 7 Bits Adjustable Output
 - ◆ $\pm 100\text{mA}$ Output Current
 - ◆ $\pm 140\text{mA}$ Output Short-Circuit Current
 - ◆ $20\text{V}/\mu\text{s}$ Slew Rate
- 2-Wire I²C Slave Mode Interface
- Using One Control Pin Enable to Store Data into Non-Volatile Memory (NVM)
- Non-Volatile Memory (NVM) Store Setting (at Least 100 Re-Write Times)
- TQFN5X5-32 Package

Applications

- TFT-LCD Monitors
- LCD Televisions

General Description

The G1620 consists of 14+1 channel buffers target toward the needs of thin film transistor liquid crystal display (TFT LCD). This device incorporates one Vcom buffer and 14 gamma buffers, and are programmed through I²C interface. It contains two register banks which can store two different sets of gamma reference values. Each buffer is capable of driving heavy capacitive loads and offering large current loading (Vcom: 100mA, Gammas: 25mA).

The G1620 is available in the TQFN5X5-32 package.

Ordering Information

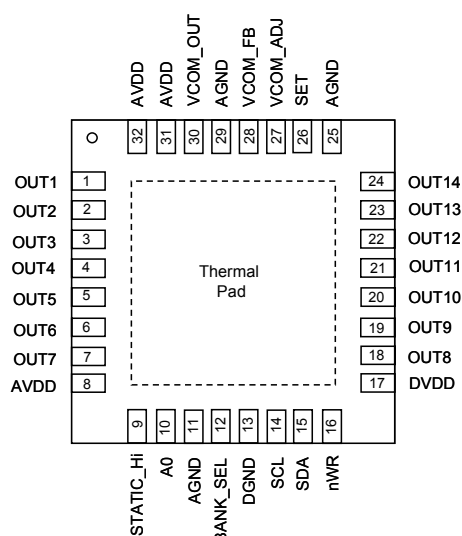
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1620RA1U	1620	-40°C to +85°C	TQFN5X5-32

Note: RA: TQFN5X5-32

1: Bonding Code

U: Tape & Reel

Pin Configuration



G1620 TQFN5X5-32

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

Typical Application Circuit

