

## Programmable 16+2 Channel Voltage Buffers with NVM for TFT LCD

### Features

- Supply Operation Range : 7V to 20V
- 16+2 Channels :
  - 16 Channel Rail-to-Rail Programmable Gamma Buffers
    - ◆ 10 bits Resolution for each Channel
    - ◆ 25mA Output Current for each Channel
  - 2 Channel Rail-to-Rail Vcom Buffers:
    - ◆ 10 Bits Adjustable Output
    - ◆ ±100mA Output Current
    - ◆ ±300mA Output Short-Circuit Current
    - ◆ 50V/μs Slew Rate
    - ◆ Programmable VCOM Limits
- 2 Banks Registers Using BKSEL to Select which Bank Data Output
- 2-Wire I<sup>2</sup>C Slave Mode Interface
- Non-Volatile Memory (NVM) Store Setting (at Least 100 Re-Write Times)
- QFN5X5-28 Package

### Applications

- TFT-LCD Monitors
- LCD Televisions

### General Description

The G1606 consists of 16+2 channel buffers target toward the needs of thin film transistor liquid crystal display (TFT LCD). This device incorporates 2 Vcom buffers and 16 gamma buffers, and is programmed through I<sup>2</sup>C interface. It contains two register banks which can store two different sets of gamma and VCOM values. Each buffer is capable of driving heavy capacitive loads and offering large current loading (Vcoms: 100mA, Gammas: 25mA).

The G1606 is available in the QFN5X5-28 package.

### Ordering Information

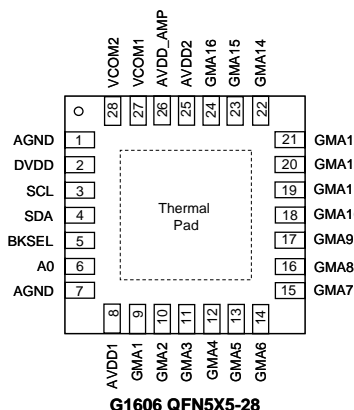
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1606Q61U	1606	-40°C to 85°C	QFN5X5-28

Note :Q6: QFN5X5-28

1: Bonding Code

U: Tape & reel

### Pin Configuration



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

### Typical Application Circuit

