

ISL24813

Programmable 18-Channel x 2 Bank, 10-Bit TFT-LCD  $V_{REF}$  Generator with Buffered  $V_{COM}$  Calibrator

FN6615  
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The ISL24813 is an I<sup>2</sup>C programmable 18-channel, 10-bit reference voltage generator with a digitally controlled  $V_{COM}$  calibrator and op amp. Two selectable banks of 18 channels allow fast hardware or software switching between two different gamma curves. The ISL24813 is configured and controlled via a standard I<sup>2</sup>C interface.

ISL24813 is available in a 32 Ld TQFN package and is specified for operation across the -40°C to +85°C temperature range.

**Features**

- 18 I<sup>2</sup>C programmable 10-bit DACs
- Integrated programmable  $V_{COM}$  calibrator
- One  $V_{COM}$  op amp
- Two banks of volatile memory for DACs
- 5V to 18V analog supply range
- 2.5V to 3.3V digital supply range
- 20mA analog supply current (unloaded)
- 700µA digital supply current
- I<sup>2</sup>C serial interface
- Pb-free (RoHS compliant)

**Applications**

- TFT-LCD column driver reference generator
- General-purpose reference voltage generators

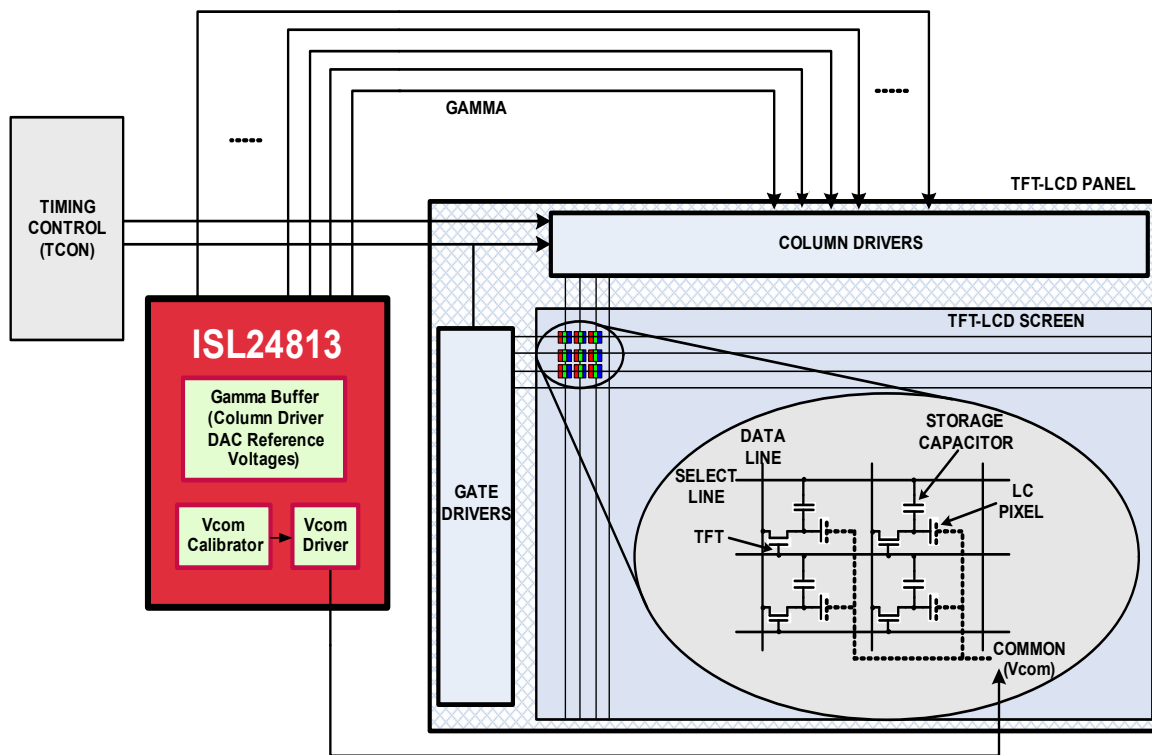


FIGURE 1. TYPICAL APPLICATION CIRCUIT

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