ISL24005

14-Channel Programmable I2C TFT-LCD Reference Voltage Generator with Integrated 4-Channel Static Gamma Buffers and Integrated VCOM Calibrator

FN6304
Rev 1.00
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The ISL24005 is a 14-Channel programmable reference voltage generator with four channels of static gamma buffers and a programmable V_{COM} calibrator.

The ISL24005 is divided into two sets of seven generators: one is designed to cover the range from V_{REFL_L} to V_{REFL_H}, and the other is designed to cover the range from V_{REFU_L} to V_{REFU_H}.

The V_{COM} calibrator is the sink-current output that attaches to an external voltage divider. The desired V_{COM} setting can be adjusted by the I^2C interface.

ISL24005 is available in the 32 Ld Thin QFN package and is specified for operation over the -40°C to +85°C temperature range.

Ordering Information

PART NUMBER (Note)	PART MARKING	PACKAGE (Pb-Free)	PKG. DWG. #
ISL24005IRTZ*	ISL240 05IRTZ	32 Ld TQFN	L32.5x5C

*Add "-T13" suffix for tape and reel. Please refer to TB347 for details on reel specifications.
NOTE: These Intersil Pb-free plastic packaged products employ special Pb-free material sets, molding compounds/die attach materials, and 100% matte tin plate plus anneal (e3 termination finish, which is RoHS compliant and compatible with both SnPb and Pb-free soldering operations). Intersil Pb-free products are MSL classified at Pb-free peak reflow temperatures that meet or exceed the Pb-free requirements of IPC/JEDEC J STD-020.

Features

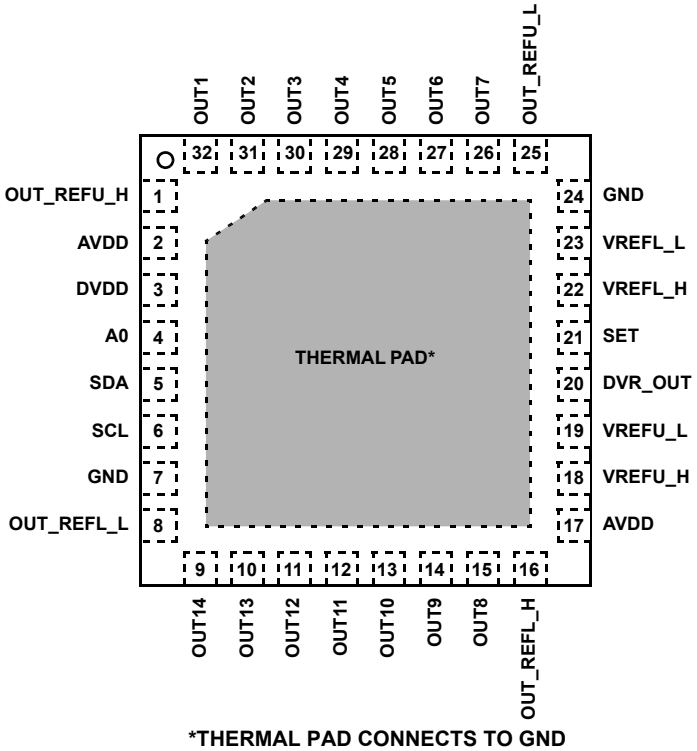
- 14 Programmable Voltages
- Integrated Programmable V_{COM} Calibrator
- 4-Channel Static Buffers
- 20mV Resolution (8-bits)
- Analog Supply: 4.5V to 19V @ 11mA (Unloaded)
- Digital Supply: 2.25V to 3.6V @ 0.7mA (Unloaded)
- I^2C Interface
- Pb-Free (RoHS compliant)

Applications

- TFT-LCD Column Driver Reference Generator
- General-Purpose Reference Voltage Generators

Pinout

ISL24005
(32 LD TQFN)
TOP VIEW



*THERMAL PAD CONNECTS TO GND

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