Analog IC / Discrete total solution provider



U74GTL2014

4-channel LVTTL to GTL Transceiver

Description

>U74GTL2014 is a 4-channel transceiver IC designed for interfacing LVTTL chipset I/O with GTL processor I/O. The LVTTL input of U74GTL2014 are tolerant up to 5.5V, allowing direct access to TTL or 5V CMOS signals. The GTL input and output of U74GTL2014 operate up to 3.6V, allowing the device to be used in higher voltage open-drain output applications.

➤GTL (Gunning Transceiver Logic): A GTL input stage is comparator based, identifying high/low logic by referencing the input to a fixed (external) voltage. ➤LVTTL (Low Voltage Transistor-Transistor Logic): compliant to standard TTL with 3.3V-operational voltage supply.

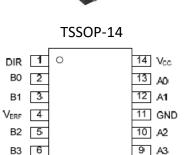
Features

- Operates as a 4-bit GTL-/GTL/GTL+ sampling receiver or as a LVTTL to GTL-/GTL/GTL+ driver
- ◆ Capable of low V_{RFF} 0.5V operation for low-voltage CPU
- ◆ Partial-power-down permitted

Applications

- ◆ Server
- ◆ Base station
- Wired communication

Pin description



8 GND

GND

- ◆ DIR: controls the direction of transmission either from Ax to Bx, or from Bx to Ax
- ◆ Bx: can be either input or output. If it is implemented for GTL signals, the logic status is determined by comparison with a reference voltage. Bx is open-drain configured.
- ◆ Ax: can be either input or output. It is defined as LVTTL logic.
- \bullet V_{REF}: is provided as reference voltage while Bx is input. V_{REF} should connect to ground while Ax is input.



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Automotive electronics



Wired communication



Rack-mounted power supplies



Computer

