NLSX4373

Level Translator, 2-Bit, 20 Mbps, Dual-Supply

Product Overview

For complete documentation, see the data sheet.

The NLSX4373 is a 2-Bit configurable dual-supply bidirectional auto sensing translator that does not require a directional control pin. The VCC I/O and VL I/O ports are designed to track two different power supply rails, VCC and VL respectively. The VCC supply rail is configurable from 1.5V to 5.5V while VL supply rail is configurable from 1.5V to 5.5V. This allows voltage logic signals on the VL side to be translated into lower, higher or equal value voltage logic signals on the VCC side and vice-versa. The NLSX4373 translator has open-drain outputs with integrated 10K Ohm pullup resistors on the I/O lines. The integrated pullup resistors are used to pullup the I/O lines to either VL or VCC. The NLSX4373 is an excellent match for open-drain applications such as the I2C communication bus.

Features

- Wide VCC Operating Range: 1.5V to 5.5VWide VL Operating Range: 1.5V to 5.5V
- High-Speed with 20 Mb/s Guaranteed Data Rates
- Low BIt-to-bit skew
- Small Packaging - 1.8 x 1.2 x 0.5mm UDFN8

Benefits

- Allows for ease of integration to multiple voltage systems.
- Minimizes system delays
- Good for differential signaling
- Physical space savings over alternate solutions

Applications

- I2C, SMBus, PMBus
- Low Voltage ASIC Level Translation

End Products

- Mobile Phones, PDAs, Cameras

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Channels	Input Level	V_{CC} Min (V)	V_{CC} Max (V)	t_{pd} Max (ns)	I_O Max (mA)	Package Type
NLSX4373DMR2G	0.6826	Pb H	Active	2	CMOS	1.5	5.5	20	1	Micro8
NLSX4373DR2G	0.42	Pb H	Active	2	CMOS	1.5	5.5	20	1	SOIC-8
NLSX4373MUTAG	0.4	Pb H	Active	2	CMOS	1.5	5.5	20	1	UDFN-8
NLVSX4373DR2G	0.4307	A P Pb H	Active	2	CMOS	1.5	5.5	20	1	SOIC-8
NLVSX4373MUTAG	0.5867	A P Pb H	Active	2	CMOS	1.5	5.5	20	1	UDFN-8