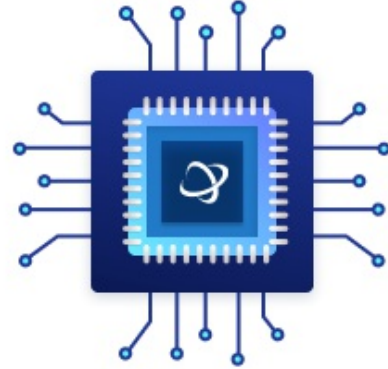


Translation - Voltage Levels 2 BIT TRANSLATOR

Manufacturers	ON Semiconductor, LLC
Package/Case	Micro8-8
Product Type	Logic ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for NLSX5012DMR2G or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The NLSX5012 is a 2-bit configurable dual-supply autosensing bidirectional level translator that does not require a direction control pin. The I/O Vcc- and I/O VL- ports are designed to track two different power supply rails, Vcc and VL respectively. Both the Vcc and the VL supply rails are configurable from 0.9V to 4.5V. This allows a logic signal on the VL side to be translated to either a higher or a lower logic voltage on the Vcc side, and vice-versa. The NLSX5012 offers the feature that the values of the VCC and VL supplies are independent. Design flexibility is maximized because VL can be set to a value either greater than or less than the VCC supply. In contrast, the majority of competitive auto sense translators have a restriction that the value of the VL supply must be equal to less than (VCC-0.4)V. The NLSX5012 has high output current capability, which allows the translator to drive high capacitive loads such as most high frequency EMI filters. Another feature of the NLSX5012 is that each I/O VLn and I/O VCCn channel can function as either an input or an output. An Output Enable (EN) input is available to reduce the power consumption. The EN pin can be used to disable both I/O ports by putting them in 3-state which significantly reduces the supply current from both VCC and VL. The EN signal is referenced to the VL supply.

Features

Wide VCC, VL Operating Range: 0.9 V to 4.5 V

VL and VCC are independent VL may be greater than, equal to, or less than VCC

High 100 pF Capacitive Drive Capability

HighSpeed with 140 Mb/s Guaranteed Data Rate for VCC, VL > 1.8 V

Low Bit to Bit Skew

Overvoltage Tolerant Enable and I/O Pins

Nonpreferential PowerUp Sequencing

PowerOff Protection

Small packaging: UDFN8, SO8, Micro8

These are PbFree Devices

Application

ONSEMI

Related Products



[NLSV2T244MUTAG](#)

ON Semiconductor, LLC
UDFN8



[NL27WZU04DFT2G](#)

ON Semiconductor, LLC
SC-70-6



[NL17SZI26DFT2G](#)

ON Semiconductor, LLC
SC-70-5



[NL27WZ00USG](#)

ON Semiconductor, LLC
VFSOP-8



[NLSV1T34DFT2G](#)

ON Semiconductor, LLC
SC-88A



[NL17SZ32DFT2G](#)

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SC-70



[NL17SZ00DFT2G](#)

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SC-70



[NL37WZ17USG](#)

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US8-8