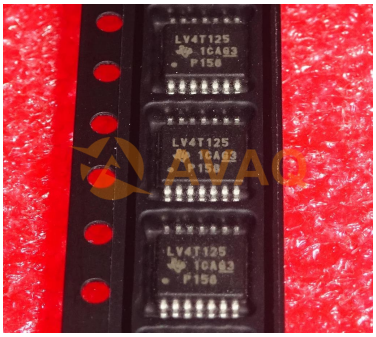
SN74LV4T125PWR

Voltage Level Shifter 4-CH Unidirectional Automotive 14-Pin TSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	TSSOP14
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

SN74LV4T125 is a low-voltage CMOS buffer gate that operates at a wider voltage range for portable, telecom, industrial, and automotive applications. The output level is referenced to the supply voltage and is able to support 1.8-V, 2.5-V, 3.3-V, and 5-V CMOS levels.

The input is designed with a lower threshold circuit to match 1.8-V input logic at V_{CC} = 3.3 V and can be used in 1.8 V to 3.3 V level-up translation. In addition, the 5-V tolerant input pins enable down translation (for example, 3.3 V to 2.5 V output at V_{CC} = 2.5 V). The wide V_{CC} range of 1.8 V to 5.5 V allows the generation of desired output levels to connect to controllers or processors.

The SN74LV4T125 device is designed with current-drive capability of 8 mA to reduce line reflections, overshoot, and undershoot caused by high-drive outputs.

Key Features

Single-Supply Voltage Translator at 5.0-V, 3.3-V, 2.5-V, and 1.8-V V_{CC}

Operating Range of 1.8 V to 5.5 V

Up Translation
1.2 V[(1)] to 1.8 V at 1.8-V V_{CC}

1.5 V[(1)] to 2.5 V at 2.5-V V_{CC}

1.8 V[(1)] to 3.3 V at 3.3-V V_{CC}

3.3 V to 5.0 V at 5.0-V V_{CC}

Down Translation
3.3 V to 1.8 V at 1.8-V V_{CC}

3.3 V to 2.5 V at 2.5-V V_{CC}

5.0 V to 3.3 V at 3.3-V V_{CC}

Logic Output is Referenced to V_{CC}

Characterized up to 50 MHz at 3.3-V V_{CC}

5.5 V Tolerance on Input Pins

–40°C to 125°C Operating Temperature Range

Pb-Free Packages Available: SC-70 (RGY)
3.5 × 3.5 × 1 mm

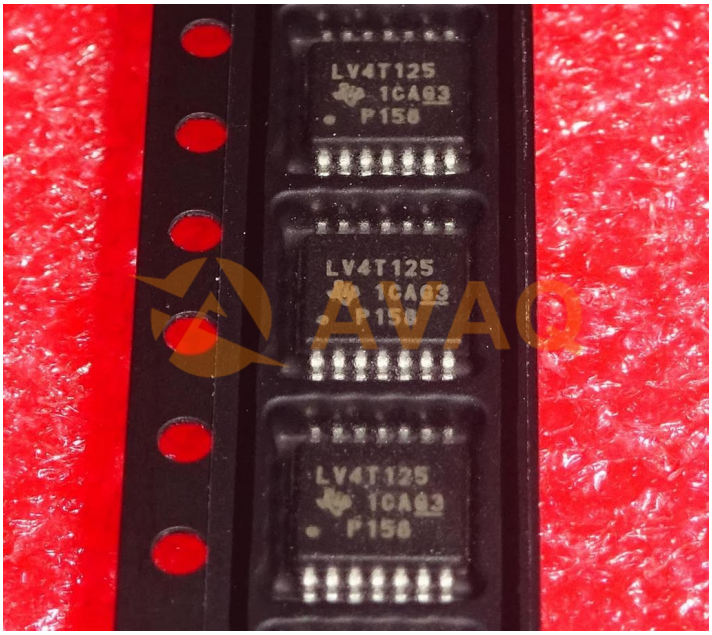
Latch-Up Performance Exceeds 250 mA Per JESD 17

Supports Standard Logic Pinouts

I_{off} Support Partial-Power-Down Mode Operation

CMOS Output B Compatible with AUP125, LVC125 [(1)]

[(1)]Refer the V_{IH}/V_{IL} and output drive for lower V_{CC} condition.



Recommended For You

SN74S38N

Texas Instruments, Inc

DIP

SN7438N

Texas Instruments, Inc

DIP14

SN75462P

Texas Instruments, Inc

DIP8

SN74F08D

Texas Instruments, Inc

SOP-14

SN74LS257BN

Texas Instruments, Inc

DIP16

SN75452BP

Texas Instruments, Inc

DIP8

SN74LS245DW

Texas Instruments, Inc

SOP20

SN74LS74AN

Texas Instruments, Inc

DIP

SN74S74N

Texas Instruments, Inc

DIP

SN7406N

Texas Instruments, Inc

DIP-14

SN74CBTLV3257D

Texas Instruments, Inc

SOP-16P

SN74HC138DR

Texas Instruments, Inc

SOP16

SN74LS14N

Texas Instruments, Inc

DIP

SN74HC139N

Texas Instruments, Inc

DIP

SN74AVC16T245DGGR

Texas Instruments, Inc

TSSOP48