

Product Overview

74VHC157: Quad 2-Input Multiplexer

For complete documentation, see the data sheet.

The VHC157 is an advanced high speed CMOS Quad 2-Channel Multiplexer fabricated with silicon gate CMOS technology. It achieves the high speed operation similar to equivalent Bipolar Schottky TTL while maintaining the CMOS low power dissipation. It consists of four 2-input digital multiplexers with common select and enable inputs. When the ENABLE# input is held "H" level, selection of data is inhibited and all the outputs become "L" level. The SELECT decoding determines whether the I_{0x} or I_{1x} inputs get routed to their corresponding outputs. An Input protection circuit ensures that 0V to 7V can be applied to the input pins without regard to the supply voltage. This device can be used to interface 5V to 3V systems and on two supply systems such as battery back up. This circuit prevents device destruction due to mismatched supply and input voltages.

Features

- High Speed: $t_{PD} = 4.1$ ns (typ) at $V_{CC} = 5V$
- Low power dissipation: $I_{CC} = 4$ μA (max.) at $T_A = 25^\circ C$
- High noise immunity: $V_{NIH} = V_{NIL} = 28\%$ V_{CC} (min.)
- Power down protection is provided on all inputs
- Low noise: $V_{OLP} = 0.8V$ (max.)
- Pin and function compatible with 74HC157

Applications

- This product is general usage and suitable for many different applications.

Part Electrical Specifications

Product	Compliance	Status	Channels	V_{CC} Min (V)	V_{CC} Max (V)	t_{pd} Max (ns)	I_O Max (mA)	Package Type
74VHC157M	Pb-free	Active	4	2	5.5	7.1	8	SOIC-16
74VHC157MTC	Pb-free Halide free	Active	4	2	5.5	7.1	8	TSSOP-16
74VHC157MTCX	Pb-free Halide free	Active	4	2	5.5	7.1	8	TSSOP-16
74VHC157MX	Pb-free	Active	4	2	5.5	7.1	8	SOIC-16

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