National Semiconductor

ADVANCE INFORMATION
January 1997

NC7SZ384
Tiny UHS 1-Bit Low Power Bus Switch

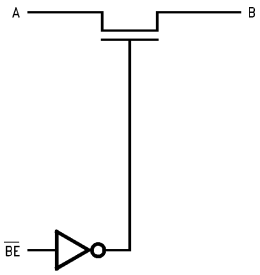
General Description

The NC7SZ384 provides 1-bit of high-speed CMOS TTL-compatible bus switch. The low on resistance of the switch allows inputs to be connected to outputs without adding propagation delay or generating additional ground bounce noise. The device is organized as a 1-bit switch with a bus enable ($\overline{BE}$) signal. When $\overline{BE}$ is low, the switch is on and port A is connected to port B. When $\overline{BE}$ is high, the switch is open and a high-impedance state exists between the two ports.

Features

- 5Ω switch connection between two ports
- Zero propagation delay
- Ultra low I_{CC}
- Zero bounce in flow-through mode
- Control inputs compatible with TTL level
- Available in SOT23-5 packaging

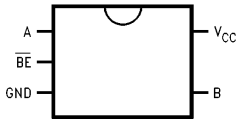
Logic Diagram



TL/F/12178–1

Connection Diagram

Pin Assignment for TinyPak™



TL/F/12178–2

Truth Table

$\overline{BE}$	B	Function
L	A	Connect
H	HIGH-Z State	Disconnect

Pin Names	Description
$\overline{BE}$	Bus Switch Enable
A	Bus A
B	Bus B

	5-Pin SOT23-5	Supplied As
Order Number	NC7SZ384M5 NC7SZ384M5X	250 Units in Tape and Reel 3000 Units in Tape and Reel
See NS Package Number	MA05B	

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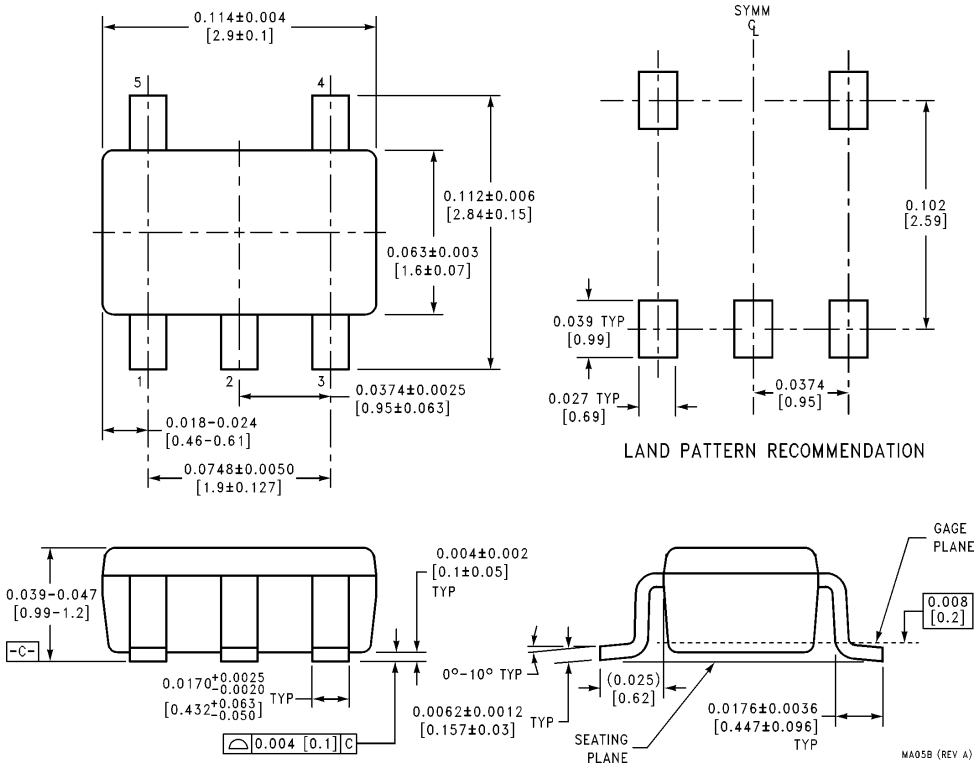
Physical Dimensions inches (millimeters) unless otherwise noted



Molded Package, SOT23-5, 5-Lead Enhanced Thermal
Order Number NC7SZ384M5 or NC7SZ384M5X
NS Package Number MA05B

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