

NC7SV125

TinyLogic ULP-A Buffer with 3-STATE Output

Product Overview

For complete documentation, see the data sheet.

The NC7SV125 is a single buffer with 3-STATE output from ON Semiconductor's Ultra Low Power-A (ULP-A) Series of TinyLogic®. ULP-A is ideal for applications that require extreme high speed, high drive and low power. This product is designed for wide low voltage operating range (0.9V to 3.6V VCC) and applications that require more drive and speed than the TinyLogic ULP series, but still offer best in class low power operation. The NC7SV125 is uniquely designed for optimized power and speed, and is fabricated with an advanced CMOS technology to achieve high-speed operation while maintaining low CMOS power dissipation.

Features

- 0.9V to 3.6V VCC supply operation
- 3.6V overvoltage tolerant I/O's at VCC from 0.9V to 3.6V
- Extremely High Speed t_{PD} 1.0 ns typ for 2.7V to 3.6V VCC 2.0 ns typ for 2.3V to 2.7V VCC 3.0 ns typ for 1.65V to 1.95V VCC 3.5 ns typ for 1.4V to 1.6V VCC 6.0 ns typ for 1.1V to 1.3V VCC 13 ns typ for 0.9V VCC
- Power-Off high impedance inputs and outputs
- High Static Drive (IOH/IOL) ± 24 mA @ 3.00V VCC ± 18 mA @ 2.30V VCC ± 6 mA @ 1.65V VCC ± 4 mA @ 1.4V VCC ± 2 mA @ 1.1V VCC ± 0.1 mA @ 0.9V VCC
- Uses patented Quiet Series™ noise/EMI reduction circuitry
- Ultra small MicroPak™ leadfree package
- Ultra low dynamic power

Applications

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

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channels	Output	V _{CC} Min (V)	V _{CC} Max (V)	t _{pd} Max (ns)	I _O Max (mA)	Package Type
NC7SV125L6X	0.22		Active	1	3-State	0.9	3.6	1	24	SIP-6
NC7SV125P5X	0.0796		Active	1	3-State	0.9	3.6	1	24	SC-88A-5 / SC-70-5