

# NC7SV34

## TinyLogic ULP-A Single Buffer

### Product Overview

For complete documentation, see the data sheet.

The NC7SV34 is a single buffer 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 a 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 NC7SV34 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  $t_{PD}$  1.5 ns typ for 2.7V to 3.6V VCC 1.8 ns typ for 2.3V to 2.7V VCC 2.0 ns typ for 1.65V to 1.95V VCC 3.2 ns typ for 1.4V to 1.6V VCC 5.9 ns typ for 1.1V to 1.3V VCC 12.0 ns typ for 0.9V VCC
- Power-Off high impedance inputs and outputs
- High Static Drive (IOH/IOL)  $\pm 24$  mA @ 3.00V VCC  $\pm 18$  mA @ 2.30V VCC  $\pm 6$  mA @ 1.65V VCC  $\pm 4$  mA @ 1.4V VCC  $\pm 2$  mA @ 1.1V VCC  $\pm 0.1$  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 <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	t <sub>pd</sub> Max (ns)	I <sub>O</sub> Max (mA)	Package Type
NC7SV34L6X	0.172		Active	1	CMOS	0.9	3.6	1.5	24	SIP-6
NC7SV34P5X	0.0952		Active	1	CMOS	0.9	3.6	1.5	24	SC-88A-5 / SC-70-5