



Product Overview

NB3N853531E: Xtal Input or LVTTTL / LVCMOS Input Mux - 2:1, 3.3 V, Fanout Buffer- 1:4 LVPECL

For complete documentation, see the data sheet

Product Description

The NB3N853531E is a low skew 3.3 V supply 2:1:4 clock distribution fanout buffer. An input MUX selects either a Fundamental Parallel Mode Crystal or a LVCMOS/LVTTTL Clock by using the CLK_SEL pin (HIGH for Crystal, LOW for Clock) with LVCMOS / LVTTTL levels. The single ended CLK input is translated to four LVPECL Outputs. Using the crystal input, the NB3N853531E can be a Clock Generator. A CLK_EN pin can enable or disable the outputs synchronously to eliminate runt pulses using LVCMOS/LVTTTL levels (HIGH to enable outputs, LOW to disable output).

Features

- Four Differential LVPECL Outputs
- Selectable Crystal or LVCMOS/LVTTTL CLOCK Inputs
- Operating Range: $V_{CC} = 3.3 \pm 5\% V$ (3.135 to 3.465 V)
- PbFree TSSOP20 Package
- Up to 266 MHz Clock Operation
- Output to Output Skew: 30 ps (Typ)
- Device to Device Skew 200 ps (Max)
- Propagation Delay 1.8 ns (Max)
- Additive Phase Jitter, RMS: 0.053 ps (Typ.)
- Synchronous Clock Enable Control

Benefits

- Multiple copies of the Clock
- Accepts inexpensive crystals
- Ensures operation in the majority of designs
- Meets all green international materials standards

Applications

- Gigabit Ethernet
- SONET/SDH
- Telecommunications

End Products

- LAN/WAN
- Enterprise Servers
- ATE
- Test and Measurement

Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V_{CC} Typ (V)	$t_{jitter RMS}$ Typ (ps)	$t_{skew(o-p)}$ Max (ps)	t_{pd} Typ (ns)	t_R & t_F Max (ps)	$f_{max Clock}$ Typ (MHz)	$f_{max Data}$ Typ (Mbps)	Package Type
NB3N853531EDTG	Pb-free Halide free	Active	Buffer	1	2:1:4	Crystal LVCMOS LVTTTL	LVPECL	3.3	0.053	30		600			TSSOP-20
NB3N853531EDTR2G	Pb-free Halide free	Active	Buffer	1	2:1:4	Crystal LVCMOS LVTTTL	LVPECL	3.3	0.053	30		600			TSSOP-20

For more information please contact your local sales support at www.onsemi.com

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