Product Overview

NB6L11S: Clock / Data Fanout Buffer, 1:2 AnyLevel™ Input, LVDS, 2.5 V

For complete documentation, see the data sheet.

The NB6L11S is a differential 1:2 Clock or Data Receiver and will accept AnyLevel input signals: LVPECL, CML, LVCMOS, LVTTL, or LVDS. These signals will be translated to LVDS and two identical copies of Clock or Data will be distributed, operating up to 2.0 GHz or 2.5 Gb/s, respectively. As such, the NB6L11S is ideal for SONET, GigE, Fiber Channel, Backplane and other Clock or Data distribution applications. The NB6L11S has a wide input common mode range from GND + 50mV to VCC - 50mV. Combined with the 50-ohm internal termination resistors at the inputs, the NB6L11S is ideal for translating a variety of differential or single-ended Clock or Data signals to 350mV typical LVDS output levels. The NB6L11S is the 2.5 V version of the NB6N11S and is offered in a small 3mm X 3mm 16-QFN package. Application notes, models, and support documentation are available at www.onsemi.com.

Features

- Input Clock Frequency > 2.0GHz
- Input Data Rate > 2.5Gb/s
- 1 ps Maximum RMS Clock Jitter
- Typically 10 ps of Data Dependent Jitter
- 380 ps Typical Propagation Delay
- 120 ps Typical Rise and Fall Times
- Single Power Supply Vcc=2.5V ± 5%
- Pb-Free

Applications

- Basestations, Networking, Computing, and ATE

Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V_{CC} Typ (V)	$t_{JitterRMS}$ Typ (ps)	$t_{skew(o-o)}$ Max (ps)	t_{pd} Typ (ns)	t_R & t_F Max (ps)	f_{max} Clock Typ (MHz)	f_{max} Data Typ (Mbps)	Package Type
NB6L11SMNG	Pb-free Halide free	Active	Buffer	1	1:2	LVDS CMOS CML TTL ECL	LVDS	2.5	0.5	25	0.38	170	2000	2500	QFN-16
NB6L11SMNR2G	Pb-free Halide free	Active	Buffer	1	1:2	CMOS CML LVDS TTL ECL	LVDS	2.5	0.5	25	0.38	170	2000	2500	QFN-16

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

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