

Product Overview

NB6L14S: Clock / Data Fanout Buffer, 1:4 AnyLevel™; Input, LVDS, 2.5 V

For complete documentation, see the data sheet.

The NB6L14S is a differential 1:4 Clock or Data Receiver and will accept AnyLevel differential input signals: LVPECL, CML, LVDS, or HCSL. These signals will be translated to LVDS and four identical copies of Clock or Data will be distributed, operating up to 2.0GHz or 2.5Gbps, respectively. As such, the NB6L14S is ideal for SONET, GigE, Fiber Channel, Backplane and other Clock or Data distribution applications. The NB6L14S has a wide input common mode range from GND plus 50mV to VCC-50mV. Combined with the 50-ohm internal termination resistors at the inputs, the NB6L14S is ideal for translating a variety of differential or single-ended Clock or Data signals to 350mV typical LVDS output levels. The NB6L14S is the 2.5V version of the NB6N14S and is offered in a small 3mm x 3mm 16-QFN package. Application notes, models, and support documentation are available at www.onsemi.com. The NB6L14S is a member of the ECLinPS MAX family of high performance products.

Features

- Maximum Input Clock Frequency > 2.0 GHz
- Maximum Input Data Rate > 2.5 Gbps
- 1ps Maximum of RMS Clock Jitter
- 120ps Typical Rise and Fall Times
- VREFAC Reference Output

Applications

- Networking

End Products

- Routers

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)} Max (ps)	t _{pd} Typ (ns)	t _r & t _f Max (ps)	f _{max} Clock Typ (MHz)	f _{max} Data Typ (Mbps)	Package Type
NB6L14SMNG	Pb-free Halide free	Active	Buffer	1	1:4	ECL	LVDS	2.5	0.5	20	0.45	225	2000	2500	QFN-16
						CMOS									
						CML									
						HCSL									
						LVDS									
						TTL									
NB6L14SMNTWG	Pb-free Halide free	Active	Buffer	1	1:4	TTL	LVDS	2.5	0.5	20	0.45	225	2000	2500	QFN-16
						LVDS									
						ECL									
						HCSL									
						HSTL									
						CML									
NB6L14SMNTXG	Pb-free Halide free	Active	Buffer	1	1:4	ECL	LVDS	2.5	0.5	20	0.45	225	2000	2500	QFN-16
						TTL									
						HSTL									
						HCSL									
						LVDS									
						CML									
CMOS															

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

Created on: 9/23/2019