

Product Overview

NB6L11: Clock / Data Fanout Buffer / Translator, 2.5 V / 3.3 V Multilevel Input to 1:2 Differential LVPECL / LVNECL

For complete documentation, see the data sheet.

The NB6L11 is an enhanced differential 1:2 clock or data fan-out buffer/translator. The device has the same pin-out and is functionally equivalent to the LVEL11, EP11 and LVEP11 devices. Moreover, the device is optimized for the systems that require LOW skew, LOW jitter and LOW power consumption. Differential input can be configured to accept single-ended signal by applying an external reference voltage to unused complementary input pin. Input accept LVNECL, LVPECL, LVTTTL, LVCMOS, CML or LVDS. The outputs are 800mV ECL signals.

Features

- Input Clock Frequency 6 GHz
- Input Data Rate 6 Gb/s
- Low 14 mA Typical Power Supply Current
- 150 ps Typical Propagation Delay
- 5 ps Typical Within Device Skew
- 75 ps Typical Rise/Fall Times
- PECL Mode Operating Range: VCC = 2.375 V to 3.465 V with VEE = 0 V
- NECL Mode Operating Range: VCC = 0 V with VEE = -2.375 V to -3.465 V
- Open Input Default State
- Q Outputs will default LOW with Inputs Open or at VEE

For more features, see the data sheet

Applications

- Backplane Clock distribution
- Signal Translation Between LVDS, CML, LVTTTL or LVCMOS to LVPECL

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-g)} Max (ps)	t _{pd} Typ (ns)	t _r & t _f Max (ps)	f _{max} Clock Typ (MHz)	f _{max} Data Typ (Mbps)	Package Type
NB6L11DG	Pb-free Halide free	Active	Buffer	1	1:2	CML	ECL	3.3 2.5	0.2	15	0.15	120	6000	6000	SOIC-8
						LVD S									
						ECL									
						CMO S									
						TTL									
NB6L11DR2G	Pb-free Halide free	Active	Buffer	1	1:2	TTL	ECL	3.3 2.5	0.2	15	0.15	120	6000	6000	SOIC-8
						CMO S									
						CML									
						LVD S									
						ECL									
NB6L11DTG	Pb-free Halide free	Active	Buffer	1	1:2	CMO S	ECL	3.3 2.5	0.2	15	0.15	120	6000	6000	TSSOP-8
						CML									
						ECL									
						LVD S									
						TTL									
NB6L11DTR2G	Pb-free Halide free	Active	Buffer	1	1:2	CML	ECL	3.3 2.5	0.2	15	0.15	120	6000	6000	TSSOP-8
						CMO S									
						TTL									
						ECL									
						LVD S									

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

Created on: 9/15/2019