Product Overview

NB6L611: Clock / Data Fanout Buffer, 1:2 Differential, 3 GHz, 2.5 V / 3.3 V, with LVPECL Outputs

For complete documentation, see the data sheet.

The NB6L611 is a differential 1:2 clock or data fanout buffer. The differential inputs incorporate internal 50-ohm termination resistors that are accessed through the VTD pins and will accept LVPECL, CML, LVDS, LVCMOS or LVTTL logic levels. The VREFAC pin is an internally generated voltage supply available to this device only. VREFAC is used as a reference voltage for single-ended PECL or NECL inputs. For all single-ended input conditions, the unused complementary differential input is connected to VREFAC as a switching reference voltage. VREFAC may also rebias capacitor-coupled inputs. When used, decouple VREFAC with a 0.01uF capacitor and limit current sourcing or sinking to 0.5mA. When not used, VREFAC output should be left open. The device is housed in a small 3mm x 3mm 16-pin QFN package. The NB6L611 is a member of the ECLinPS MAX family of high performance clock and data management products.

Features

- Maximum Input Clock Frequency > 3.0 GHz
- VREFAC Reference Output
- Internal Input Termination Resistors, 50-ohm

Benefits

- High Performance Applications
- Rebias Capacitor-coupled Input Signal
- No external components needed for inputs

Applications

- Clock / Data Distribution

Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V_{CC} Typ (V)	t_{jitter} RMS Typ (ps)	$t_{skew(o-o)}$ Max (ps)	t_{pd} Typ (ns)	t_R & t_F Max (ps)	f_{max} Clock Typ (MHz)	f_{max} Data Typ (Mbps)	Package Type
NB6L611MNG	Pb-free Halide free	Active	Buffer	1	1:2	CMOS TTL ECL CML LVDS	ECL	3.3 2.5	0.2	15	0.28	170	4000		QFN-16
NB6L611MNR2G	Pb-free Halide free	Active	Buffer	1	1:2	CML CMOS TTL LVDS ECL	ECL	3.3 2.5	0.2	15	0.28	170	4000		QFN-16

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

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