

Product Overview

NB6L11M: Clock / Data Fanout Buffer, 1:2 Differential, with CML Outputs

For complete documentation, see the data sheet.

The NB6L11M is a differential 1:2 CML fanout buffer. The differential inputs incorporate internal 50-ohm termination resistors that are accessed through the VT pins and will accept LVPECL, LVCMOS, LVTTTL, CML, or LVDS 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 0.5 mA. When not used, VREFAC output should be left open. The device is housed in a small 3x3 mm 16 pin QFN package. The NB6L11M is a member of the ECLinPS MAX family of high performance clock products.

Features

- Maximum Input Clock Frequency > 4 GHz
- 0.5ps max Random Clock Jitter
- VREFAC Reference Output
- Internal Input Termination Resistors, 50-ohm

Benefits

- High performance applications
- Low Jitter Outputs
- 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} MS Typ (ps)	t _{skew(c-to-c)} Max (ps)	t _{pd} Typ (ns)	t _{tr} & t _{fr} Max (ps)	f _{max} Clock Typ (MHz)	f _{max} Data Typ (Mbps)	Package Type
NB6L11MMNG	Pb-free	Active	Buffer	1	1:2	LVD S	CML	3.3	0.2	15	0.225	120	4000		QFN-16
	Halide free					2.5									
						CML									
						LVTT L									
						LVC MOS									
	LVP ECL														
NB6L11MMNR2G	Pb-free	Active	Buffer	1	1:2	LVP ECL	CML	2.5	0.2	15	0.225	120	4000		QFN-16
	Halide free					3.3									
						LVTT L									
						CML									
						LVD S									
	LVC MOS														

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Created on: 9/15/2019