



Product Overview

NB3N121K: Clock / Data Fanout Buffer, 1:21 Differential, 3.3 V, with HCSL Outputs

For complete documentation, see the data sheet

Product Description

The NB3N121K is a differential 1:21 Clock and Data fanout buffer with High-speed Current Steering Logic (HCSL) outputs optimized for ultra low propagation delay variation. The NB3N121K is designed with HCSL PCI Express clock distribution and FBDIMM applications in mind.

Features

- Typical Input Clock Frequency 100, 133, 166, 200, 266, 333 and 400 MHz
- 340 ps Typical Rise and Fall Times
- 800 ps Typical Propagation Delay
- 100 ps Max Within Device Skew
- 150 ps Max Device to Device Skew
- Delta-tpd 100 ps Maximum Propagation Delay Variation Per Each Differential Pair
- 0.1 ps Typical RMS Additive Phase Jitter
- LVDS Output Levels Optional with Interface Termination
- Operating Range: VCC = 3.0 V to 3.6 V with GND = 0 V
- Typical HCSL Output Level (700 mV Peak to Peak)

Applications

- Clock Distribution
- PCIe I, II, III
- Networking
- High End Computing
- Routers

End Products

- Servers

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
NB3N121KMNG	Pb-free Halide free	Active	Buffer	1	1:21	CMOS ECL HCSL LVDS TTL	HCSL	3.3	0.1	100	0.8	700	400		QFN-52
NB3N121KMNR2G	Pb-free Halide free	Active	Buffer	1	1:21	CMOS ECL HCSL LVDS TTL	HCSL	3.3	0.1	100	0.8	700	400		QFN-52

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

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