



Product Overview

NB3N108K: Clock / Data Fanout Buffer, 1:8 Differential, 3.3 V, with HCSL Outputs

For complete documentation, see the data sheet

Product Description

The NB3N108K is a differential 1:8 Clock and Data fanout buffer with High-speed Current Steering Logic (HCSL) outputs optimized for ultra low propagation delay variation. The NB3N108K is designed with HCSL clock distribution and FBDIMM applications in mind.

Features

- 0.1 ps Typical RMS Phase Jitter
- Typical Input Clock Frequency 100, 133, 166, or 400 MHz
- 220 ps Typical Rise and Fall Times
- 800 ps Typical Propagation Delay
- t_{pd} 100 ps Maximum Propagation Delay 100 ps Delta t_{pd} Variation Per Each Diff Pair
- Operating Range: V_{CC} = 3.0 V to 3.6 V with V_{EE} = 0 V
- Differential HCSL Output Levels or LVDS Output Levels with Interface Termination

Benefits

- Best in class for jitter performance

Applications

- Clock distribution
- PCIe I, II, III
- Networking and Communications
- High End Computing
- Routers

End Products

- Servers
- FBDIMM Memory Card
- Ethernet Switch/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-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
NB3N108KMNG	Pb-free Halide free	Active	Buffer	1	1:8	CMOS ECL HCSL LVDS TTL	HCSL	3.3	0.1	100	0.8	400	400	400	QFN-32
NB3N108KMNR4G	Pb-free Halide free	Active	Buffer	1	1:8	CMOS ECL HCSL LVDS TTL	HCSL	3.3	0.1	100	0.8	400	400	400	QFN-32

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

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