

Product Overview

NB7L72M: 2 x 2 Crosspoint Switch, Differential, 2.5 V / 3.3 V, with CML Outputs Clock / Data Buffer / Translator

For complete documentation, see the data sheet.

The NB7L72M is a high bandwidth, low voltage, fully differential 2 x 2 crosspoint switch with CML outputs. The NB7L72M design is optimized for low skew and minimal jitter as it produces two identical copies of Clock or Data operating up to 7GHz or 10Gb/s, respectively. As such, the NB7L72M is ideal for SONET, GigE, Fiber Channel, Backplane and other clock/data distribution applications. The differential IN/INb inputs incorporate internal 50-ohm termination resistors and will accept LVPECL, CML, or LVDS logic levels. The 16mA differential CML outputs provide matching internal 50-ohm terminations and produce 400mV output swings when externally terminated with a 50-ohm resistor to VCC. The NB7L72M is the 2.5V/3.3V version of the and NB7V72M and is offered in a low profile 3x3 mm 16-pin QFN package.

Features

- Maximum Data Rate > 10Gbps
- Maximum Clock Frequency > 7GHz
- Random Clock Jitter < 0.5ps RMS
- 30ps typical output rise & fall times
- Differential CML Outputs
- 2.5V or 3.3V Operating Voltage
- Internal 50-ohm Input Termination
- Industrial Temperature Range

Applications

- Routers and Switches
- Networking

End Products

- Routers and Switches

Part Electrical Specifications

Product	Compliance	Status	Input/Output Ratio	Channels	Input Level	Output Level	V _{CC} Typ (V)	f _{Max} Typ (MHz)	t _{Jitter} Typ (ps)	t _{skew(OO)Max} (ps)	t _{pd} Typ (ns)	Package Type
NB7L72MMNG	Pb-free	Active	2:1	2	LVDS	CML	3.3	8500	0.2	10	150	QFN-16
	Halide free				ECL		2.5					
					CML							
NB7L72MMNHTBG	Pb-free	Active	2:1	2	LVDS	CML	2.5	8500	0.2	10	150	QFN-16
	Halide free				ECL		3.3					
					CML							
NB7L72MMNTXG	Pb-free	Active	2:1	2	ECL	CML	3.3	8500	0.2	10	150	QFN-16
	Halide free				CML		2.5					
					LVDS							

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

Created on: 4/20/2019