

Product Overview

NB7V72M: 2 x 2 Crosspoint Switch, Differential, 1.8 V / 2.5 V, with CML Outputs Clock / Data Buffer / Translator

For complete documentation, see the data sheet.

The NB7V72M is a high bandwidth, low voltage, fully differential 2 x 2 crosspoint switch with CML outputs. The NB7V72M design is optimized for low skew and minimal jitter as it produces two identical copies of Clock or Data operating up to 5 GHz or 6.5 Gb/s, respectively. As such, the NB7V72M is ideal for SONET, GigE, Fiber Channel, Backplane and other clock/data distribution applications. The differential IN/IN inputs incorporate internal 50-ohm termination resistors and will accept LVPECL, CML, or LVDS logic levels. The 16 mA differential CML outputs provide matching internal 50 ohm terminations and produce 400 mV output swings when externally terminated with a 50 ohm resistor to VCC. The NB7V72M is the 1.8 V/2.5 V CML version of the NB7L72M and is offered in a low profile 3 x 3 mm 16-pin QFN package.

Features

- Maximum Input Data Rate > 6.5 Gb/s
- Data Dependent Jitter < 15 ps pk-pk
- Maximum Input Clock Frequency > 5 GHz.
- Random Clock Jitter < 0.8 ps RMS
- Internal 50-ohm Input Termination Resistors
- -40C to +85C Ambient Operating Temperature
- Gigabit Ethernet data/clock routing
- SONET data/clocking routing
- Switch fabric clock routing
- Redundant switchover

For more features, see the data sheet

Applications

- Gigabit Ethernet Data/Clock Routing
- SONET Data/Clock Routing
- Switch Fabric Clock Routing
- Redundant Switchover

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
NB7V72MMNHTBG	Pb-free	Active	2:2	2	LVDS	CML	2.5	5000	0.5	30	150	QFN-16
	Halide free						1.8					
NB7V72MMNTXG	Pb-free	Active	2:2	2	LVDS	CML	2.5	5000	0.5	30	150	QFN-16
	Halide free						1.8					

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