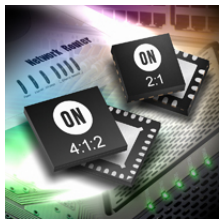
Product Overview



NB7L572: Input Mux - 4:1 Differential, 2.5 V / 3.3 V, Clock / Data Fanout Buffer - 1:2 LVPECL

For complete documentation, see the data sheet.

The NB7L572 is a high performance differential 4:1 Clock/Data input multiplexer and a 1:2 LVPECL Clock/Data fanout buffer. The INx/INxb inputs include internal 50-ohm termination resistors and will accept differential LVPECL, CML or LVDS logic levels. The NB7L572 incorporates a pair of Select pins that will choose one of four differential inputs and will produce two identical LVPECL output copies of Clock or Data operating up to 7GHz or 10Gb/s, respectively. As such, NB7L572 is ideal for SONET, GigE, Fiber Channel, Backplane and other Clock/Data distribution applications. The NB7L572 INx/INxb inputs, outputs and core logic are powered by a 2.5 V +/-5% or 3.3V +/-10% power supply. The two differential LVPECL outputs will swing 750mV when externally terminated with a 50-ohm resistor to VCC - 2V, and are optimized for low skew and minimal jitter. The NB7L572 is offered in a low profile 5mm x5mm 32-pin QFN Pb-free package. Application notes, models, and support documentation are available at www.onsemi.com. The NB7L572 is a member of the GigaComm family of high performance clock products.

Features

- Input Data Rate > 11 Gb/s Typical
- Data Dependent Jitter < 15 ps
- Maximum Input Clock Frequency > 8 GHz Typical
- Random Clock Jitter < 0.8 ps RMS
- Low Skew 1:2 LVPECL Outputs, < 10 ps max
- 4:1 MultiLevel Mux Inputs, Accepts LVPECL, CML LVDS
- 150 ps Typical Propagation Delay
- Differential LVPECL Outputs, 750 mV Peak-to-Peak, Typical
- Operating Range: VCC = 2.375 V to 3.6 V
- Internal 50-ohm Input Termination Resistors

  For more features, see the data sheet

Applications

- Redundant Clock / Data distribution
- SONET/SDH/Fibre Channel/Gigabit Ethernet Clock / Data distribution

End Products

- Servers and Routers

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
NB7L572MNG	Pb-free Halide free	Active	4:2	1	LVDS CML ECL	ECL	2.5 3.3	8000	0.5	10	0.175	QFN-32
NB7L572MNR4G	Pb-free Halide free	Active	4:2	1	LVDS ECL CML	ECL	2.5 3.3	8000	0.5	10	0.175	QFN-32

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

Created on: 4/20/2019