



Product Overview

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NB4N855S: 2.5 Gb/s Dual AnyLevel™ to LVDS Receiver/Driver/Buffer/Translator

For complete documentation, see the data sheet

Product Description

NB4N855S is a clock or data Receiver/Driver/Buffer/Translator capable of translating AnyLevel™ input signal (LVPECL, CML, HSTL, LVDS, or LVTTTL/LVCMOS) to LVDS. Depending on the distance, noise immunity of the system design, and transmission line media, this device will receive, drive or translate data or clock signals up to 1.5 Gb/s or 1.0 GHz, respectively. This device is pin-for-pin plug in compatible to the SY55855V in a 3.3 V applications.

The NB4N855S has a wide input common mode range of GND + 50 mV to VCC - 50 mV. This feature is ideal for translating differential or single-ended data or clock signals to 350 mV typical LVDS output levels.

The device is offered in a small 10 lead MSOP package. NB4N855S is targeted for data, wireless and telecom applications as well as high speed logic interface where jitter and package size are main requirements.

Features

- Guaranteed Input Clock Frequency up to 1.0 GHz
- Guaranteed Input Data Rate up to 1.5 Gb/s
- 490 ps Maximum Propagation Delay
- 1.0 ps Maximum RMS Jitter
- 180 ps Maximum Rise/Fall Times
- Single Power Supply; VCC = 3.3 V ±10%
- Temperature Compensated TIA/EIA-644 Compliant LVDS Outputs
- GND + 50 mV to VCC - 50 mV VCMR Range
- Pb-Free Packages is Available

Benefits

- precision edge placement

Applications

- Translation of all major signal types to LVDS in heterogenous systems.
- Signal driving and reception in communications and networking applications.

End Products

- General High Speed LOGIC

Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V _{CC} Typ (V)	t _{jitter} ^R MS Typ (ps)	t _{skew(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
NB4N855SMR4G	Pb-free Halide free	Active	Signal Driver	2	1:1	CML CMOS ECL HSTL LVDS SSTL TTL	LVDS	3.3	1	25	0.47	140	1500	2500	Micro10

Package Availability

Type	Pb-free	Standard
Micro10	✓	✓

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