

製品概要

NBSG16: SiGe Differential Driver / Receiver with RSECL Outputs

技術情報は、データシートをご参照ください。

The NBSG16 is a differential receiver/driver targeted for high frequency applications. The device is functionally equivalent to the EP16 and LVEP16 devices with much higher bandwidth and lower EMI capabilities. Inputs incorporate internal 50-ohm termination resistors and accept NECL (Negative ECL), PECL (Positive ECL), HSTL, LVTTTL, LVCMOS, CML, or LVDS. Outputs are RSECL (Reduced Swing ECL), 400 mV. The VBB and VMM pins are internally generated voltage supplies available to this device only. The VBB is used as a reference voltage for single-ended NECL or PECL inputs and the VMM pin is used as a reference voltage for LVCMOS inputs. For all single-ended input conditions, the unused complementary differential input is connected to VBB or VMM as a switching reference voltage. VBB or VMM may also rebias AC coupled inputs. When used, decouple VBB and VMM via a 0.01 uF capacitor and limit current sourcing or sinking to 0.5 mA. When not used, VBB and VMM outputs should be left open.

特長

- Maximum Input Clock Frequency > 12 GHz Typical
- Maximum Input Data Rate > 12 Gb/s Typical
- 120 ps Typical Propagation Delay
- 40 ps Typical Rise and Fall Times
- RSPECL Output with Operating Range: VCC = 2.375 V to 3.465 V with VEE = 0 V
- RSNECL Output with RSNECL or NECL Inputs with Operating Range: VCC = 0 V with VEE = -2.375 V to -3.465 V
- RSECL Output Level (400 mV Peak-to-Peak Output), Differential Output Only
- 50 Ω Internal Input Termination Resistors
- VBB and VMM Reference Voltage Output
- Compatible with Existing 2.5 V/3.3 V LVEP, EP, and LVEL Devices

For more features, see the data sheet

アプリケーション

- SONET OC-192 / SDH STM-64 Optical Interface
- 10 Gigabit Ethernet
- Optical Networking Equipment
- Advance Test Equipment
- Ultra High Speed Terabit Routers

最終製品

- ATE Instrumentation, Networking

電氣的仕様

製品	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V _{CC} Typ (V)	t _{jitter, RMS} Typ (ps)	t _{skew(o-to-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
NBSG16MNG	Pb-free Halide free	Active	Signal Driver	1	1:1	ECL LVDS CML TTL CMOS	RSECL	2.5 3.3	0.2 0.3		0.12	50	12000	12000	QFN-16

詳細は、弊社 www.onsemi.jp の営業または販売代理店にお問い合わせください。

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