

Product Overview

MC100EP16VB: Differential Driver / Receiver with High and Low Gain

For complete documentation, see the data sheet.

The EP16VB is a world-class differential receiver/driver. The device is functionally equivalent to the EP16 and LVEP16 devices but with both high and low gain outputs. QHG and QHGbar outputs have a DC gain several times larger than the DC gain of an EP16. Qbar output is provided for feedback purposes. The VBB pin, an internally generated voltage supply, is available to this device only. For single-ended input conditions, the unused differential input is connected to VBB as a switching reference voltage. VBB may also rebias AC coupled inputs. When used, decouple VBB and VCC via a 0.01 μ F capacitor and limit current sourcing or sinking to 0.5 mA. When not used, VBB should be left open. Special considerations are required for differential inputs under No Signal conditions to prevent instability. The 100 Series contains temperature compensation.

Features

- 300 ps Typical Propagation Delay
- Gain > 200
- Maximum Frequency > 3 GHz Typical
- PECL Mode Operating Range: VCC = 3.0 V to 5.5 V with VEE = 0 V
- NECL Mode Operating Range: VCC = 0 V with VEE = -3.0 V to -5.5 V
- VBB Output

Part Electrical Specifications

Product	Pricing (\$/Unit)	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
MC100EP16VBBDTG	3	Pb-free Halide free non AEC-Q and PPAP	Active	Signal Driver	1	1:2	CM L ECL	ECL	3.3 5	0.2	20	0.3	400	3000		TSSOP-8

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

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