

Product Overview

MC10EL16: Differential Receiver

For complete documentation, see the data sheet.

The MC10EL/100EL16 is a differential receiver. The device is functionally equivalent to the E116 device with higher performance capabilities. With output transition times significantly faster than the E116 the EL16 is ideally suited for interfacing with high frequency sources. 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 F capacitor and limit current sourcing or sinking to 0.5mA. When not used, VBB should be left open. Under open input conditions (pulled to VEE) internal input clamps will force the Q output LOW. The 100 Series contains temperature compensation.

Features

- 190 ps Propagation Delay
- ESD Protection: > 1 KV HBM, > 100 V MM
- PECL Mode Operating Range: VCC= 4.2 V to 5.7 V with VEE= 0 V
- NECL Mode Operating Range: VCC= 0 V with VEE= -4.2 V to -5.7 V
- Internal Input Pulldown Resistors
- Meets or Exceeds JEDEC Spec EIA/JESD78 IC Latchup Test
- Moisture Sensitivity Level 1 For Additional Information, see Application Note AND8003/D
- Flammability Rating: UL 94 V-0 @ 0.125 in, Oxygen Index 28 to 34
- Transistor Count = 47 devices
- Pb-Free Packages are Available

For more features, see the data sheet

Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V _{CC} Typ (V)	t _{jitter} MS Typ (ps)	t _{skew(0-1)} Max (ps)	t _{pd} Typ (ns)	t _r & t _f Max (ps)	f _{max} Clock Typ (MHz)	f _{max} Data Typ (Mbps)	Package Type
MC10EL16DG	Pb-free	Active	Signal Driver	1	1:1	ECL	ECL	5	0.7	20	0.25	350	1750		SOIC-8
	Halide free														
MC10EL16DR2G	Pb-free	Active	Signal Driver	1	1:1	ECL	ECL	5	0.7	20	0.25	350	1750		SOIC-8
	Halide free														

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

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