

Product Overview

MC100EPT21: Differential LVPECL/LVDS/CML to LVTTTL/LVCMOS Translator

For complete documentation, see the data sheet.

The MC100EPT21 is a Differential LVPECL/LVDS/CML to LVTTTL/LVCMOS translator. Because LVPECL/LVDS/CML input levels and LVTTTL/LVCMOS output levels are used only +3.3V and ground are required. The small outline 8-lead SOIC package makes the EPT21 ideal for applications which require the translation of a clock or data signal. The VBB output allows the EPT21 to be cap coupled in either single-ended or differential input mode. When single-ended cap coupled, VBB output tied to the D0 input for a non-inverting buffer or the D0 input for an inverting buffer. When cap coupled differentially, VBB output is connected through a resistor to each input pin. If used, the VBB pin should be bypassed to VCC via a 0.01 F capacitor. For additional information see AND8020. For a single-ended direct connection use an external voltage reference source such as a resistor divider. Do not use VBB for a single-ended direct connection.

Features

- 1.4ns Typical Propagation Delay
- Maximum Frequency > 275 MHz Typical
- 24mA TTL outputs
- LVPECL/LVDS/CML Inputs, LVTTTL/LVCMOS Outputs
- The 100 Series Contains Temperature Compensation
- VBB Output
- New Differential Input Common Mode Range

Applications

- Precision Clock Translation

Part Electrical Specifications

Product	Compliance	Status	Channels	Input Level	Output Level	V _{CC} Typ (V)	f _{Max} Typ (MHz)	t _{pd} Typ (ns)	t _r & t _f Max (ps)	Package Type
MC100EPT21DG	Pb-free	Active	1	LVDS	TTL	3.3	350	1.4	900	SOIC-8
	Halide free			ECL						
MC100EPT21DR2G	Pb-free	Active	1	ECL	TTL	3.3	350	1.4	900	SOIC-8
	Halide free			CML						
MC100EPT21DTG	Pb-free	Active	1	CML	TTL	3.3	350	1.4	900	TSSOP-8
	Halide free			LVDS						
MC100EPT21DTR2G	Pb-free	Active	1	CML	TTL	3.3	350	1.4	900	TSSOP-8
	Halide free			LVDS						
MC100EPT21MNR4G	Pb-free	Active	1	ECL	TTL	3.3	350	1.4	900	DFN-8
	Halide free			CML						

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

Created on: 8/25/2019