

## Product Overview

### MC100EP105: ECL Quad 2-Input Differential AND/NAND Gate

For complete documentation, see the data sheet.

The MC10/100EP105 is a quad 2-input differential AND/NAND gate. Each gate is functionally equivalent to the EP05 and LVEL05 devices. With AC performance much faster than the LVEL05 device, the EP105 is ideal for applications requiring the fastest AC performance available.

The 100 Series contains temperature compensation.

### Features

- 275ps Typical Propagation Delay
- Maximum Frequency > 3 Ghz Typical
- PECL Mode Operating Range:  $V_{CC} = 3.0\text{ V to }5.5\text{ V}$  with  $V_{EE} = 0\text{ V}$
- NECL Mode Operating Range:  $V_{CC} = 0\text{ V}$  with  $V_{EE} = -3.0\text{ V to }-5.5\text{ V}$
- Open Input Default State
- Safety Clamp on Inputs
- Pb-Free Packages are Available

### Applications

- General Purpose Logic

### Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input Level	Output Level	$V_{CC}$ Typ (V)	$f_{Toggle\ Max}$ (MHz)	$t_{pd}$ Typ (ns)	$t_{jitter}$ Typ (ps)	$t_R$ & $t_F$ Max (ps)	Package Type
MC100EP105FAG	Pb-free	Active	AND/NAND	1	ECL	ECL	5	3000	0.275	0.2	200	LQFP-32
	Halide free				CML		3.3					
MC100EP105FAR2G	Pb-free	Active	AND/NAND	1	ECL	ECL	5	3000	0.275	0.2	200	LQFP-32
	Halide free				CML		3.3					

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