

製品概要

MC100EP016A: ECL 8-Bit Synchronous Binary Counter

技術情報は、データシートをご参照ください。

The MC100EP016A is a high-speed synchronous, presettable, cascadeable 8-bit binary counter. Architecture and operation are the same as the MC100E016 in the ECLinPS family. The counter features internal feedback to TCbar gated by the TCLD (Terminal Count Load) pin. When TCLD is LOW (or left open, in which case it is pulled LOW by the internal pulldowns), the TCbar feedback is disabled, and counting proceeds continuously, with TCbar going LOW to indicate an all-one state. When TCLD is HIGH, the TC feedback causes the counter to automatically reload upon TC = LOW, thus functioning as a programmable counter. The Qn outputs do not need to be terminated for the count function to operate properly. To minimize noise and power, unused Q outputs should be left unterminated. COUT and COUTbar provide differential outputs from a single, non-cascaded counter or divider application. COUT and COUTbar should not be used in cascade configuration. Only TCbar should be used for a counter or divider cascade chain output. A differential clock input has also been added to improve performance. The 100 Series contains temperature compensation.

特長

- 550 ps Typical Propagation Delay
- Operation Frequency > 1.3 GHz is 30% Faster than MC100EP016
- PECL Mode Operating Range: VCC = 3.0 V to 3.6 V with VEE = 0 V
- NECL Mode Operating Range: VCC = 0 V with VEE = -3.0 V to -3.6 V
- Open Input Default State
- Safety Clamp on Clock Inputs
- Internal TCbar Feedback (Gated)
- Addition of COUT and COUTbar
- 8-bit
- Differential Clock Input

For more features, see the data sheet

アプリケーション

- Hi-Speed Binary Counting

電氣的仕様

製品	Compliance	Status	Type	Input Level	Output Level	V _{CC} Typ (V)	f _{Max} Typ (MHz)	t _{pd} Typ (ns)	t _r & t _f Max (ps)	Package Type
MC100EP016AFAG	Pb-free Halide free	Active	Counter	CML ECL	ECL	3.3	1400	0.55	320	LQFP-32
MC100EP016AFAR2G	Pb-free Halide free	Active	Counter	CML ECL	ECL	3.3	1400	0.55	320	LQFP-32
MC100EP016AMNG	Pb-free Halide free	Active	Counter	CML ECL	ECL	3.3	1400	0.55	320	QFN-32
MC100EP016AMNR4 G	Pb-free Halide free	Active	Counter	ECL CML	ECL	3.3	1400	0.55	320	QFN-32

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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