870919BRILF

Description | Parameters | Package | Documents | Distributor Inventory | Contacts

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DESCRIPTION

ICS FEMTOCLOCK
The ICS870919I is an LVCMOS clock generator that uses an internal phase lock loop (PLL) for frequency multiplication and to lock the low-skew outputs to the selected reference clock. The device offers eight outputs. The PLL loop filter is completely internal and does not require external components. Several output configurations of the PLL feedback and a divide-by-2 (controlled by FREQ_SEL) allow applications to optimize frequency generation over a wide range of input reference frequencies. The PLL can also be disabled by the PLL_EN control signal to allow for low frequency or DC testing. The LOCK output asserts to indicate when phase-lock has been achieved. The ICS870919I device is a member of the HiperClocks family of high performance clock solutions from IDT.

Features

- Two selectable single-ended input reference clocks
- Eight single-ended clock outputs
- Internal PLL does not require external loop filter components
- 5V tolerant inputs
- Maximum output frequency: 160MHz, (2XQ output)
- Maximum output frequency: 80MHz, (Q0:Q4 and nQ5 outputs)
- LVCMOS interface levels for all inputs and outputs
- PLL disable feature for low-frequency testing
- PLL lock output
- Selectable synchronization of output to input edge
- Output drive capability: ±24mA
- Output skew: 300ps (maximum), Q0:Q4
- Output skew: 500ps (maximum), all outputs
- Full 3.3V supply voltage
- Available in lead-free (RoHS 6) packages
- -40°C to 85°C ambient operating temperature

Generic Part:
870919I
Category:
Zero Delay Buffers (PLL)

PARAMETERS

Package	QSOP 28
Voltage	3.3 V
Temperature	I
Speed	NA
Divide Value	4x
Input Style	S/E
Max. Input Frequency	100
Min. Input Frequency	2.5
No. of Outputs	8
Output Frequency	160
Output Style	LVCMOS
Core Supply Voltage (VDD)	
Min. Output Frequency	
Output Supply Voltage (VDDO)	
No. of Inputs	
Max. Output Frequency	
Temp. Grade	
Multiplication/Divide Value	

PACKAGE

Package	QSOP 28 (PCG28)
Description	QSOP 150 MIL
Status	Active
Class	PLASTIC
Category	Green
Pb (Lead) Free	Yes
Pb Free Category	e3 Sn
Mark	R
Package Type	QSOP
Lead Count	28
Length	9.9 mm
Width	3.8 mm
Thickness	1.47 mm
Pitch	0.64 mm
Tube / Tray	TUBE
Quantity per Tube/Tray	48
Quantity per	2500

Reel	
Moisture Sensitivity Level (MSL)	1
Moisture Exposure Floor Life	Unlimited@<30C/85% RH
Peak Reflow Temperature	260°C
Rebake Conditions	NA
Related Package Documents	view documents

DOCUMENTS

Type	Title	Size	Revision Date
Product Change Notice	PCN# : TB1010-01 Remove Country of Origin from Package Bottom	677 KB	11/21/2010
	PCN# : TB0910-01 TRACEABILITY MARK ON TOP OF PACKAGE	579 KB	11/12/2009

DISTRIBUTOR INVENTORY

Part	Distributor	Qty	Date	RFQ	Order
870919BRILF	AVNET	25	01/25/2011	Quote	**Buy Now**

CONTACTS

Sales Offices

- Sales Offices and authorized distributors

Technical Support

Clock Help

- WWW: Clock Help