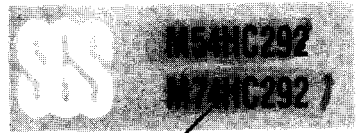


# HS-C<sup>2</sup>MOS™ INTEGRATED CIRCUITS

040706



## PRODUCT PREVIEW

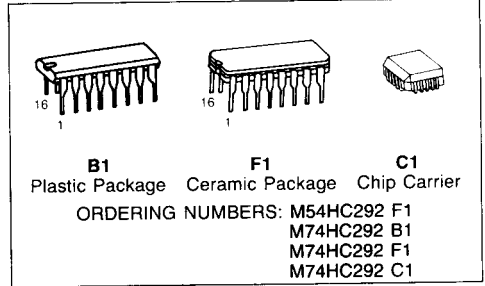
### PROGRAMMABLE FREQUENCY DIVIDER/ DIGITAL TIMER

#### GENERAL DESCRIPTION

The M54/74HC292 is a high speed CMOS PROGRAMMABLE FREQUENCY DIVIDER/DIGITAL TIMER fabricated in Silicon Gate C<sup>2</sup>MOS Technology. It has the same high speed performance of LSTTL combined with true CMOS low power consumption.

This device has an active-low clear input to initialize the state of all flip-flops. To facilitate incoming inspection, test points (TP1, TP2 and TP3) are provided. These test points are not intended to drive system loads. It has two clock inputs; either one may be used for clock gating. (See the truth table below.)

All inputs are equipped with protection circuits against static discharge or transient excess voltage.



#### FEATURES

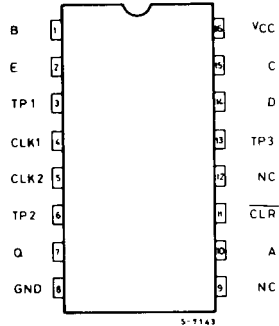
- Low Power Dissipation  
 $I_{CC} = 4 \mu\text{A}$  (Max.) at  $T_A = 25^\circ\text{C}$
- High Noise Immunity  
 $V_{NIH} = V_{NIL} = 28\% V_{CC}$  (Min.)
- Output Drive Capability  
10 LSTTL Loads
- Symmetrical Output Impedance  
 $|I_{OH}| = I_{OL} = 4 \text{ mA}$  (Min.)
- Balanced Propagation Delays  
 $t_{PLH} = t_{PHL}$
- Wide Operating Voltage Range  
 $V_{CC}(\text{opr}) = 2\text{V to } 6\text{V}$
- Pin and Function compatible with 54/74LS292

#### TRUTH TABLE

\*: Don't care

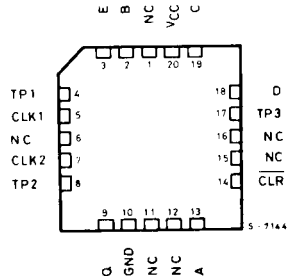
CLEAR	CLK1	CLK2	Q OUTPUT MODE
L	*	*	Cleared to L
H	$\uparrow$	L	Count
H	$\downarrow$	L	No Count
H	L	$\uparrow$	Count
H	L	$\downarrow$	No Count
H	H	*	Inhibit
H	*	H	Inhibit

#### PIN CONNECTIONS (top view)



Dual in line

#### CHIP CARRIER



NC = No Internal Connection