MOTOROLA

MC54/74HC423

Product Preview

DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR

The MC54/74HC423 is identical in pinout to the LS423. The device inputs are compatible with standard CMOS outputs; with pullup resistors, they are compatible with LSTTL outputs.

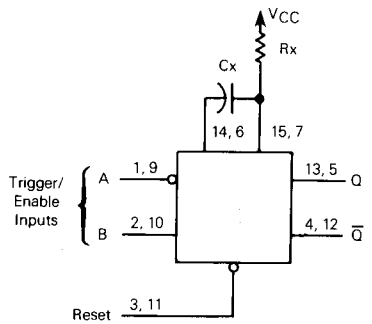
Each multivibrator features an active-low asynchronous reset and both negative- and positive-edge triggered inputs, either of which can be used as an enable. The output pulse width is dependent upon an external resistor and capacitor connection as shown in the block diagram.

The HC423 has the same pinout as the HC123 and the HC221 monostable multivibrators. However, both of these devices may be triggered by using the Reset pin .

If more pulse-width accuracy is required, use the MC54/74HC4538 Precision Monostable Multivibrator.

- Low Power Consumption Characteristic of CMOS Devices
- Output Drive Capability: 10 LSTTL Loads Minimum
- Operating Speeds Similar to LSTTL
- Wide Operating Voltage Range: 2 to 6 Volts
- Low Input Current: 1 μA Maximum
- Low Quiescent Current: 80 μA Maximum (74HC Series)
- High Noise Immunity Characteristic of CMOS Devices
- Diode Protection on All Inputs

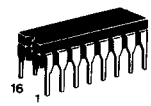
BLOCK DIAGRAM



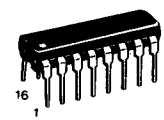
V_{CC} = Pin 16
GND = Pin 8

HIGH-PERFORMANCE
CMOS
LOW-POWER COMPLEMENTARY MOS
SILICON-GATE

DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR



J SUFFIX
CERAMIC PACKAGE
CASE 620



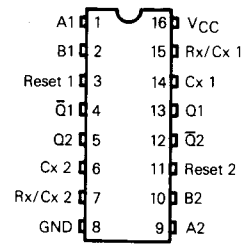
N SUFFIX
PLASTIC PACKAGE
CASE 648

ORDERING INFORMATION

54 Series: −55°C to +125°C
MC54HCXXXJ (Ceramic Package Only)

74 Series: −40°C to +85°C
MC74HCXXXN (Plastic Package)
MC74HCXXXJ (Ceramic Package)

PIN ASSIGNMENT



FUNCTION TABLE

Inputs			Outputs	
A	B	Reset	Q	Q̄
X	X	L	L	H
H	X	H	L	H
X	L	H	L	H
L	↓	H	⊓	⊔
↓	H	H	⊓	⊔
L	H	↓	⊓	⊔

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