



MOTOROLA

MC54/74HC4518

Product Preview

DUAL BCD COUNTER

The MC54/74HC4518 is identical in pinout to the MC14518 metal-gate CMOS device. The device inputs are compatible with standard CMOS outputs; with pullup resistors, they are compatible with LSTTL outputs.

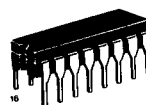
The HC4518 consists of two independent, synchronous 4-stage counters. The counter stages are D-type flip-flops, with interchangeable Clock and Enable lines for incrementing on either the positive-going or negative-going transition as required when cascading multiple stages. Each counter can be Reset by applying a high level on the Reset line. The HC4518 will count out of all undefined states within two clock periods. These up counters find primary use in multi-stage synchronous or ripple counting applications requiring low power dissipation and/or high noise immunity.

- Internally Synchronous for High Internal and External Speeds
- Logic Edge-Clocked Design — Incremented on Positive Transition of Clock or Negative Transition on Enable
- 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 μ A Maximum
- Low Quiescent Current: 80 μ A Maximum (74HC Series)
- High Noise Immunity Characteristic of CMOS Devices
- Diode Protection on All Inputs

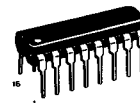
HIGH-PERFORMANCE CMOS

LOW-POWER COMPLEMENTARY MOS
SILICON-GATE

DUAL BCD COUNTER



J SUFFIX
CERAMIC PACKAGE
CASE 620



N SUFFIX
PLASTIC PACKAGE
CASE 648

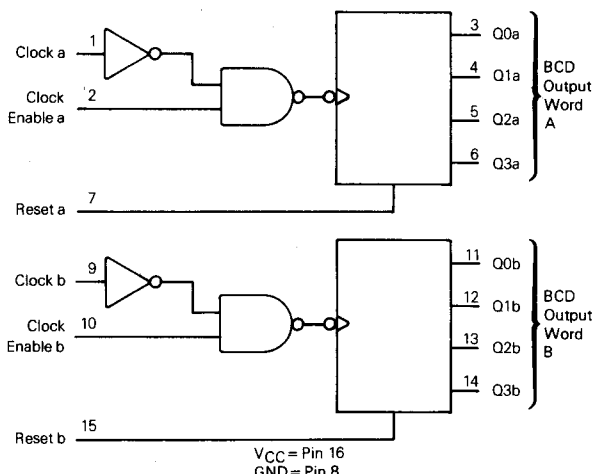
ORDERING INFORMATION

54 Series: -55°C to +125°C
MC54HCXXXXJ (Ceramic Package Only)

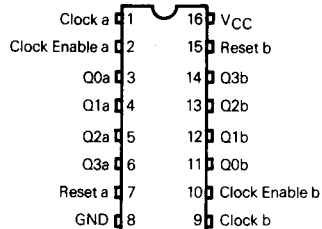
74 Series: -40°C to +85°C
MC74HCXXXXN (Plastic Package)
MC74HCXXXXJ (Ceramic Package)

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BLOCK DIAGRAM



PIN ASSIGNMENT



FUNCTION TABLE

	Clock	Enable	Reset	Operation
		H	L	Increment Counter
		L	L	Increment Counter
		X	L	No Change
		X	H	No Change
		L	L	No Change
		L	L	No Change
		X	X	No Change
		X	H	Q0 thru Q3=L

X = Don't Care

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