
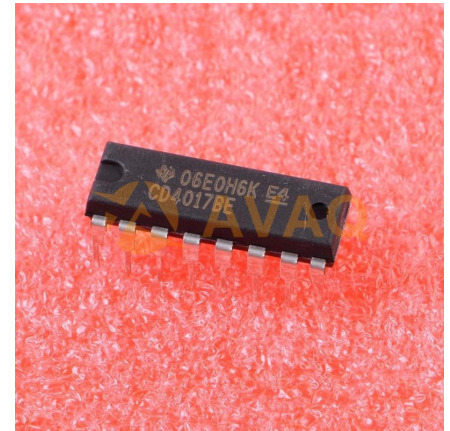


## Counter/Divider Single 5-Bit Decade UP 16-Pin PDIP Tube

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	DIP16
<b>Product Type:</b>	Logic ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

CD4017B and CD4022B are 5-stage and 4-stage Johnson counters having 10 and 8 decoded outputs, respectively. Inputs include a CLOCK, a RESET, and a CLOCK INHIBIT signal. Schmitt trigger action in the CLOCK input circuit provides pulse shaping that allows unlimited clock input pulse rise and fall times. These counters are advanced one count at the positive clock signal transition if the CLOCK INHIBIT signal is low. Counter advancement via the clock line is inhibited when the CLOCK INHIBIT signal is high. A high RESET signal clears the counter to its zero count. Use of the Johnson counter configuration permits high-speed operation, 2-input decode-gating and spike-free decoded outputs. Anti-lock gating is provided, thus assuring proper counting sequence. The decoded output are normally low and go high only at their respective decoded time slot. Each decoded output remains high for one full clock cycle. A CARRY-OUT signal completes one cycle every 10 clock input cycles in the CD4017B or every 8 clock input cycles in the CD4022B and is used to ripple-clock the succeeding device in a multi-device counting chain.

The CD4017B and CD4022B types are supplied in 16-lead hermetic dual-in-line ceramic packages (F3A suffix), 16-lead dual-in-line plastic package (E suffix), 16-lead small-outline packages (NSR suffix), and 16-lead thin shrink small-outline packages (PW and PWR suffixes). The CD4017B types also are supplied in 16-lead small-outline packages (M and M96 suffixes).

## Key Features

Fully static operation

Medium speed operation...10 MHz (typ.) at VDD = 10 V

Standardized, symmetrical output characteristics

100% tested for quiescent current at 20 V

5-V, 10-V, and 15-V parametric ratings

Meets all requirements of JEDEC Tentative Standard No. 13B, "Standard Specifications for Description of 'B' Series CMOS Devices"

### Applications:

Decade counter/decimal decode display (CD4017B)

Binary counter/decoder

Frequency division

Counter control/timers

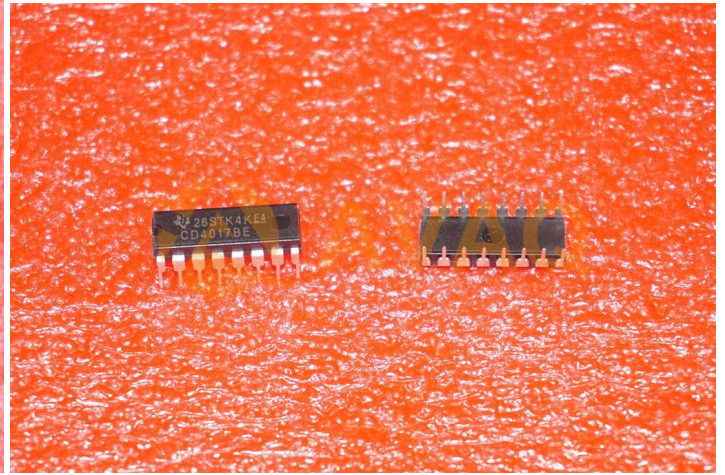
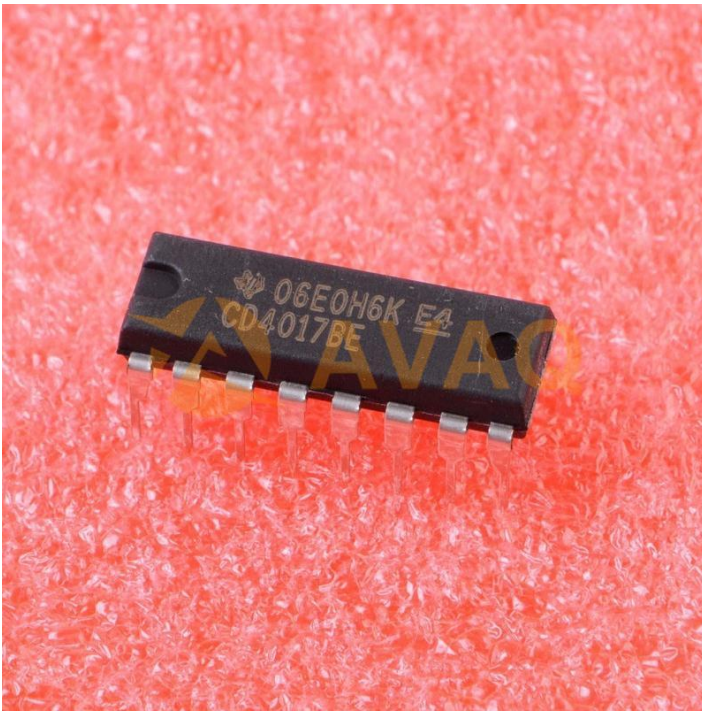
Divide-by-N counting

For further application information, see ICAN-6166 "COS/MOS MSI Counter and Register Design and Applications"

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## Recommended For You

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### **CD40193BE**

Texas Instruments, Inc

DIP

### **CD4024BM**

Texas Instruments, Inc

SOP14

### **CD74AC161M**

Texas Instruments, Inc

SOP16

### **CD4060BM**

Texas Instruments, Inc

SOP

### **CD4520BE**

Texas Instruments, Inc

DIP16

### **CD4040BE**

Texas Instruments, Inc

DIP16

### **CD4026BE**

Texas Instruments, Inc

DIP

### **CD4516BE**

Texas Instruments, Inc

DIP16

### **CD4060BE**

Texas Instruments, Inc

DIP16

### **CD4020BE**

Texas Instruments, Inc

DIP16

### **CD40110BE**

Texas Instruments, Inc

DIP

### **CD74HCT193E**

Texas Instruments, Inc

DIP

### **CD4510BNSR**

Texas Instruments, Inc

SOP16

### **CD4022BE**

Texas Instruments, Inc

DIP

### **CD74HC193E**

Texas Instruments, Inc

DIP