
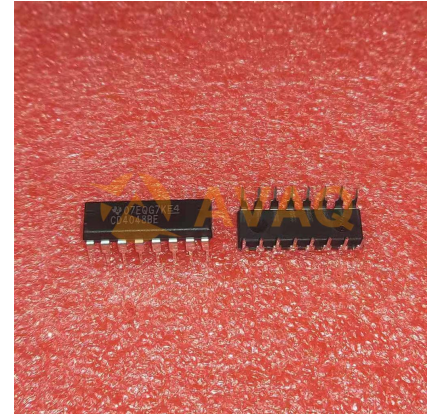


## Multi Function Gate 1-Element 8-IN CMOS 16-Pin PDIP Tube

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	DIP
<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

### Key Features

Three-state output

Many logic functions available in one package

Standardized, symmetrical output characteristics

100% tested for quiescent current at 20 V

Maximum input current of 1  $\mu$ A at 18 V (full package-temperature range), 100 nA at 18 V and 25°C

Noise margin (full package-temperature range) - 1 V at VDD = 5 V, 2 V at VDD = 10 V, 2.5 V at VDD = 15 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

Selection of up to 8 logic functions

Digital control of logic

General-purpose gating logic - Decoding - Encoding

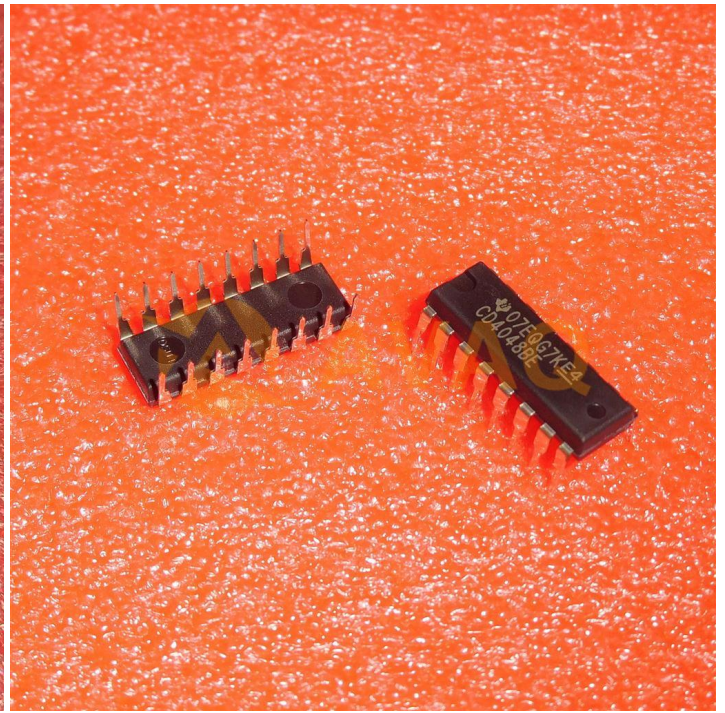
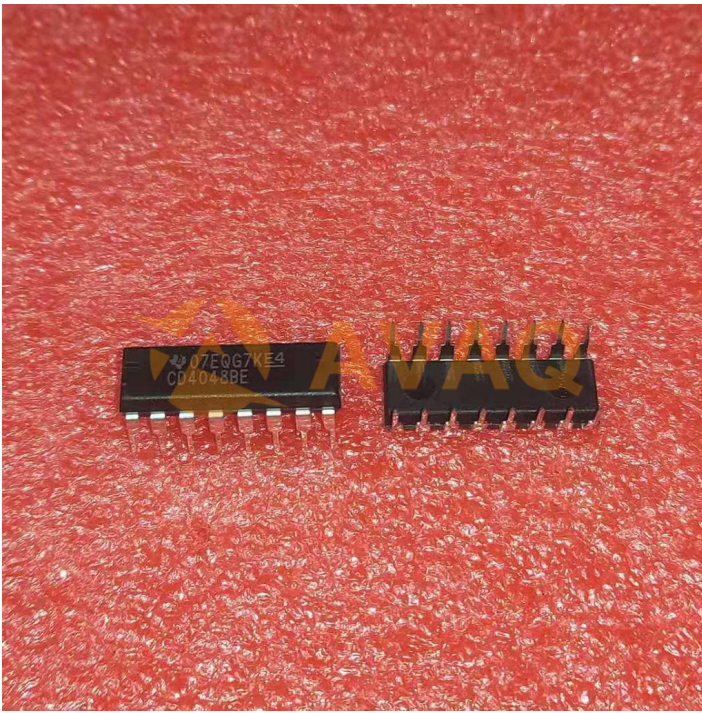
### Description

CD4048B is an 8-input gate having four control inputs. Three binary control inputs - Ka, Kb, and Kc - provide the implementation of eight different logic functions. These functions are OR, NOR, AND, NAND, OR/AND, OR/NAND, AND/OR and AND/NOR.

A fourth control input, Kd, provides the user with a 3-state output. When control input Kd is high, the output is either a logic 1 or a logic 0 depending on the inner states. When control input Kd is low, the output is an open circuit. This feature enables the user to connect this device to a common bus line.

In addition to the eight input lines, an EXPAND input is provided that permits the user to increase the number of inputs into a CD4048B (see Fig. 2). For example, two CD4048Bs can be cascaded to provide a 16-input multifunction gate. When the EXPAND input is not used, it should be connected to VSS.

The CD4048B-series types are supplied in 16-lead hermetic dual-in-line ceramic packages (F3A suffix), 16-lead dual-in-line plastic packages (E suffix), 16-lead small-outline packages (M, M96, MT and NSR suffixes), and 16-lead thin shrink small-outline packages (PW and PWR suffixes).



## Recommended For You

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### CD4070BE

Texas Instruments, Inc

DIP14

### CD74HCT138E

Texas Instruments, Inc

DIP16

### CD4098BE

Texas Instruments, Inc

DIP

### CD74HC08E

Texas Instruments, Inc

DIP

### CD74HC4075E

Texas Instruments, Inc

DIP

### CD74ACT174E

Texas Instruments, Inc

DIP-14

### CD74HC75E

Texas Instruments, Inc

DIP

### CD4504BE

Texas Instruments, Inc

DIP16

### CD4068BE

Texas Instruments, Inc

DIP

### CD4081BE

Texas Instruments, Inc

DIP14

### CD4001BE

Texas Instruments, Inc

DIP14

### CD4512BE

Texas Instruments, Inc

DIP16

### CD4069UBE

Texas Instruments, Inc

DIP14

### CD74HCT151E

Texas Instruments, Inc

DIP

### CD74HC04M

Texas Instruments, Inc

SOP14