



## Analog Multiplier/Divider 4Bit 10-Pin TO-100 Tube

Manufacturer: Analog Devices, Inc

Package/Case: CAN10

**Product Type:** Amplifier ICs

Lifecycle: **NRND** 



Images are for reference only

## **General Description**

The AD632 is an internally trimmed monolithic four-quadrant multiplier/divider. The AD632B has a maximum multiplying error of ±0.5% without external trims.

Excellent supply rejection, low temperature coefficients and long term stability of the on-chip thin film resistors and buried zener reference preserve accuracy even under adverse conditions. The simplicity and flexibility of use provide an attractive alternative approach to the solution of complex control functions. The AD632 is pin-for-pin compatible with the industry standard AD532 with improved specifications and a fully differential high impedance Z-input. The AD632 is capable of providing gains of up to X10, frequently eliminating the need for separate instrumentation amplifiers to precondition the inputs. The AD632 can be effectively employed as a variable gain differential input amplifier with high common-mode rejection. The effectiveness of the variable gain capability is enhanced by the inherent low noise of the AD632: 90  $\mu V$  rms.

Product Highlights

Guaranteed performance over temperature.

The AD632A and AD632B are specified for maximum multiplying errors of ±1.0% and ±0.5% of full scale, respectively, at +25°C and are rated for operation from  $-25^{\circ}$ C to  $+85^{\circ}$ C.

Maximum multiplying errors of ±2.0% (AD632S) and ±1.0% (AD632T) are guaranteed over the extended temperature range of -55°C to +125°C. High reliability.

The AD632S and AD632T series are available with MIL-STD-883 Level B screening.

All devices are available in either the hermetically sealed TO-100 metal can or ceramic DIP package.

Key F	Features	Application

All Inputs (X, Y and Z) Differential, High Impedance for [(X1 - X2) (Y1 - Y2)/10] + Z2 Transfer Function High quality analog signal processing

Pretrimmed to ±0.5% Max 4-Quadrant Error

Scale-Factor Adjustable to Provide up to X10 Gain

Low Noise, Design: 90 µV rms, 10 Hz-10 kHz

Low Cost, Monolithic Construction

Excellent Long-Term Stability

Differential ratio and percentage computations

Algebraic and trigonometric function synthesis

Accurate voltage controlled oscillators and filters





## **Recommended For You**

AD834AQ

Analog Devices, Inc

CDIP8

AD734BN

Analog Devices, Inc

DIP14

AD835AR

Analog Devices, Inc

SOP8

**AD9500BP** 

Analog Devices, Inc

PLCC

AD632ADZ

Analog Devices, Inc

14-CDIP

AD632TH

Analog Devices, Inc

CAN

AD734BNZ

Analog Devices, Inc

DIP14

AD734AQ

Analog Devices, Inc

DIP

AD632AD

Analog Devices, Inc

**AUDIP** 

AD835AN

Analog Devices, Inc

DIP

AD734AN

Analog Devices, Inc

DIP

AD734ANZ

Analog Devices, Inc

DIP14

AD734BQ

Analog Devices, Inc

**CDIP** 

AD835ARZ

Analog Devices, Inc

SOP8

ADG3308BCPZ-REEL7

Analog Devices, Inc

LFCSP-20