AD652BQ/+

VFC Sync 2MHz 16-Pin CDIP

Manufacturer:	Analog Devices, Inc
Package/Case:	CDIP16
Product Type:	Voltage to Frequency & Frequency to Voltage
Lifecycle:	Obsolete

Images are for reference only

Inquiry

General Description

The AD652 uses a variation of the popular charge-balancing technique to perform the conversion function. The AD652 uses an external clock to define the full-scale output frequency, rather than relying on the stability of an external capacitor. The result is a more stable, more linear transfer function, with significant application benefits in both single and multichannel systems.

Gain drift is minimized using a precision low drift reference and low TC on-chip thin-film scaling resistors. Furthermore, the initial gain error is reduced to less than 0.5% by the use of laser-wafer-trimming.

The analog and digital sections of the AD652 have been designed to allow operation from a single-ended power source, simplifying its use with isolated power supplies.

The AD652 is available in five performance grades. The 20-pin PLCC packaged JP and KP grades are specified for operation over the 0°C to +70°C commercial temperature range. The 16- pin cerdip-packaged AQ and BQ grades are specified for operation over the -40°C to +85°C industrial temperature range, and the AD652SQ is available for operation over the full -55°C to +125°C extended temperature range.

Key Features

Full-Scale Frequency (up to 2 MHz) set by external system clock

Extremely low linearity error (0.005% max at 1 MHz FS, 0.02% max at 2 MHz FS)

No critical external components required

Accurate 5V reference voltage

Low drift (25 ppm/°C max)

Dual- or single-supply operation

Voltage or current input

MIL-STD-883 compliant versions available

Recommended For You

AD7305BRZ

Analog Devices, Inc

SOP20

AD9910BSVZ

Analog Devices, Inc

TQFP100

AD9831ASTZ

Analog Devices, Inc

QFP

AD5447YRUZ

Analog Devices, Inc

TSSOP

AD5302BRMZ

Analog Devices, Inc

MSOP10

AD5531BRUZ

Analog Devices, Inc

TSSOP16

AD537JH

Analog Devices, Inc

CAN10

AD652AQ

Analog Devices, Inc

DIP

AD654JN

Analog Devices, Inc

DIP8

AD7740YRMZ

Analog Devices, Inc

MSOP8

AD9914BCPZ

Analog Devices, Inc

LFCSP

AD73311ARSZ

Analog Devices, Inc

SSOP20

AD7291BCPZ

Analog Devices, Inc

LFCSP20

AD9954YSVZ

Analog Devices, Inc

QFP

AD2S1205YSTZ

Analog Devices, Inc

LQFP44