



Data Sheet

DACPORT Low Cost, Complete µP-Compatible 8-Bit DAC

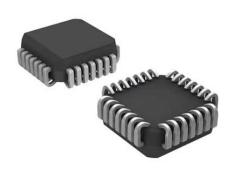
Manufacturers Analog Devices, Inc

Package/Case PLCC-20

Product Type Data Conversion ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD557JPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD5570 is a single 16-bit serial input, voltage output DAC that operates from supply voltages of $\pm 11.4~V$ up to $\pm 16.5~V$. Integral linearity (INL) and differential nonlinearity (DNL) are accurate to 1 LSB. During power-up, when the supply voltages are changing, VOUT is clamped to 0 V via a low impedance path.

The AD5570 DAC comes complete with a set of reference buffers. The reference buffers allow a single, positive reference to be used. The voltage on REFIN is gained up and inverted internally to give the positive and negative reference for the DAC core. Having the reference buffers on-chip eliminates the need for external components such as inverters, precision amplifiers, and resistors, thereby reducing the overall solution size and cost.

The AD5570 uses a versatile 3-wire interface that is compatible with SPI®, QSPITM, MICROWIRETM, and DSP® interface standards.Data is presented to the part as a 16-bit serial word. Serial data is available on the SDO pin for daisy-chaining purposes. Data readback allows the user to read the contents of the DACregister via the SDO pin.

Features on the AD5570 include LDAC which is used to update the output of the DAC. The device also has a power-down pin (PD), allowing the DAC to be put into a low power state, and a CLR pin that allows the output to be cleared to 0 V.

The AD5570 is available in a 16-lead SSOP.

Product Highlights

1 LSB maximum INL and DNL.

Buffered voltage output up to $\pm 14 \text{ V}$.

Output controlled during power-up.

On-board reference buffers.

Wide temperature range of -40° C to $+125^{\circ}$ C.

Annlications

Industrial automation

Automatic test equipment

Process control

Data acquisition systems

General-purpose instrumentation

Features

Full 16-bit performance

1 LSB max INL and DNL

Output voltage range up to $\pm 14~V$

On-board reference buffers, eliminating the need for a negative reference

Temperature ranges of -40°C to +85°C for A/B version/-40°C to +125°C for W/Y version

Controlled output during power-on

Settling time of 10 µs to 0.003%

Clear function to 0 V

Asynchronous update of outputs (LDAC pin)

Power-on reset

Serial data output for daisy chaining

Data readback facility

Related Products



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



Analog Devices, Inc PDIP-28

AD574AJNZ



AD7938BSUZ
Analog Devices, Inc
TQFP-32



Industrial automation

Automatic test equipment

Process control

Data acquisition systems

General-purpose instrumentation



AD7266BSUZ
Analog Devices, Inc
TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



AD7124-8BCPZ-RL7
Analog Devices, Inc
LFCSP-32



Analog Devices, Inc LFCSP-64