

DAC 1-CH R-2R 8-bit 16-Pin PDIP N Tube

Manufacturer: Analog Devices, Inc

Package/Case: DC

Product Type: Data Conversion ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: NRND





Images are for reference only



General Description

The DAC08 series of 8-bit monolithic digital-to-analog convertersprovide very high speed performance coupled with low costand outstanding applications flexibility.

Advanced circuit design achieves 85 ns settling times with verylow glitch energy and at low power consumption. Monotonic multiplying performance is attained over a wide 20 to 1 reference current range. Matching to within 1 LSB between reference and full-scale currents eliminates the need for full-scale trimming inmost applications.

Direct interface to all popular logic families with full noiseimmunity is provided by the high swing, adjustable thresholdlogic input.

High voltage compliance complementary current outputs are provided, increasing versatility and enabling differential operation of effectively double the peak-to-peak output swing. In manyapplications, the outputs can be directly converted to voltage without the need for an external op amp. All DAC08 series models guarantee full 8-bit monotonicity, and nonlinearities as tight as $\pm 0.1\%$ over the entire operating temperature range are available. Device performance is essentially unchanged over the ± 4.5 V to ± 18 V power supply range, with 33 mW power consumption attainable at ± 5 V supplies.

The compact size and low power consumption make the DAC08attractive for portable and military/aerospace applications; devices processed to MIL-STD-883, Level B are available.

DAC08 applications include 8-bit, 1 µs A/D converters, servomotor and pen drivers, waveform generators, audio encodersand attenuators, analog meter drivers, programmable powersupplies, LCD display drivers, high speed modems, and otherapplications where low cost, high speed, and completeinput/output versatility are required.

Key Features

Fast settling output current: 85 ns

Full-scale current prematched to ± 1 LSB

Direct interface to TTL, CMOS, ECL, HTL, PMOS

Nonlinearity to 0.1% maximum over temperature range

High output impedance and compliance: $-10\ V$ to $+18\ V$

Complementary current outputs

Wide range multiplying capability: 1 MHz bandwidth

Low FS current drift: ±10 ppm/°C

Wide power supply range: ± 4.5 V to ± 18 V

Low power consumption: 33 mW at ± 5 V

Low cost

Recommended For You

DAC8562FSZ

Analog Devices, Inc

SOP20

DAC8800FPZ

Analog Devices, Inc

20-LeadPDIP

ADAQ7980BCCZ

Analog Devices, Inc

LGA-24

ADA4350ARUZ

Analog Devices, Inc

TSSOP28

ADAQ4001BBCZ-RL13

Analog Devices, Inc

BGA49

DAC08AQ

Analog Devices, Inc

DIP

DAC312HPZ

Analog Devices, Inc

DIP

DAC312FR

Analog Devices, Inc

DIP

DAC08CSZ

Analog Devices, Inc

SOP16

DAC8043AESZ

Analog Devices, Inc

SOP8

DAC08EQ

Analog Devices, Inc

CDIP16

DAC08ESZ

Analog Devices, Inc

SOP16

 ${\bf ADAQ4003BBCZ}$

Analog Devices, Inc

BGA

DAC8043FPZ

Analog Devices, Inc

DIP8

ADAL6110-16BCPZ

Analog Devices, Inc

LFCSP-48