

# AD558TD/883B

Data Sheet

#### DAC 1-CH R-2R 8-bit 16-Pin SBCDIP Tube

Manufacturers <u>Analog Devices, Inc</u>

Package/Case CDIP-16

Product Type Data Conversion ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for AD558TD/883B or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

### **General Description**

The AD558 DACPORT® is a complete voltage-output 8-bit digital-to-analog converter, including output amplifier, full microprocessor interface and precision voltage reference on a single monolithic chip. No external components or trims are required to interface, with full accuracy, an 8-bit data bus to an analog system.

The performance and versatility of the DACPORT is a result of several recently-developed monolithic bipolar technologies. The complete microprocessor interface and control logic is implemented with integrated injection logic (I2 L), an extremely dense and low power logic structure that is process-compatible with linear bipolar fabrication. The internal precision voltage reference is the patented low voltage bandgap circuit which permits full-accuracy performance on a single +5 V to +15 V power supply. Thin-film silicon-chromium resistors provide the stability required for guaranteed monotonic operation over the entire operating temperature range (all grades), while recent advances in laser-wafer-trimning of these thin-film resistors permit absolute calibration at the factory to within  $\pm 1$  LSB; thus no user-trims for gain or offset are required. A new circuit design provides voltage settling to  $\pm 1/2$  LSB for a full-scale step in 800 ns.

The AD558 is available in four performance grades. The AD558J and K are specified for use over the 0°C to +70°C temperature range, while the AD558S and T grades are specified for -55°C to +125°C operation. The "J" and "K" grades are available either in 16-pin plastic (N) or hermetic ceramic (D) DIPS. They are also available in 20-pin JEDEC standard PLCC packages. The "S" and "T" grades are available in the 16-pin hermetic ceramic DIP package.

DACPORT is a registered trademark of Analog Devices, Inc.

## **Features**

Complete 8-bit DAC

Voltage Output-2 Calibrated Ranges

Internal Precision Bandgap Reference

Single-Supply Operation: +5~V to +15~V

Full Microprocessor Interface

Fast: 1  $\mu s$  Voltage settling to  $\pm 1/2$  LSB

Low Power: 75 mW

No User Trims

Guaranteed Monotonic Over Temperature

All Errors Specified Tmin to Tmax

Small 16-Pin DIP and 20-PIN PLCC Packages

Single Laser-Wafer-Trimmed Chip for Hybrids



#### **Related Products**



ADAS3022BCPZ
Analog Devices, Inc
LFCSP-40



AD574AJNZ
Analog Devices, Inc
PDIP-28



AD7938BSUZ
Analog Devices, Inc
TQFP-32



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



AD7266BSUZ Analog Devices, Inc TQPF-32



AD7401YRWZ
Analog Devices, Inc
SOIC-16



AD7192BRUZ-REEL
Analog Devices, Inc
TSSOP-24



AD9680BCPZ-500
Analog Devices, Inc
LFCSP-64