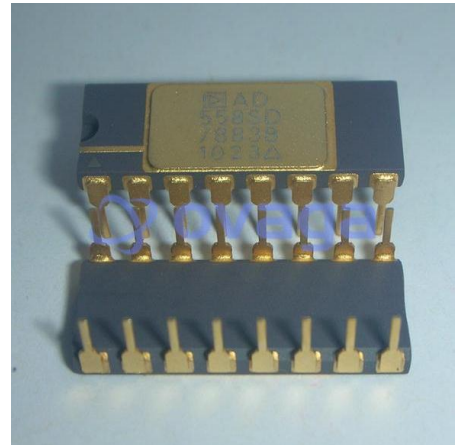


## 8-Bit Digital-to-Analog Converter

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	DIP-16
Product Type	Data Conversion ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for AD558SD/883B or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## 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 (I<sup>2</sup>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-trimming of these thin-film resistors permit absolute calibration at the factory to within ±1 LSB; thus no user-trims for gain or offset are required. A new circuit design provides voltage settling to ±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

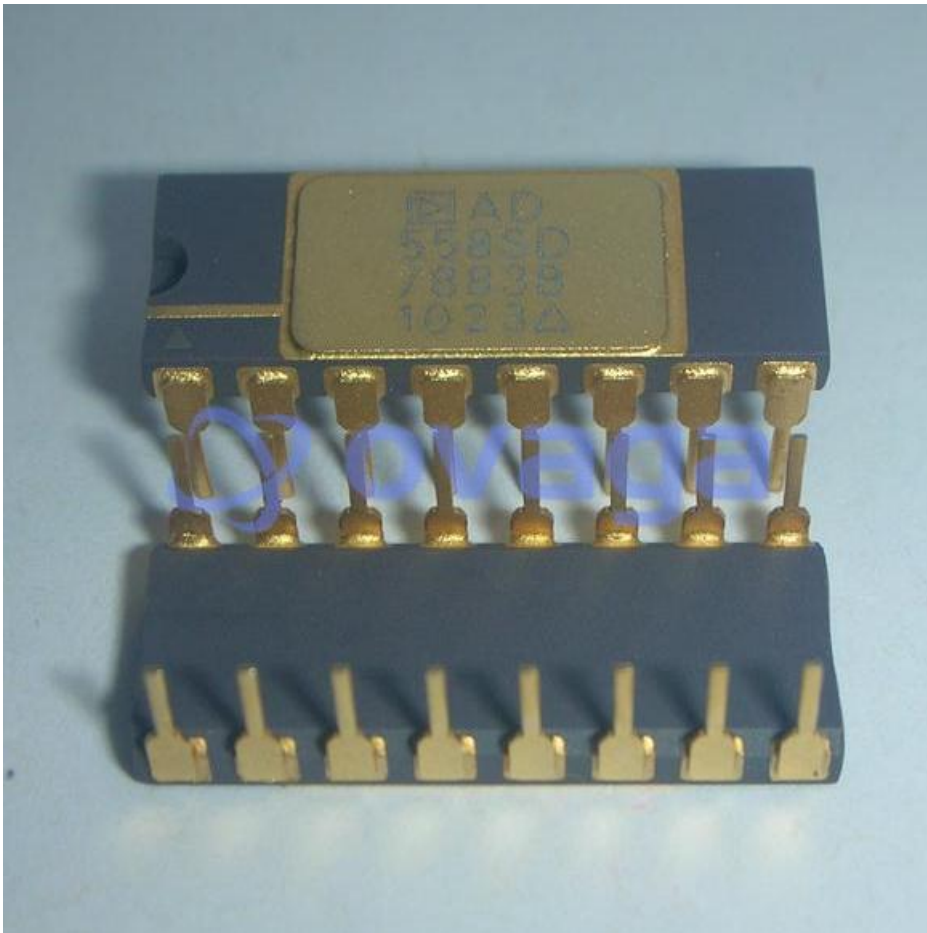
No User Trims

Guaranteed Monotonic Over Temperature

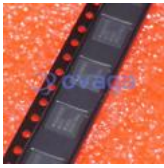
All Errors Specified T<sub>min</sub> to T<sub>max</sub>

Small 16-Pin DIP and 20-PIN PLCC Packages

Single Laser-Wafer-Trimmed Chip for Hybrids



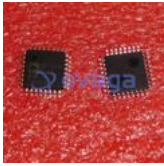
## Related Products



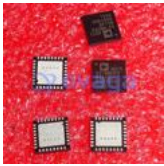
[ADAS3022BCPZ](#)  
Analog Devices, Inc  
LFCSP-40



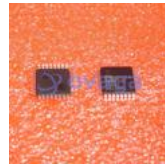
[AD574AJNZ](#)  
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TQFP-32



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LFCSP-64