

8-Channel Single ADC SAR 200ksps 12-bit Serial 24-Pin SOIC W Tube

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-24
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7858ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7858 / AD7858L are high speed, low power, 12-bit ADCs that operate from a single 3 V or 5 V power supply, the AD7858 being optimized for speed and the AD7858L for low power. The ADC powers up with a set of default conditions at which time it can be operated as a read only ADC. The ADC contains self-calibration and system calibration options to ensure accurate operation over time and temperature and have a number of power-down options for low power applications. The part powers up with a set of default conditions and can operate as a read only ADC.

The AD7858 is capable of 200 kHz throughput rate while the AD7858L is capable of 100 kHz throughput rate. The input track-and-hold acquires a signal in 500 ns and features a pseudo-differential sampling scheme. The AD7858/AD7858L voltage range is 0 to V_{REF} with both straight binary and 2s complement output coding. Input signal range is to the supply and the part is capable of converting full power signals to 100 kHz.

CMOS construction ensures low power dissipation of typically 5.4 mW for normal operation and 3.6 μ W in power-down mode. The part is available in 24-pin, 0.3 inch-wide dual-in-line package (DIP), 24-lead small outline (SOIC) and 24-lead small shrink outline (SSOP) packages.

APPLICATIONS

PRODUCT HIGHLIGHTS

- Specified for 3 V and 5 V supplies.
- Automatic calibration on power-up.
- Flexible power management options including automatic power-down after conversion.
- Operates with reference voltages from 1.2 V to VDD. 5. Analog input range from 0 V to VDD.
- Eight single-ended or four pseudo-differential input channels.
- System and self-calibration.

Versatile serial I/O port (SPI/QSPI/8051/μP).

Lower power version AD7858L.

Features

Specified for V

DD

System and Self-Cal with Autocal on Power-Up

Eight Single-Ended or Four Pseudo-Differential Inputs

Low Power: 12 mW/AD7858, 4.5 mW/AD7858L

Automatic Power-Down After Conversion (25 μW)

Application

Battery-Powered Systems (Personal Digital Assistants,

Medical Instruments, Mobile Communications)

Pen Computers

Instrumentation and Control Systems

High-Speed Modems

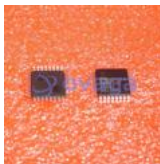


Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



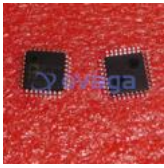
[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



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SOIC-16



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