

Digital to Analogue Converter, 16 bit, 143 kSPS, Serial, $\pm 14.25\text{V}$ to $\pm 15.75\text{V}$, WSOIC, 20 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-20
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD7849CRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD7849 is a 14-bit/16-bit serial input multiplying DAC. The DAC architecture ensures excellent differential linearity performance, and monotonicity is guaranteed to 14 bits for the A grade and to 16 bits for all other grades over the specified temperature ranges. During power-up and power-down sequences (when the supply voltages are changing), the VOUT pin is clamped to 0 V via a low impedance path. To prevent the output of A3 being shorted to 0 V during this time, transmission gate G1 is also opened. These conditions are maintained until the power supplies stabilize and a valid word is written to the DAC register. At this time, G2 opens and G1 closes. Both transmission gates are also externally controllable via the Reset In (RST IN) control input. For instance, if the RST IN input is driven from a battery supervisor chip, then on power-off or during a brown out, the RST IN input will be driven low to open G1 and close G2. The DAC must be reloaded, with RST IN high, to reenable the output. Conversely, the on-chip voltage detector output (RST OUT) is also available to the user to control other parts of the system.

The AD7849 has a versatile serial interface structure and can be controlled over three lines to facilitate opto-isolator applications.

SDOUT is the output of the on-chip shift register and can be used in a daisy-chain fashion to program devices in the multichannel system. The DCEN (Daisy Chain Enable) input controls this function.

The BIN/COMP pin sets the DAC coding; with BIN/COMP set to 0, the coding is straight binary; and with it set to 1, the coding is 2's complement. This allows the user to reset the DAC to 0 V in both the unipolar and bipolar output ranges.

The part is available in a 20-pin DIP and 20-pin SOIC package.

Features

14-Bit/16-Bit Multiplying DAC

Guaranteed Monotonicity

Output Control on Power-Up and Power-Down Internal or External Control

Versatile Serial Interface

DAC Clears to 0 V in Both Unipolar and Bipolar Output Ranges

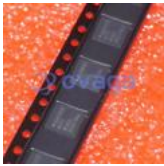
Application

Industrial process controls

PC analog I/O boards

Instrumentation

Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD574AJNZ](#)

Analog Devices, Inc
PDIP-28



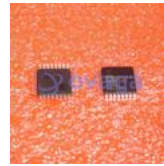
[AD7938BSUZ](#)

Analog Devices, Inc
TQFP-32



[AD7124-8BCPZ-RL7](#)

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