

Digital to Analogue Converter, 12 bit, 20.4 MSPS, Parallel, 2.5V to 5.5V, TSSOP, 20 Pins

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



Images are for reference only

Please submit RFQ for AD5445YRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5424/AD5433/AD5445 are CMOS 8-, 10-, and 12-bit current output digital-to-analog converters (DACs), respectively. These devices operate from a 2.5 V to 5.5 V power supply, making them suitable for battery-powered applications and many other applications. These DACs utilize data readback, allowing the user to read the contents of the DAC register via the DB pins. On power-up, the internal register and latches are filled with 0s and the DAC outputs are at zero scale.

As a result of manufacturing with a CMOS submicron process, they offer excellent 4-quadrant multiplication characteristics, with large signal multiplying bandwidths of up to 10 MHz.

The applied external reference input voltage (VREF) determines the full-scale output current. An integrated feedback resistor (RFB) provides temperature tracking and full-scale voltage output when combined with an external I-to-V precision amplifier.

While these devices are upgrades of the AD5424/AD5433/AD5445 in multiplying bandwidth performance, they have a latched interface and cannot be used in transparent mode.

The AD5424 is available in a small, 20-lead LFCSP and a small, 16-lead TSSOP, while the AD5433 and AD5445 DACs are available in a small, 20-lead LFCSP and a small, 20-lead TSSOP. The EVAL-AD5445SDZ evaluation board is available for evaluating DAC performance. For more information, see the UG-333 evaluation board user guide.

Features

2.5 V to 5.5 V supply operation

Fast parallel interface (17 ns write cycle)

Update rate of 20.4 MSPS

INL of ± 1 LSB for 12-bit DAC

10 MHz multiplying bandwidth

Extended temperature range: -40°C to $+125^{\circ}\text{C}$

See data sheet for additional features

Application

Portable battery-powered applications

Waveform generators

Analog processing

Instrumentation applications

Programmable amplifiers and attenuators

Digitally controlled calibration

Programmable filters and oscillators

Composite video

Ultrasound

Gain, offset, and voltage trimming

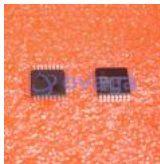


Related Products



[ADAS3022BCPZ](#)

Analog Devices, Inc
LFCSP-40



[AD7266BSUZ](#)

Analog Devices, Inc
TQPF-32



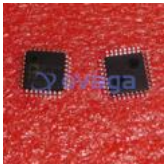
[AD574AJNZ](#)

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