

Digital to Analogue Converter, Quad, 16 bit, 25 MSPS, SPI, 2.7V to 5.5V, TSSOP, 16 Pins

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



Images are for reference only

Please submit RFQ for AD5686RBRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD5686R nanoDAC+™ is a quad, 16-bit, rail-to-rail, voltage output DAC. The device includes a 2.5V, 2ppm/°C internal reference (enabled by default) and a gain select pin giving a full-scale output of 2.5V>

The device operates from a single 2.7 V to 5.5 V supply, is guaranteed monotonic by design and exhibits less than 0.1% FSR gain error and 1.5mV offset error performance. The device is available in a 3mm X 3mm LFCSP and a TSSOP package.

The AD5686R also incorporates a power-on-reset circuit and a RSTSEL pin that ensures the DAC outputs power up to zero-scale or midscale, and remain there until a valid write takes place. Each device contains a per-channel power-down feature that reduces the current consumption of the device to 4 uA at 3 V while in power-down mode.

The AD5686R employs a versatile SPI interface that operates at clock rates up to 50 MHz and includes a VLOGIC pin intended for 1.8V/3V/5V logic.

### Product Highlights

High Relative Accuracy: AD5686R(16-bit); ±2LSB INL max

Low drift on-chip reference: 2.5 V, 2 ppm/°C temperature drift.

Two package options: 3mm × 3mm 16 lead LFCSP or 16 lead TSSOP

## Features

High relative accuracy (INL):  $\pm 2$  LSB maximum at 16-bits

Low drift 2.5 V reference: 2 ppm/°C typical

Tiny package: 3 mm  $\times$  3 mm, 16-lead LFCSP or TSSOP

Total unadjusted error (TUE): 0.1% of FSR maximum

Offset error: 1.5 mV maximum

Gain error: 0.1 % of FSR maximum

See data sheet for additional features

AD5686R-EP supports defense and aerospace applications (AQEC standard)

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Temperature range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

Controlled manufacturing baseline

1 assembly/test site

1 fabrication site

Enhanced product change notification

Qualification data available on request

V62/14335 DSCC Drawing Number

## Application

Optical transceivers

Base-station power amplifiers

Process control (PLC I/O cards)

Industrial automation

Data acquisition systems

## Related Products



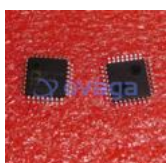
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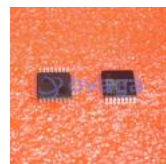
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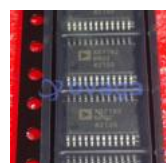
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