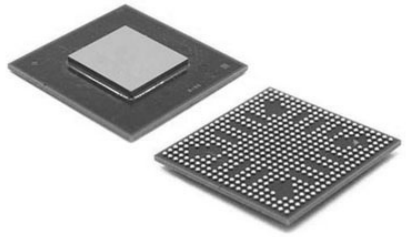
AD5686RBCPZ-RL7

Data Sheet

Digital to Analog Converters - DAC 16b 4ch SPI IF w/on-chip Ref

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-16
Product Type	Data Conversion ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD5686RBCPZ-RL7 or Email to us: 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): ±2 LSB maximum at 16-bits

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

Tiny package: 3 mm × 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)

Download(pdf)

Temperature range: −55°C to +125°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

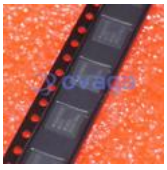
Base-station power amplifiers

Process control (PLC I/O cards)

Industrial automation

Data acquisition systems

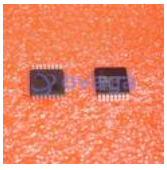
Related Products



ADAS3022BCPZ

Analog Devices, Inc

LFCSP-40



AD7266BSUZ

Analog Devices, Inc

TQPF-32

AD574AJNZ

Analog Devices, Inc

PDIP-28

AD7401YRWZ

Analog Devices, Inc

SOIC-16

AD7938BSUZ

Analog Devices, Inc

TQFP-32

AD7192BRUZ-REEL

Analog Devices, Inc

TSSOP-24

AD7124-8BCPZ-RL7

Analog Devices, Inc

LFCSP-32

AD9680BCPZ-500

Analog Devices, Inc

LFCSP-64