

Analogue Switch, Quad Channel, 4 Channels, SPST, 1.8 ohm, 5V to 16.5V,  $\pm 4.5V$  to  $\pm 16.5V$ , TSSOP

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



Images are for reference only

Please submit RFQ for ADG1411YRUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADG1411/ADG1412/ADG1413 are monolithic complementary metal-oxide semiconductor (CMOS) devices containing four independently selectable switches designed on an iCMOS® process. iCMOS (industrial CMOS) is a modular manufacturing process combining high voltage CMOS and bipolar technologies. It enables the development of a wide range of high performance analog ICs capable of 33 V operation in a footprint that no previous generation of high voltage devices has been able to achieve. Unlike analog ICs using conventional CMOS processes, iCMOS components can tolerate high supply voltages while providing increased performance, dramatically lower power consumption, and reduced package size.

The on-resistance profile is very flat over the full analog input range, ensuring excellent linearity and low distortion when switching signals.

iCMOS construction ensures ultralow power dissipation, making the devices ideally suited for portable and battery-powered instruments.

The ADG1411/ADG1412/ADG1413 contain four independent single-pole/single-throw (SPST) switches. The ADG1411 and ADG1412 differ only in that the digital control logic is inverted. The ADG1411 switches are turned on with Logic 0 on the appropriate control input, whereas the ADG1412 switches are turned on with Logic 1. The ADG1413 has two switches with digital control logic similar to that of the ADG1411; the logic is inverted on the other two switches. Each switch conducts equally well in both directions when on and has an input signal range that extends to the supplies. In the off condition, signal levels up to the supplies are blocked.

The ADG1413 exhibits break-before-make switching action for use in multiplexer applications. Inherent in the design is low charge injection, which results in minimum transients when the digital inputs are switched

### Product Highlights

2.6  $\Omega$  maximum on resistance over temperature

Minimum distortion

Ultralow power dissipation:  $<0.03 \mu W$

16-lead TSSOP and 16-lead, 4 mm  $\times$  4 mm LFCSP

## Features

1.5  $\Omega$  on-resistance

0.3  $\Omega$  on-resistance flatness

0.1  $\Omega$  on-resistance match between channels

Continuous current per channel

LFCSP: 250 mA

TSSOP: 190 mA

Fully specified at +12 V,  $\pm 15$  V, and  $\pm 5$  V

No VL supply required 3 V logic-compatible inputs

Rail-to-rail operation

16-lead TSSOP and 16-lead, 4 mm  $\times$  4 mm LFCSP

Qualified for automotive applications

## Application

Automated test equipment

Data acquisition systems

Battery-powered systems

Sample-and-hold systems

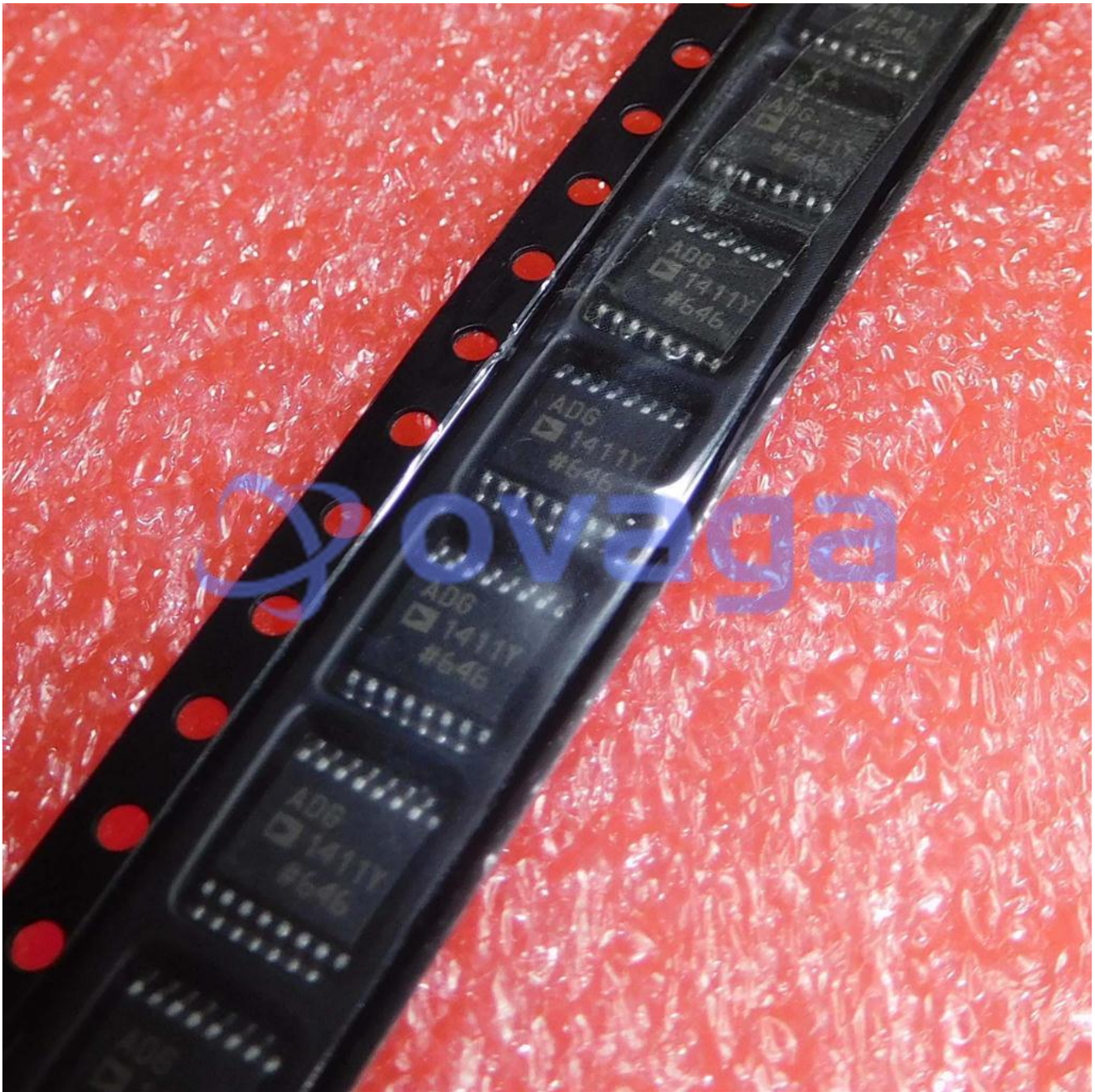
Audio signal routing

Video signal routing

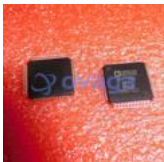
Communications systems

Relay replacement





## Related Products



### [ADV7181CBSTZ](#)

Analog Devices, Inc  
LQFP-64



### [AD8170AR](#)

Analog Devices, Inc  
SOP8



### [AD724JR](#)

Analog Devices, Inc  
SOIC-16



### [ADV7393BCPZ](#)

Analog Devices, Inc  
LFCSP-VQ-40



[ADV7391WBCPZ](#)

Analog Devices, Inc  
LFSCP-3



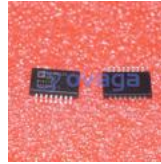
[ADV7390BCPZ](#)

Analog Devices, Inc  
QFN32



[ADV7341BSTZ](#)

Analog Devices, Inc  
LQFP-64



[ADUM4160BRIZ](#)

Analog Devices, Inc  
SOIC-16