# ADG731BCPZ

Data Sheet

32:1 Analog Multiplexer IC, Single, 5.5 ohm, 1.8V to 5.5V, LFCSP-48

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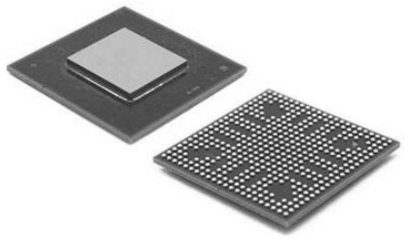
|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | LFCSP-48 |
| Product Type | Analog Switches Multiplexers ; Dual Supply 2V to 8V |
| RoHS | Rohs |
| Lifecycle | |



Images are for reference only

Please submit RFQ for ADG731BCPZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

## General Description

The ADG731/ADG725 are monolithic, CMOS, 32-channel/dual 16-channel analog multiplexers with a serially controlled 3-wire interface. The ADG731 switches one of 32 inputs (S1–S32) to a common output, D. The ADG725 can be configured as a dual mux switching one of 16 inputs to one output, or a differential mux switching one of 16 inputs to a differential output.

These mulitplexers utilize a 3-wire serial interface that is compatible with SPI®, QSPI™, MICROWIRE™, and some DSP interface standards. On power-up, the Internal Shift Register contains all zeros and all switches are in the OFF state.

These multiplexers are designed on an enhanced submicron process that provides low power dissipation yet gives high switching speed with very low on resistance and leakage currents. They operate from a single supply of 1.8 V to 5.5 V or a ±2.5 V dual supply, making them ideally suited to a variety of applications. On resistance is in the region of a few ohms, is closely matched between switches, and is very flat over the full signal range.

These parts can operate equally well as either multiplexers or demultiplexers and have an input signal range that extends to the supplies. In the OFF condition, signal levels up to the supplies are blocked. All channels exhibit break-before-make switching action, preventing momentary shorting when switching channels.

The ADG731 and ADG725 are serially controlled 32-channel, and dual/differential 16-channel multiplexers, respectively. They are available in either a 48-lead LFCSP or TQFP package.

Product Highlights

3-Wire Serial Interface.

1.8 V to 5.5 V Single-Supply or ±2.5 V Dual-SupplyOperation. These parts are specified and guaranteedwith 5 V ± 10%, 3 V ± 10% single-supply,and ± 2.5 V ±10% dual-supply rails.

On Resistance of 4 W.

Guaranteed Break-Before-Make Switching Action.

7 mm ×7 mm 48-Lead Chip Scale Package (LFCSP) or

48-Lead TQFP Package.

## Features

3-Wire SPI Compatible Serial Interface

1.8 V to 5.5 V Single Supply

4 Ω On Resistance

0.5 Ω On Resistance Flatness

7 mm x 7 mm 48-Lead Chip Scale Package (LFCSP) or 48-Lead TQFP Package

Rail-to-Rail Operation

Power-On Reset

See data sheet for additional feature

## Application

Optical Applications

Data Acquisition Systems

Communication Systems

Relay Replacement

Audio and Video Switching

Battery-Powered Systems

Medical Instrumentation

Automatic Test Equipment

### 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

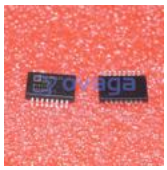
Analog Devices, Inc

QFN32

ADV7341BSTZ

Analog Devices, Inc

LQFP-64



ADUM4160BRIZ

Analog Devices, Inc

SOIC-16