

Analog Video 200MHz 16 x 16 128-Pin LQFP Tray

Manufacturer: Analog Devices, Inc

Package/Case: QFP128

Product Type: Switches

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only



General Description

The AD8116 is a high speed 16×16 video crosspoint switch matrix. It offers a -3 dB signal bandwidth greater than 200 MHz and channel switch times of 50 ns with 0.1% settling. With -60 dB of crosstalk and -105 dB of isolation (@ 10 MHz), the AD8116 is useful in many high speed applications. The differential gain and differential phase errors of better than 0.01% and 0.01°, respectively, along with 0.1 dB flatness out to 60 MHz make the AD8116 ideal for video signal switching.

The AD8116 includes output buffers that can be placed into a high impedance state for paralleling crosspoint outputs so that off channels do not load the output bus. It operates on voltage supplies of ± 5 V while consuming only 80 mA of idle current. The channel switching is performed via a serial digital control that can accommodate "daisy chaining" of several devices.

The AD8116 is packaged in a 128-lead LQFP package occupying only 0.36 square inches, and is specified over the commercial temperature range of 0° C to $+70^{\circ}$ C.

An evaluation board is available for this product and may be ordered using the following product number: AD8116-EB. Schematic and layout for this evaluation board is contained in the product datasheet.

Key Features

16 x 16 High-Speed Nonblocking Switch Array

Switch Array Controllable via an 80-Bit Serial Word

Serial Data Out Allows "Daisy Chaining" of Multiple AD8116s to Create Large Switch Arrays Over 256 x 256

Complete Solution Buffered Inputs 16 Individual Output Amplifiers Drives 150 Ω Loads

Excellent AC Performance200 MHz -3 dB Bandwidth300 V/ μs Slew Rate

Excellent Video Performance

60 MHz, 0.1 dB Gain Flatness 0.01% Differential Gain = 150 Ω)

Low Power of 900 mW (3.5 mW per Point)

Low All Hostile Crosstalk of -70 dB @ 5 MHz

See data sheet for additional Features



Recommended For You

AD1803JRU	AD1847JP	AD8109ASTZ

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

TSSOP24 PLCC QFP

AD8115ASTZ AD1980JST-REFL AD1836AAS

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QFP QFP48 QFP52

AD1843JS

Analog Devices, Inc

QFP

AD1888JCPZ-REEL

Analog Devices, Inc

LFCSP-48

QFP

ADV611JST

Analog Devices, Inc

QFP

ADN4600ACPZ

Analog Devices, Inc

QFN

AD8152JBPZ

ADV601LCJST

Analog Devices, Inc

Analog Devices, Inc

BGA

ADN4605ABPZ

Analog Devices, Inc

BGA

AD8113JSTZ

Analog Devices, Inc

QFP

ADN4612ACPZ

Analog Devices, Inc

LFCSP-88