

Video Amp Quad 5V 14-Pin TSSOP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: TSSOP14

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

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General Description

Fabricated using the revolutionary, complementary Silicon-Germanium (SiGe) BiCom3X process, the THS7373 is a low-power, single-supply, 3-V to 5-V, four-channel integrated video buffer. It incorporates one standard-definition (CVBS) and three high-definition (HD) filter channels. All filters feature sixth-order Butterworth characteristics that are useful as digital-to-analog converter (DAC) reconstruction filters or as analog-to-digital converter (ADC) anti-aliasing filters. The HD filters can be bypassed to support 1080p60 video or up to quad extended graphics array (QXGA) RGB video.

As part of the THS7373 flexibility, the input can be configured for ac- or dc-coupled inputs. The 300-mV output level shift allows for a full sync dynamic range at the output with 0-V input. The ac-coupled modes include a transparent sync-tip clamp option for composite video (CVBS), Y', and G'B'R' signals. AC-coupled biasing for C'/P'B/P'R channels can easily be achieved by adding an external resistor to VS+.

The THS7373 rail-to-rail output stage with 6-dB gain allows for both ac and dc line driving. The ability to drive two lines, or 75- Ω loads, allows for maximum flexibility as a video line driver. The 16.2-mA total quiescent current at 3.3 V and 0.1 μ A (disabled mode) makes it an excellent choice for power-sensitive video applications.

The THS7373 is available in a small TSSOP-14 package that is lead-free and green (RoHS-compliant).

Key Features

One SDTV Video Amplifier for CVBS Video

Three HDTV Video Amplifiers for Y'/P'B/P'R, 720p/1080i/1080p30, or G'B'R' (R'G'B')

Sixth-Order Low-Pass Filters: CVBS Channel: –3 dB at 9.5-MHz

HD Channels: -3 dB at 36-MHz with 350-MHz Bypass for 1080p60 Support

Versatile Input Biasing:

DC-Coupled with 300-mV Output Shift

AC-Coupled with Sync-Tip Clamp

Allows AC-Coupling with Biasing

Built-in 6-dB Gain (2 V/V)

+3-V to +5-V Single-Supply Operation

Rail-to-Rail Output:

Output Swings Within 100 mV from the Rails: Allows AC or DC Output Coupling

Supports Driving Two Video Lines/Channel

Low Total Quiescent Current: 16.2 mA at 3.3 V

Disabled Supply Current Function: 0.1 µA

Low Differential Gain/Phase: 0.15%/0.25°

RoHS-Compliant Package: TSSOP-14

Recommended For You

THS3092D THS7316DR THS4131IDGNR

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP-8 SOP-8 MSOP8

THS4011CD THS7374IPW THS6184RHFR

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SOP TSSOP14 QFN

THS45031DGN THS7376IPWR THS7314D

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MSOP8 TSSOP14 SOP8

THS4130IDGK

Texas Instruments, Inc

MSOP8

THS7353PW

Texas Instruments, Inc

TSSOP20

VQFN16

THS4281D

Texas Instruments, Inc

SOIC-8

THS4631D

Texas Instruments, Inc

SOP-8

THS3061DGN

THS4551IRGTR

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MSOP8