

Video Amp Hex 5V 20-Pin TSSOP Tube

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

Package/Case: TSSOP-20

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

Fabricated using the revolutionary, complementary Silicon-Germanium (SiGe) BiCom3X process, the THS7368 is a low-power, single-supply, 2.7-V to 5-V, six-channel integrated video buffer. It incorporates three SDTV filters and three selectable SD/ED/HD/Full-HD (also known as True-HD) HDTV filters. All filters feature bypassable 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 THS7368 has flexible input coupling capabilities that can be configured for either 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 for 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 THS7368 is an ideal choice for all video buffer applications. Its 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- loads, allows for maximum flexibility as a video line driver. The 23.4-mA total quiescent current at 3.3 V and 0.1 μ A (disabled mode) makes it a good choice for systems that must meet power-sensitive Energy Star standards.

The THS7368 is available in a TSSOP-20 package that is lead-free and green (RoHS-compliant).

Key Features

Three SDTV Video Amplifiers for CVBS, S-Video, Y'/P'B/P'R, 480i/576i, Y'U'V', or G'B'R'

Three SD/ED/HD/Full-HD Selectable Filters for Y'/P'B/P'R, G'B'R', or Computer RGB

Bypassable Sixth-Order Low-Pass Filters:

Fixed SD Channels: 9.5-MHz

Selectable Channels: 9.5-MHz/18-MHz/36-MHz/72-MHz

Versatile Input Biasing:

DC-Coupled with 300-mV Output Shift

AC-Coupled with Sync-Tip Clamp or Bias

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

+2.7-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: 23.4 mA at 3.3 V

Disabled Supply Current Function: 0.1 µA

Low Differential Gain/Phase: 0.2%/0.35°

APPLICATIONS

Set Top Box Output Video Buffering

PVR/DVDR Output Buffering

BluRay Output Video Buffer

Recommended For You

THS3092D THS7316DR THS41311DGNR

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

SOP-8 SOP-8 MSOP8

THS4011CD THS7374IPW THS6184RHFR

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

SOP TSSOP14 QFN

THS4503IDGN THS7376IPWR THS7314D

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

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