



THS7373 4-Channel Video Amplifier with 1-SD and 3-HD Sixth-Order Filters and 6-dB Gain

General Description:

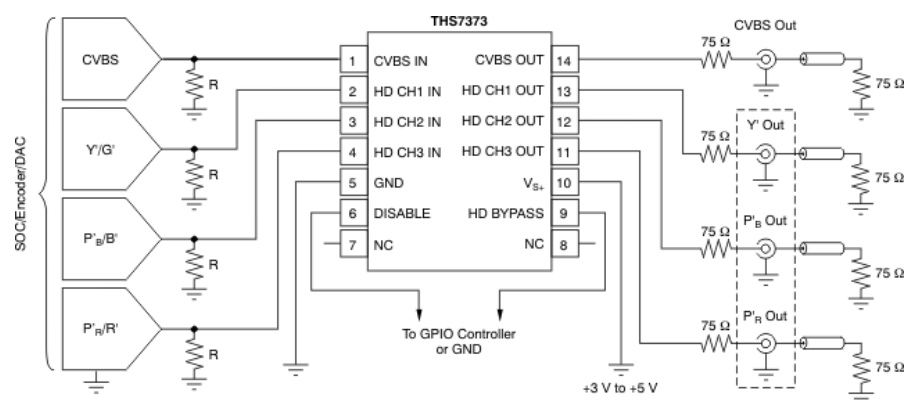
Fabricated using the revolutionary, complementary Silicon-Germanium (SiGe) BiCom3X process, the THS7373 is a low-power, single-supply, 3-V to 5-V, four-channel integrated video buffer. It incorporates one standard-definition (CVBS) and three high-definition (HD) filter channels. All filters feature sixth-order 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.

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 μ A
- Low Differential Gain/Phase: 0.15%/0.25°
- RoHS-Compliant Package: TSSOP-14

Applications:

- Set Top Box Output Video Buffering
- PVR/DVDR/ BluRay™ Output Buffering
- Low-Power Video Buffering

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
THS7373IPW	1815747	60R2432	THS7373 4-Channel Video Amplifier with 1-SD and 3-HD Sixth-Order Filters and 6-dB Gain - TSSOP-14