

Triple-video buffer filter for SD/HD inputs

TSH345 SD/HD and TSH346 HD low-cost solutions
for DVD players/recorders, set-top boxes and TVs



The **TSH345** and **TSH346** are dedicated to driving analog video signals on 75-ohm video lines in HD and standard-definition video equipment such as set-top boxes, DVD players/recorders and TVs. They both contribute to reducing BOM costs. The TSH345 integrates an input mux, DC shift and filtering for SD, progressive and HD inputs. The TSH346 integrates an HD filter as well as a DC shift and comes in an S08 package for space savings. The TSH345 and TSH346 are simple to implement on boards and provide cost savings for large-volume video consumer applications.

Key features

- 6th order filter
- 6 dB gain buffer for 75-ohm line
- Internal DC shift
- 5 V single supply
- Min/max values guaranteed by test

- TSH345
 - Standard, progressive and HD filters
 - Input 2:1 mux
 - Standby mode
 - TSSOP14 and SO14 packages
- TSH346
 - HD filter
 - SO-8 package

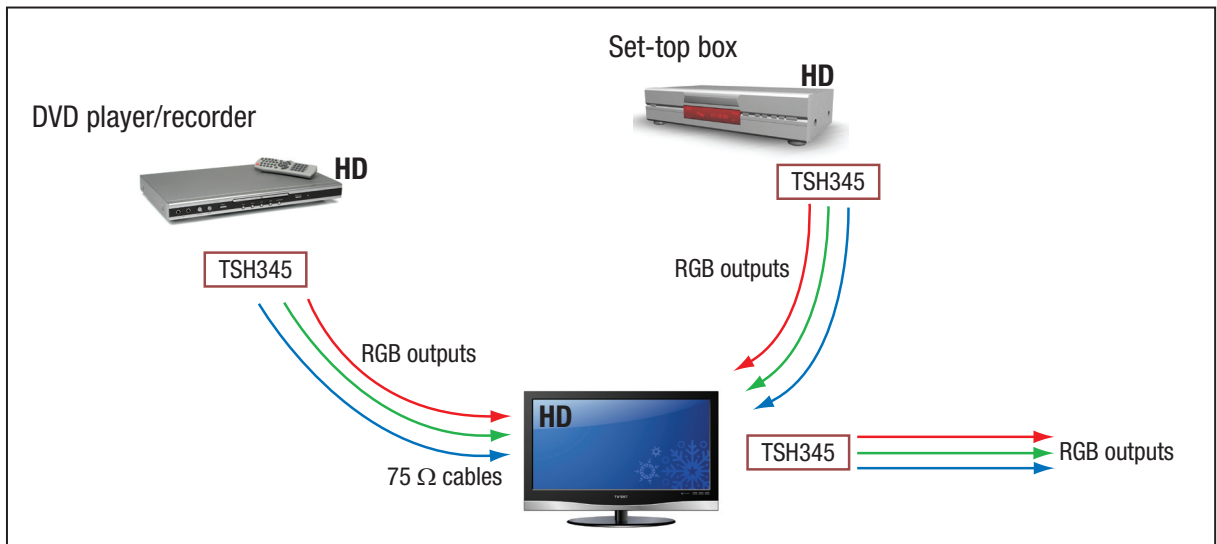
Key benefits

- Small, size saving
- Good video performance up to HD applications
- Easy to design in
- Cost-effective solution
- Key parameters guaranteed by test

Main applications

- Set-top boxes
- DVD players/recorders
- TVs
- Video games

TSH345-TSH346 for HD 1920 x 1080i



Video driver

Part number	Package	General description	Operating temperature (°C)		Number of operators	Gain (dB)	Bandwidth (MHz)	Input equivalent noise voltage (Vn) (nV)	Supply current (Icc) typ (mA)	Supply voltage (Vcc)	
			min.	max.						min. (V)	max. (V)
TSH345	SO-14 TSSOP14	Single supply triple video buffer and selectable filter for HD and SD video applications	- 40	85	3	6	30 12 6	75	15	4.5	5.5
TSH346	SO-8	Single supply triple video buffer and filter for HD video applications	- 40	85	3	6	30	85	15	4.5	5.5
TSH103	SO-8	Low cost triple video buffer/filter for standard video	- 40	85	3	6	6	76	5.5	4.5	5.5
TSH120	SC70-6 or SOT323-6	2.2 V to 5 V video buffer with Sag correction	- 40	85	1	6	6	25	5.8	2.2	5
TSH122	SC70-6 or SOT323-6	Ultra low power video buffer/filter with power-down	- 40	85	1	6	6	51	1.7	2.25	5
TSH173	SO-8	Single supply triple video buffer and filter	- 40	85	3	6	6	25	7	4.5	5.5



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