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Product Brief

TB1311AFG/TB1328FG Audio Video Switches

Highlights

- Audio and video switch blocks are integrated into a single chip.
- Pre-filters for analog to digital converter reduces analog design complexity.
- Sync separator and horizontal and vertical format detector makes signal acquisition faster.
- Controlled via an I²C bus.
- Reduces PCB size by integrating the functionality of multiple switches and LCR filters.
- Dummy Hsync and Vsync output maintains picture stability when no video signal is present.
- TB1311AFG 80-pin PQFP (Lead Pb-free)
- TB1328FG 64-pin LQFP (Lead Pb-free)

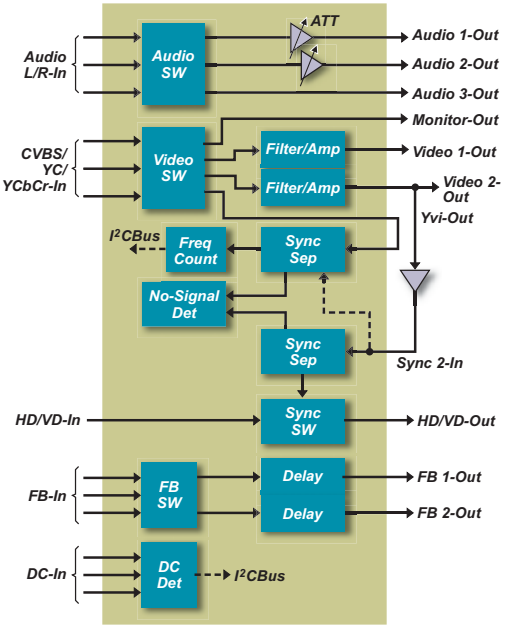
Description

The TB1311AFG and TB1328FG are the two newest members of the Toshiba audio video switch family. These chips are used in audio video equipment like televisions and audio video receivers where numerous audio video inputs are required for connectivity to devices like DVD players, set-top boxes, PCs, etc. In audio video equipment, only one or two of these inputs are actually processed by the receiving device and the Toshiba audio video switches are used to select the active inputs. The audio video switches include a real-time format detector to improve system performance. In addition there is a no-input signal detector that activates dummy horizontal and vertical sync outputs to stabilize the television picture display.

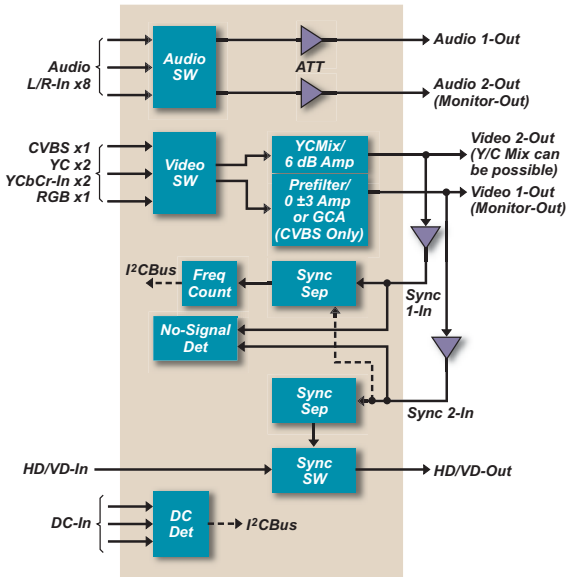
Features

- Gain switching for video output
- Bandwidth filter for external ADC
- Sync separation block supports 525@30p/60i/60p, 625@50i/50p, 750@50p/60p,1125@24p/25p/30p/50i/60i/50p/60p, 1250@50i, VGA, SVGA, XGA, SXGA, UXGA@60p
- Horizontal and vertical sync input – selectable polarity
- Horizontal and vertical sync output – selectable polarity
- No-input detection
- TB1311AFG
  - Video block can accept multiple CVBS, S-Video, Component Video, RGB and SCART inputs and select 2 video outputs.
  - Audio block can accept up to 10 stereo inputs and select 3 stereo outputs.
- TB1328FG
  - Video block can accept multiple CVBS, S Video, Component Video and RGB inputs and select 1 video output.
  - Audio block can accept up to 8 stereo inputs and select 2 stereo outputs.

TB1311AFG Block Diagram



TB1328FG Block Diagram



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