



## TV ENCODER

### GENERAL DESCRIPTION

The W9952QP digital video encoder converts YCbCr (4:2:2) 8-bit data into analog composite video and Y/C video signals. It accepts ITU-601/656 or square pixel input formats, and the output video is formatted to be compatible with 525-line (M) NTSC/PAL or 625-line (B,D,G,H,I,M,Nc) PAL TV System.

The W9952QP operates in both master or slave modes. At slave mode, the W9952QP auto detects the input video format from the HSYNCRN and VSYNCRN pins and generates the corresponding video signals. At master mode, It generates the required video timing internally according to the configuration.

The W9952QP has two DAC outputs which can output either two composite video signals or one Y/C S-video signal. The W9952QP doesn't output composite video and S-video simultaneously.

The W9952QP can operate at power-down mode by selecting the SLEEP pin.

The W9952QP is designed to connect to MPEG1 and MPEG2 video decoders without glue logic. All video processing is done digitally and requires no external adjustment and no software programming is required.

### FEATURES

- Full multi-standard digital encoder support for 525-line (M) NTSC/ PAL or 625-line PAL ( B, D, G, H, I, M, Nc)
- Accepts 8-bit ITU-601/656 or square YCbCr (4:2:2) video data
- Two composite outputs or one Y/C video output (S video)
- Master/ slave sync signal switchable
- Interlaced and non-interlaced operation modes
- Optional internal voltage reference
- Power down mode
- No software programming is required
- 5 Volts operation
- 32-pin PLCC package

### FUNCTIONAL BLOCK

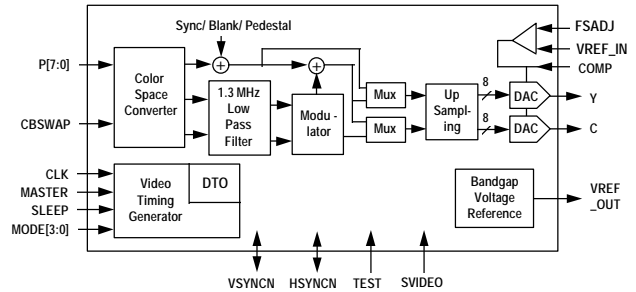


Figure-1 W9952QP Functional Block

### APPLICATIONS

W9952QP is designed for digital video applications, such as VCDs (Video CDs), STBs (Set-Top Box) and video games.

Figure 2 shows a typical configuration of W9952QP application.

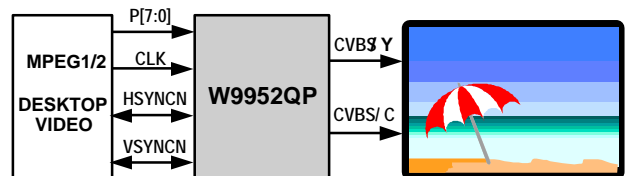
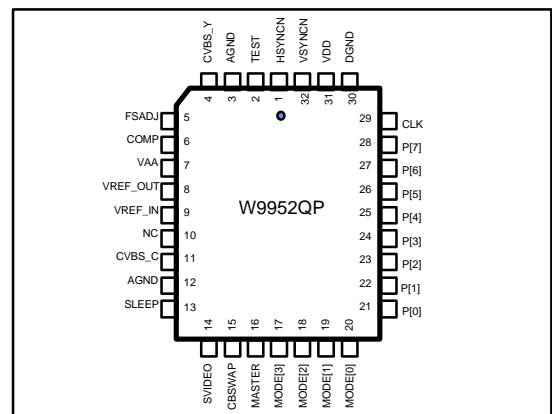


Fig. 2 W9952QP Application



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