

## SVCD Decoder

### GENERAL DESCRIPTION

The W9926QF is a high performance single-chip SVCD decoder. It performs real-time decompression of ISO/IEC-11172 MPEG1 and 13818 MPEG2 streams, including system/program layer, audio and video data. It incorporates an 8-bit host interface and a CD interface which make it easy to use. Also, its versatile features help to build high-quality and cost-effective standalone SVCD player applications.

### FEATURES

#### Integration

- MPEG 1 system and MPEG2 program/audio/video decoding and synchronization
- CD-ROM decoding
- 8-bit 8051 and generic host interface
- Standard 4-Pin CD Interface
- Supports Bit-Map/Font On Screen Display
- Supports on-chip TV timing generator

#### System Operations

- Fully supports SVCD, VCD, CD-I and CDDA titles
- Supports digest function
- Supports versatile playback commands

#### Video Processing

- High quality MPEG1/MPEG2 video output of still pictures
- Decodes D1, 1/2 D1 and 2/3 D1 MPEG1/MPEG2 video
- Supports SVCD sub-picture decoding, color change and highlight information processing
- Supports NTSC and PAL TV system
- Output 8-bit YCbCr ITU-R 656 format

#### Audio Processing

- Decodes MPEG1 and MPEG2 stereo channel audio of layer-1 and layer-2
- Supports dual stereo or four mono audio track and multi-language for SVCD
- 16-bit Audio serial PCM output
- Supports Karaoke key shift
- Supports 3D and surround sound processing

#### Physical

- Directs 1M×16 bits SDRAM interface
- 3.3V power supply
- 100-pin plastic QFP

### ARCHITECTURE

Following diagram shows the functional blocks which W9926QF is composed of to perform the whole SVCD function.

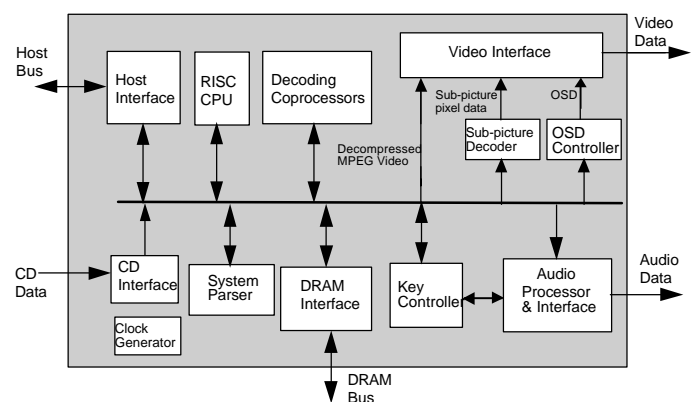


Figure 1 Block Diagram

### APPLICATIONS

Following figure shows a typical configuration of Super Video CD player application.

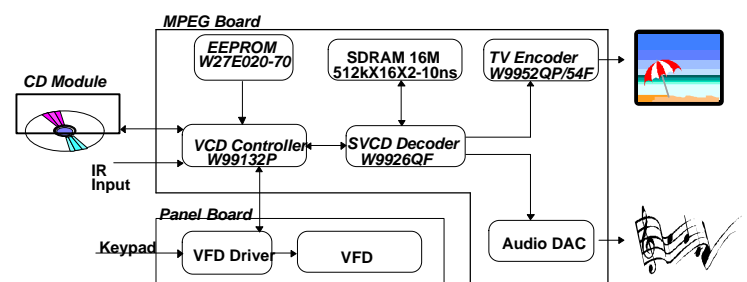


Figure 2 Application Example of W9926QF in SVCD Player