

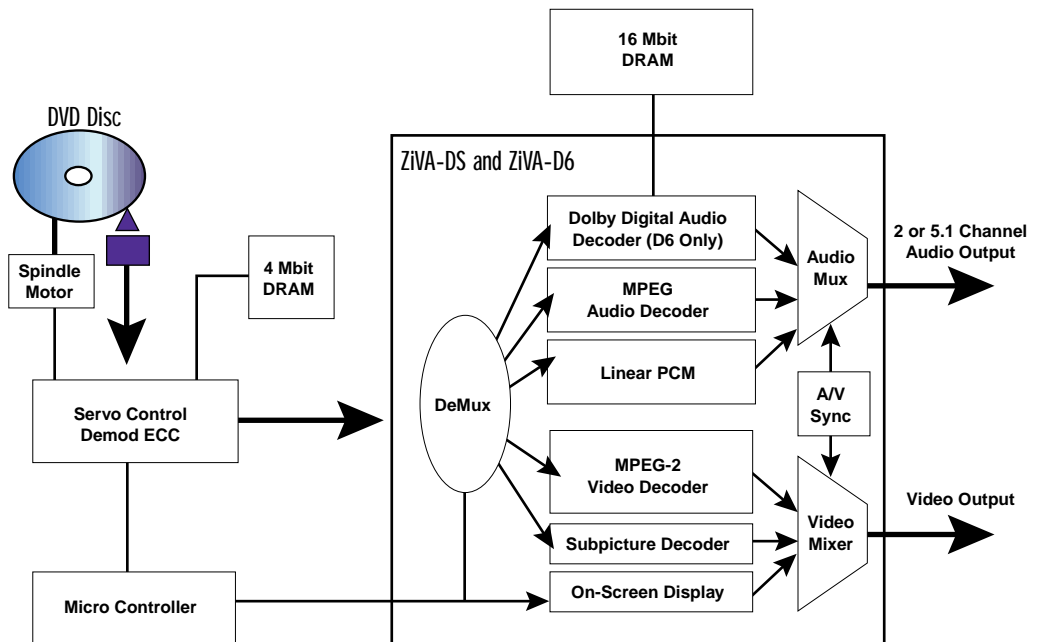
ZiVA™ DECODERS

DVD SYSTEM SOLUTIONS FOR CONSUMER PLAYERS AND MULTIMEDIA APPLICATIONS

The ZiVA-DS™ and ZiVA-D6™ products are highly integrated, single-chip DVD decoders. First-generation DVD players use several components to perform the functions that are integrated into a single ZiVA decoder. ZiVA decoders offer the highest level of integration and the most advanced architecture. OEMs who design ZiVA into their DVD products have significantly shorter time to market and lower parts count. The advanced microcoded architecture and high-level API shorten the design cycle and allow for future upgrades while preserving design investment.

The ZiVA decoders feature full DVD compliance, clear video quality and a high tolerance for media errors. Consumer DVD players benefit from the integrated 5.1-channel Dolby Digital (AC-3) audio (downmixed to 2 channels in the ZiVA-DS decoder). Multimedia add-in cards based on ZiVA support a high level of functionality, including full 30-fps playback and compatibility with a wide range of graphic controllers.

C-Cube offers comprehensive design support for OEMs in the form of ZiVA-Kit, a manufacturing kit for DVD consumer players, and ZiVA-Card, a reference design for DVD multimedia products. The ZiVA family also includes the CLM4730Z DVD Authoring Encoder, our third-generation solution which features real-time, variable bit rate encoding.



FEATURES

Highest Level of Integration:

- MPEG-2 video decoding
- Dolby Digital, MPEG, and LPCM audio decoding
- Subpicture decoding
- On-screen display

Richest Feature Set:

- Two-channel or 5.1-channel (ZiVA-D6) audio
- VideoCD 2.0 compatible

Advanced Microcode Architecture:

- High-level commands such as Play, Pause, Slow Motion
- Automatic A/V sync
- Highlight processing
- Advanced error concealment
- Microcode upgradeable



SPECIFICATIONS

	ZiVA-DS	ZiVA-D6
Video		
Decoding Standards	MPEG-1, MPEG-2	MPEG-1, MPEG-2
Compressed Resolutions	720 x 480 @ 30 HZ, 720 x 576 @ 25 Hz 352 x 240 @ 30 Hz, and 352 x 288 @ 25 Hz	720 x 480 @ 30 Hz, 720 x 576 @ 25 Hz 352 x 240 @ 30 Hz, and 352 x 288 @ 25 Hz
Formats	NTSC, PAL	NTSC, PAL
Compatibility	DVD, VideoCD 1.1, 2.0, CD-DA	DVD, VideoCD 1.1, 2.0, CD-DA
Audio		
Decoding Standards	Dolby Digital 5.1 downmixed to 2 channels MPEG-1 and MPEG-2, Layers I and II	Dolby Digital 5.1 (AC-3) MPEG-1 and MPEG-2, Layers I and II
Output Channels	2 audio plus S/P DIF (IEC958)	6 audio
Sample Rates	44.1, 48, 96 kHz	44.1, 48, 96 kHz
System		
Compressed Data Input	Parallel DVD/CD interface or 8-bit host interface	Parallel DVD/CD interface or 8-bit host interface
Compressed Data Rate	16 Mbits/sec (sustained, 80 Mbits/sec (burst, host IF) 160 Mbits/sec (burst, parallel IF)	16 Mbits/sec (sustained, 80 Mbits/sec (burst, host IF) 160 Mbits/sec (burst, parallel IF)
DRAM	16 Mbits of 60-ns EDO DRAM	16 Mbits of 60-ns EDO DRAM
Physical		
Input Voltage	3.3 V± 5% (tolerates 5 V inputs)	3.3 V± 5% (tolerates 5 V inputs)
Packaging	160-pin PQFP	208-pin PQFP



C-CUBE MICROSYSTEMS
1778 McCarthy Boulevard
Milpitas, California USA 95935
Phone 408.944.6300 • Fax 408.944.6314
<http://www.c-cube.com>