



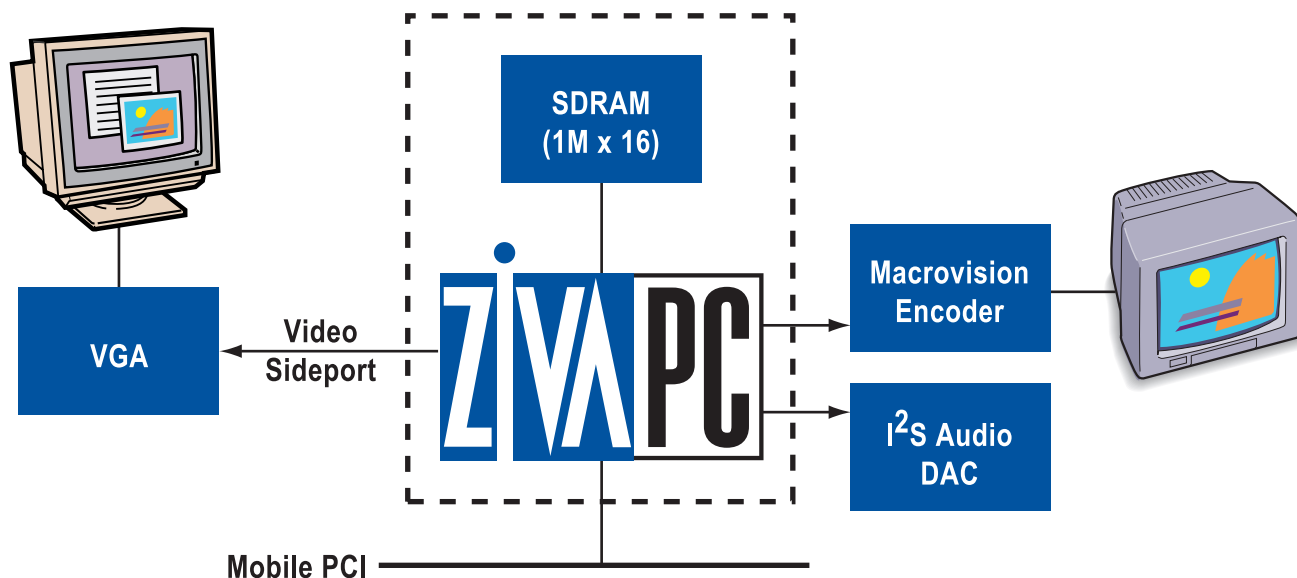
INTEGRATED SINGLE-CHIP DVD DECODER FOR NOTEBOOK AND DESKTOP PCs

ZiVA-PC™ KEY FEATURES

- Integrated audio/video/system DVD decoder in a single chip (PCI-bus master interface, MPEG-2 audio and video decoder, DVD system functions, video timing generation, VideoCD decoding functions, and memory controller).
- Windows 98-ready for maximum support of Microsoft DirectShow 2.0 DVD playback.
- Integrated mobile PCI-bus master
- Full NTSC and PAL decoding in single 16-Mbit SDRAM
- Glueless video support interface to: AMC 2.0, LPB, Zoomed Video (ZV), VIP, and VMI. Allows for easy interface to most major graphics accelerators.
- Advanced Configuration and Power Interface (ACPI) compatible, with power-down modes for low-power (notebook) applications.
- Dual integrated SecureView™ CSS copy protection decryption channels (audio and video)
- Dolby Digital (AC-3) audio decoding: supports 2-channel downmixed and 6-channel modes.
- CCIR (VGA) and CCIR 601 outputs for maximum display flexibility.
- Dual DMA channels to support separate audio and video streams.
- PC '98 compliance with scatter/gather DMA support.
- Supports Microsoft's Bob and Weave display algorithms.
- 16-color on-screen display (OSD).
- Microcode compatible with all existing ZiVA products: ZiVA 1.0, ZiVA 1.1, and ZiVA 2.0.
- Flexible memory configurations:
 - 16-Mbit—One 1 M x 16 SDRAM (standard configuration)
 - 20-Mbit—One 1 M x 16 SDRAM and One 256 K x 16 EDO DRAM
- Larger memory arrays to allow for additional features.
- Economical, low-profile 208-pin TQFP package.



Single-Chip DVD Decoder for PCs and Notebooks



ZiVA-PC System Architecture Block Diagram

PRODUCT SPECIFICATIONS

Parameter	Specification
Video	
Decoding Standards	MPEG-1, MPEG-2
Compressed Resolutions	720x480 @ 30 Hz, 720x576 @ 25 Hz, 352x240 @ 30 Hz, 352x288 @ 25 Hz
Formats	NTSC, PAL, CCIR 601, CCIR 656
Compatibility	DVD, VideoCD 1.1, VideoCD 2.0, CD-DA
Audio	
Decoding Standards	Dolby Digital 5.1: 6-channel and 2-channel downmixed, MPEG-1, MPEG-2, Layers I and II
Output Channels	Dolby Digital AC-3: 2-channel downmixed and 6-channel LPCM, Analog, or IEC-958 (S/P-DIF)
Sample Rates	44.1, 48, 96 kHz
System	
Compressed Data Input	PCI-Bus
Compressed Data Rate	54 Mbits/s x 2 channels (sustained), 100+ Mbytes/s burst (PCI ITF)
Memory	16/20/32-Mbit SDRAM
Physical	
Input Voltage	3.3V 5% (tolerates 5V PCI-bus)
Packaging	208-pin TQFP
Operating Power	<1.3W @ 3.3 VDC Typical (estimated)

