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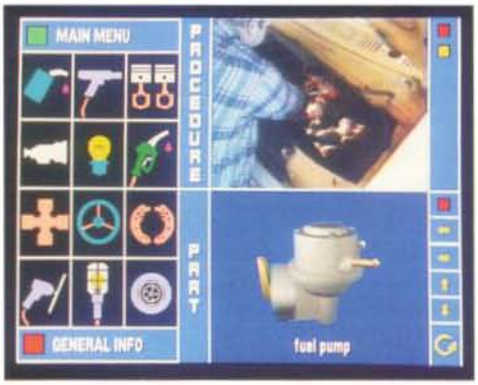
Intel DVI Technology

Commercial Board Products
Preliminary Product Information



Integrating Motion Video, Audio and Graphics on a CD-ROM

Digital Video Interactive (DVI) Systems

Digital Video Interactive (DVI) technology opens the door to a world of interactive video applications, integrating full-motion video, high-resolution images, high-speed graphics, high-quality audio and text. Using DVI video and audio compression technology, our **Commercial Board Products** can transform your PC* into a powerful, interactive workstation, enabling you to develop a wide range of multi-media applications, such as ...

Training ... Video scenarios with graphic overlay and audio allow users to actively participate in their own training, e.g., auto mechanics can interact with 3D models of complex systems.

Education ... Learning becomes an adventure. Students explore distant lands, interact with people, are thrilled by 360° panoramic views, and absorb the sights and sounds of a new culture.

Entertainment ... Texture-mapped 3D models give players the freedom and realism of a real-life flight or race car adventure, in the arcade or at home.

Retail Sales ... Home furnishing sales can increase dramatically as customers rearrange and reupholster furniture on the DVI system. Shoppers hunt for bargains through interactive information kiosks.

Creative Design ... As quick as an artist's imagination, DVI's powerful design capabilities put real life imagery and 3D animation at the fingertips of graphic artists.

Turn Your PC into a Powerful Interactive Video/Audio/Graphics System*

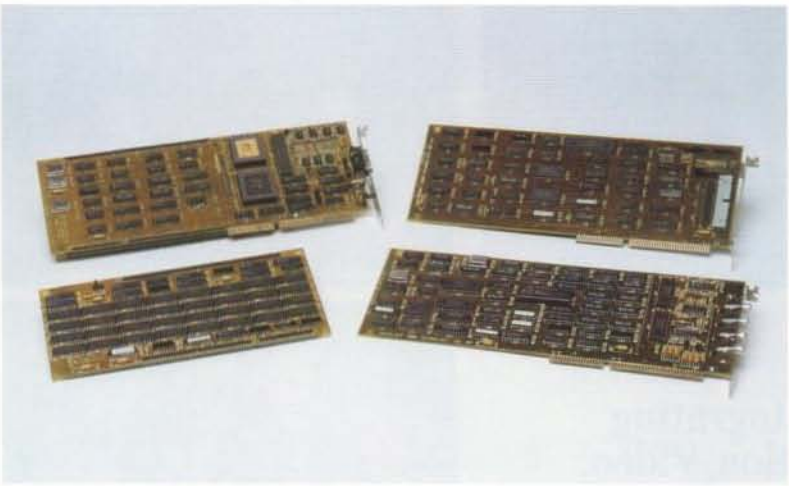
FEATURES

- Full-screen, full-motion video — 72 minutes on a CD-ROM
- Synthetic video—photographic texture-mapping on 2D and 3D objects
- High-resolution stills
- High speed graphics
- High-capacity video and audio storage
- Real time compression of edit-level motion video, audio, and high-resolution stills
- 360° panoramas
- Multiple, interactively mixed video & audio streams
- Can work with any digital medium — including CD-ROM, hard disk or WORM
- Compact, flexible, all-digital medium. Examples:
  - — 72 minutes of full-motion video and audio
  - — 20 minutes of motion video, with 7 hours of voice-over and 5000 high-resolution stills
  - — 2 hours of quarter-screen video with thousands of textures and 3D objects.

Order Number: 240363-001

Digital Video Interactive (DVI) Systems

DVI Application Delivery Boardset for IBM PC-AT or Selected Compatibles

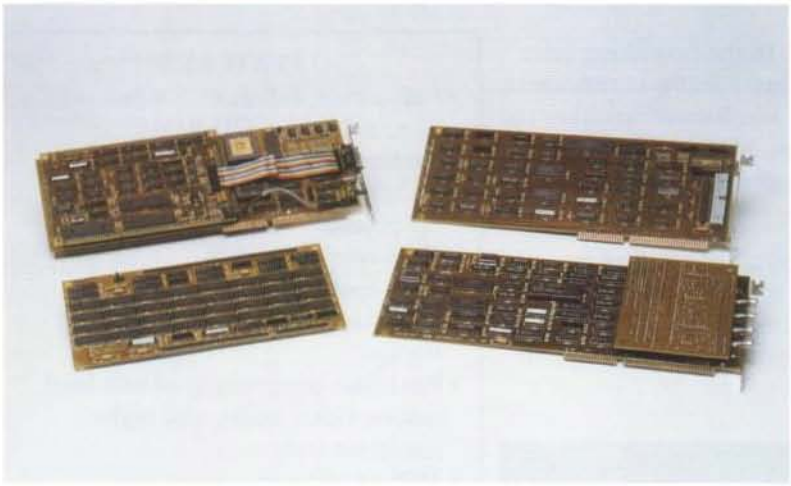


Video Board
- 12.5 MIPS Pixel Processor, Display Processor
- 1 MB dual-ported video RAM, expandable to 4 MB
- Video Driver supports multiple, bitmaps with programmable resolutions and pixel depths
- Output to standard analog RGB monitor

Audio Board
- TMS 320C10 Digital Signal Processor
- Bit rate to approx. 240K bits/second
- 84 dB dynamic range
- Audio Driver decompresses and mixes parallel input streams dynamically to two outputs
- Output to standard stereo audio amplifier

Utility Board
- Buffered interface to a Sony CD-ROM drive with MS-CDEX compatible driver
- 128 KB of AT RAM
- Supports two 3-button joysticks

DVI Application Development Boardset
(Application Delivery Boardset plus Audio and Video Digitizer Boards and additional VRAM Board)



The DVI Application Development Kit includes boardset, system software and authoring tools.

Video Digitizer
- Piggybacks onto video board
- Accepts NTSC video
- Genlocks video board to external video, allowing images to be superimposed on NTSC input
- Data written to VRAM at 768-pixel resolution
- Captured data immediately displayable

Audio Digitizer
- Piggybacks onto audio board
- Two channels of audio input

System Software
- RTX — Real-time executive — multitasking extension of MS-DOS*
- AVSS — Audio/Video Support System — real-time manager of data from discs or RAM to video and audio subsystems
- Graphics Library
- Video Microcode Library and paging support, for graphics and video compression and decompression

Authoring Tools
- Operate on a DVI Application Development System
- Still image capture and compression
- Edit-level motion video compression and playback
- Audio compression and editing
- CD-ROM layout and formatting
- Microcode development tools
- Standard "C" development environment

Services and Support
- Motion video compression
- Applications design consulting, program support
- Developer training

For more information, contact:

Intel Corporation (DVI Technology)
CN 5325
Princeton, NJ 08543-5325
(609) 734-2211
800-548-4725

Specifications are subject to change.

*PC-AT is a trademark of International Business Machine Corporation. MS-DOS is a trademark of MicroSoft Corporation.

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