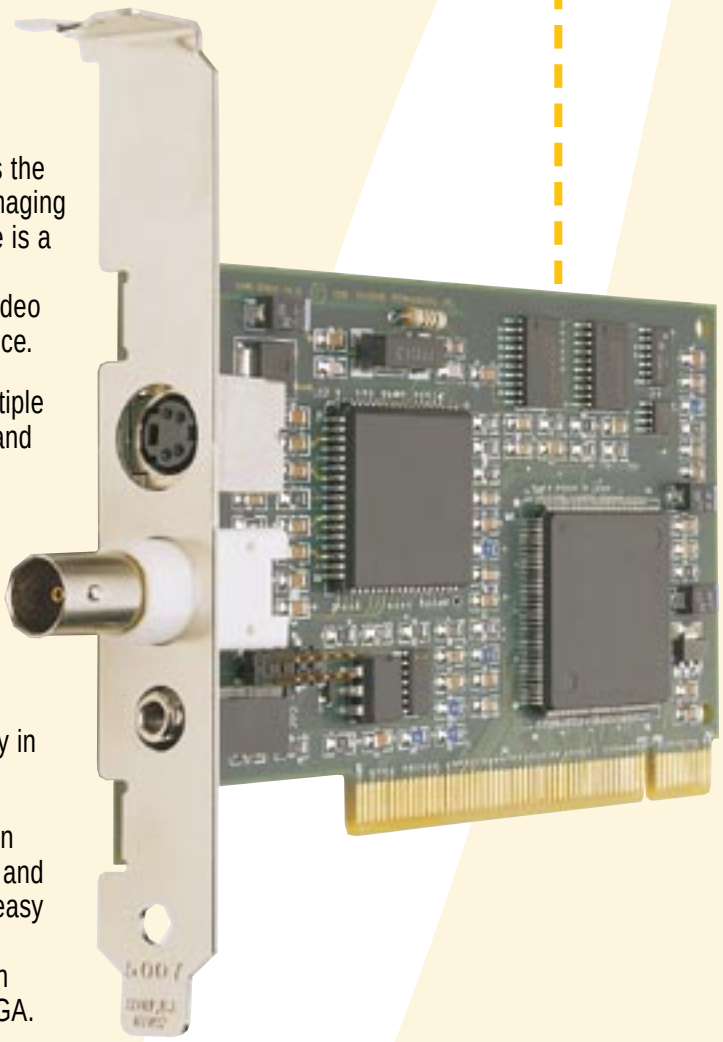
FlashBus™ MV lite

PCI Video Frame Grabber

The inexpensive solution with bus-mastering performance



Integral Technologies presents the solution to cost concerns for imaging systems. The FlashBus MV Lite is a PCI bus-mastering video frame grabber that provides quality video images at an amazingly low price.

The FlashBus MV Lite has multiple video inputs, external triggers and control of camera and flash.

Since this board is a member of the FlashBus MV family, any software written for the Lite will also run properly on the Pro and Plus versions — thereby allowing OEMs a tremendous amount of flexibility in the design of a system.

Maintaining the Integral tradition of excellence in both hardware and software, FlashBus MV Lite is easy to install and operate. This bus-mastering board works with nearly any machine and any VGA.

The available Software Developers Kit is designed for Microsoft Windows 3.1, 95, 98, NT and for OS/2. Should technical support be needed, Integral's team of engineers is poised to give you immediate attention.

Quality and affordability — the hallmark of Integral Technologies' FlashBus MV Lite.

Key Features

- High Performance Bus-Mastering
- Multiple Video Inputs
- Extensive Software
- Small Form Factor
- Very Low cost

Applications

- Machine Vision
- Inspection
- Scientific & Medical Imaging
- Biometric Identification
- Surveillance
- Security & Access Control
- Traffic Control

Also Available:

FlashBus™ MV PRO

FlashBus™ MV PLUS

Visit our Web Site at www.integraltech.com

INTEGRAL® TECHNOLOGIES, INC.

FlashBus™ MV lite

PCI Video Frame Grabber

FlashBus MV Lite is a high-speed, very low-cost, PCI bus-mastering frame grabber designed to capture 8 bits-per-pixel monochrome and 24 bits-per-pixel color video in real time to system memory. FlashBus MV Lite was specifically developed for cost-critical applications requiring very high-quality, high-speed image capture such as machine vision, inspection and scientific imaging.

Ground-breaking Low Cost

This Integral board offers a number offeatures and a wealth of software at pricing that's a welcome relief to cost-critical applications.

Bus-Mastering Performance

Taking advantage of its high-speed PCI-based bus-mastering capabilities (up to 132 MB/sec), FlashBus MV Lite delivers consecutive frames of video in real time into system memory while the CPU is free to operate on other applications.

External Triggers

FlashBus MV Lite accepts one input trigger so that image acquisition can be synchronized to external events. Interrupt and polled input triggers are available to control external events in a technique best suited for application execution. FlashBus MV Lite also provides one TTL level output trigger for controlling external devices.

Small Form Factor

FlashBus MV Lite is built on a very small form factor - 76mm x 125mm,enabling its use in embedded systems and other environments with tight space constraints.

Extensive Software Support

The FlashBus MV Lite setup software provides support for all major operating systems and drivers. Included with this board is FBG, a Windows-based application that offers full image-capture control. The FlashBus MV Lite is also supported by a wide array of third-party imaging programs. A comprehensive Software Developers Kit provides programmable access to the features of the FlashBus MV Lite hardware architecture. The SDK includes DLLs for Microsoft Windows 3.x, 95, 98, NT and OS/2. Also included are TWAIN, MCI, Video-for-Windows and Direct Draw drivers, as well as sample applications with source code.

High CPU Compatability

FlashBus MV Lite provides a PCI 2.1 compatible interface having both slave and master mode compatibility. FlashBus MV Lite was designed to be fully compatible with Pentium, Pentium Pro, MMX and Pentium II computers. Because FlashBus MV Lite is a functional subset of the FlashBus MV Pro and Plus, any software written for the Lite will run properly on both the Pro and Plus versions as well.

SPECIFICATIONS

Analog Video Inputs
- Composite video connector (BNC)
- S-video color input connector (4-pin DIN)
- Up to three Composite/RS170/CCIR inputs

I/O Control
- 1 optically isolated output trigger for flash interface
- Configurable as 1 TTL input and 1 TTL output
- Video Decoder
- Accepts NTSC and PAL Composite and S-video
- Genlocks to any NTSC/PAL video source including cameras, VCRs, laser discs and still video players
- 24/16/15/8 bit video digitizing
- Square pixel digitizing resolutions for NTSC (12.27 MHz at 640x480) and PAL (14.75 MHz at 768x576)
- Digital control of offset, gain, brightness, contrast, hue and saturation
- EEPROM for storing configuration and calibration settings

Video Format
- 24/16/15 bit RGB (or) YUV 4:2:2 software selectable
- Y8 monochrome

RGB Video Pixel Format
888 - 16.7 million colors
565 - 65 thousand colors
555 - 32 thousand colors
8 - 256 level monochrome

Video Throughput Performance
- Full size, full speed video delivery to and from system or VGA memory
- Full bandwidth PCI bus master read and write (up to 132 MB/sec)

Video Scaling Processor
- High quality still frame video capture
- Smooth, high quality interpolated scaling is performed on video in X (horizontal) and Y (vertical) directions
- Supports hardware cropping

Video Output Display
- Video-in-a-window screen resolution to 640x480 (768x576 for PAL)
- 24/16/15-bit video displayed on up to 1600x1200 VGA desktop
- Selectable refresh rate: 30 frames/second, 60 fields/second, or 30 fields/second

External Camera Control
- Software controllable, optically isolated, universal strobe interface
- Camera integration control

Physical Size
- 76mm x 125mm

Software Developers Kit
- MS Windows 95, 98 and NT display drivers
- MS Windows 95, 98 and NT DLLs
- MS Windows MCI and Video for Windows (AVI) drivers
- Microsoft DirectDraw support
- OS/2 display drivers and DLLs
- TWAIN driver
- Sample applications with source code
- MS Windows FBG video capture application

Video Input Cable
- Standard Composite, S-video and RS170 cables

CE

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