INTEGRAL TECHNOLOGIES, INC.

FlashPoint®128

**PCI Video Frame Grabber**

FEATURES

- High speed PCI 2.1 bus video frame grabber
- High performance SuperVGA Windows Accelerator Chip
- 2 MB or 4 MB high bandwidth MDRAM
- 24/16/15/8 bit video capture - up to 16.7 million colors
- 8 bits, 256 level gray scale monochrome video capture
- NTSC and PAL compatible
- RGB, YUV and 8 bit frame buffer format
- High quality video-in-a-window scaling
- Video overlay with mask RAM
- Square pixel digitizing resolutions for NTSC and PAL
- Multiple RGB, composite, S-Video and RS-170 inputs
- Programmable analog output control (0 - 10 volt DC)
- Optically isolated output trigger for universal flash interface
- General purpose TTL input/output triggers
- Asynchronous vertical reset camera trigger
- 12 Volt DC fused power output, resettable and on/off control
- Programmable Hue, Contrast, Saturation, Brightness
- System Interrupt based on Vsync, input trigger & serial port
- Independent offset and gain on each RGB input channel
- Integrated RS232 Serial Interface
- Software Developers Kit and Win 3.1/95/NT and OS/2 Drivers
- Microsoft® Plug and Play compatible
- FCC and CE (European) Approved

APPLICATIONS

- **Security and Access Control**
- **Electronic Photo ID, License Systems**
- **Electronic Photo Proofing Systems**
- **Law Enforcement MugShot Systems**
- **Fingerprint Biometrics**
- **Traffic Control**
- **Medical Imaging**
- **Microscopy**
- **Scientific Imaging**
- **Machine Vision**
- **Inspection and Process Control**
- **Robotics**

Pentium Pro Compatible!

SUMMARY OF KEY FEATURES

- *Unparalleled Video Capture Quality*
- *High Desktop Resolutions*
- *2 MB or 4 MB High Bandwidth MDRAM*
- *Video Overlay*
- *Software Developers Toolkit*
- *Compatible with all FlashPoint® Applications*
- *Low Cost*
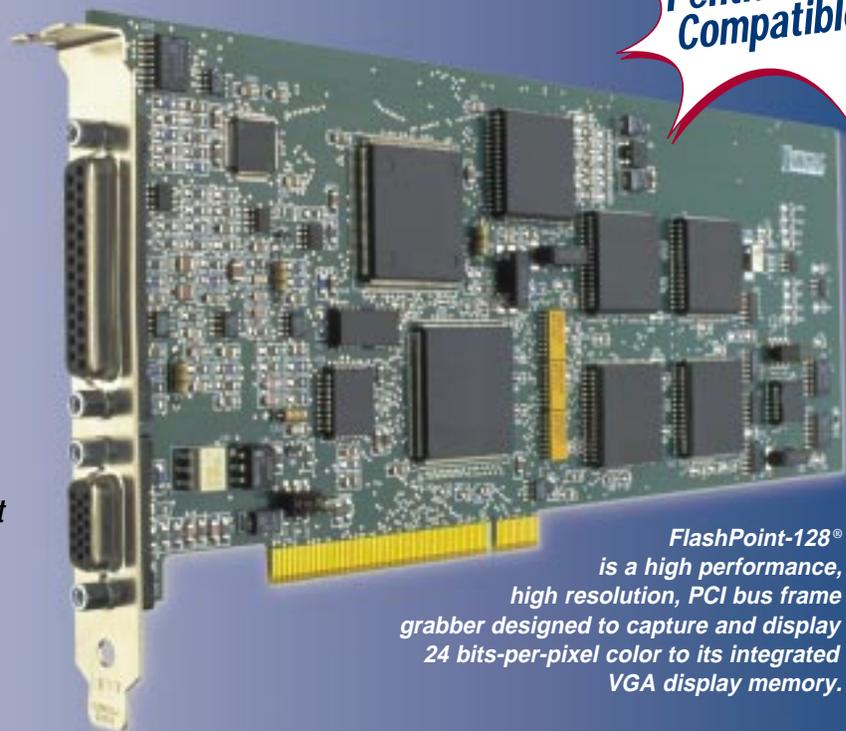
FlashPoint-128® is a high performance, high resolution, PCI bus frame grabber designed to capture and display 24 bits-per-pixel color to its integrated VGA display memory.

FlashPoint®128

OVERVIEW

FlashPoint-128® is the latest in the industry-standard FlashPoint line of high performance, high resolution PCI bus video frame grabbers. **FlashPoint-128**® is designed to capture and display 24 bits-per-pixel color and RS-170/CCIR video to its integrated VGA display memory. It features a precision RGB decoder that provides unparalleled video capture quality. It offers the ultimate video frame grabber solution for OEMs, VARs and system integrators designing systems for business and industrial use.

Multiple Video Inputs - RGB, YUV, Composite, S-Video
Video can be captured by connecting an NTSC or PAL source to any of **FlashPoint-128's**® software selectable inputs. Video is displayed full-screen or in a resizable video window and can be software adjusted (hue, brightness, saturation, contrast, offset and gain) to the desired levels through programmable control of the video decoder.

Camera Control Features
FlashPoint-128® provides features for complete camera and external device control:

Universal Flash Interface
A software controlled, optically-isolated contact closure enables triggering of photographic flash and strobe units. Flash Capture provides the ultimate in color quality, color balance lighting and detail for facial photos (photo ID, license, mugshot) as well as control for strobe units in machine vision systems.

On-board Serial Interface
An on-board serial interface and general purpose input/output triggers provide further integration of camera and external device-control.

Camera Power Output
A software on/off controlled, resettable fused 12 volt DC output is supplied on the **FlashPoint-128's**® output connector, eliminating the need and cost of an external camera power supply.

Programmable Iris Control
A software programmable iris output (0-10 volt DC) provides control of DC iris lenses.

Asynchronous Vertical Reset
An asynchronous vertical reset trigger allows automatic synchronization with asynchronous vertical resettable cameras.

Software Developers Toolkit
A comprehensive Software Developers Toolkit provides programmable access to the features of the **FlashPoint-128**® hardware architecture. The toolkit includes DLLs for Microsoft® Windows™ 3.1, Windows 95™ and Windows NT™, IBM OS/2 Warp DLLs, TWAIN and MCI drivers (16/32 bit) and sample applications with source code.

Full Software Support
Included with **FlashPoint-128**® is FPG™, a Windows™-based application that automates the flash-capture of video images with full software control of most industry-standard video cameras.

Full CPU and Software Compatibility
FlashPoint-128® is fully compatible with all PCI bus computers using the Intel 386, 486, Pentium and the newest Pentium Pro and Pentium MMX processors. **FlashPoint-128**® is fully software compatible with the entire line of FlashPoint products and runs all FlashPoint software.

SPECIFICATIONS

Video Inputs
- NTSC and PAL selectable inputs
- RGB, Composite, S-Video and YUV software selectable
- Multiple Video Inputs: (1) RGB, (6) Composite, (3) S-Video, (2) YUV, (7) RS-170/CCIR

I/O Control
- Optically Isolated Flash Interface Trigger
- General Purpose TTL input/output triggers
- Integrated Serial Port for camera or external device control
- 12 Volt DC fused power output, resettable and on/off control
- Asynchronous vertical camera reset

Software
- MS Windows 3.1, 95, NT (3.51 and 4.0) and OS/2 Warp Display Drivers
- MS Windows MCI Driver (16 and 32 bit versions)
- TWAIN Driver (16 and 32 bit versions)
- Video for Windows Driver
- FPG™ Video Capture Application (16 and 32 bit versions)
- Media Cybernetics ImagePro Plus 1.3, 2.0 and 3.0 Drivers
- Easy installation software
- Extensive Software Developers Toolkit available with complete DLLs and sample applications with source code

Video Decoder
- Accepts NTSC, PAL, Composite, S-Video, RGB, YUV, RS-170 and CCIR video
- Genlocks to any NTSC/PAL video source including cameras, VCRs laser disks and still video players
- 24/16/15/8 bit per pixel video digitizing
- Square pixel digitizing resolutions for NTSC (640x480) and PAL (760x570)
- Digital control of offset, gain, brightness, contrast, hue and saturation
- EEProm for storing configuration and calibration settings

Frame Buffer Memory
- 2 MB or 4 MB MDRAM shared between VGA and Video
- Linear or paged mode, memory mapped RGB or YUV video frame buffer
- Pixel formats: 888 (16.8 million colors), 565 (65000 colors), 555 (32000 colors), 8 (256 level gray scale)

Video Scaling Processor
- Unparalleled still video frame capture quality
- Smooth, high-quality interpolated scaling is performed on video in X (horizontal) and Y (vertical) directions
- Video window size from 16x16 to 760x570
- Supports hardware cropping and panning
- I²C mapped control registers

Display resolutions
- 1600x1200x8bpp - 256 gray scale
- 1280x1024x16bpp - 65000 and 32000 colors
- 1024x768x24bpp - 16.8 million colors
- 800x600x24bpp - 16.8 million colors
- 640x480x24bpp - 16.8 million colors

For More Information Call: +1-(317) 845-9242 or Fax: +1-(317) 845-9275.
Visit our Web Site at http://www.integraltech.com

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