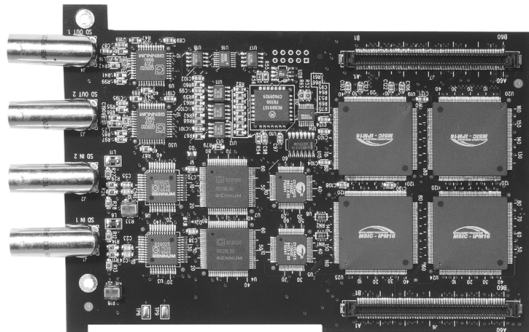


**Dual Serial Digital Input/Output  
for the Video Explorer 2 System**



A Video Explorer 2 base card with the Dual Serial Digital Daughterboard allows you to work directly with standard component digital video equipment such as digital video tape recorders, digital monitors, and other peripherals.

**Video Explorer 2 System Features**

- Broadcast quality output
- All digital video processing system
- Compatibility with QuickTime™ software
- Proprietary MSIC™ systolic video processing chip set provides advanced digital video processing and switcher effects
- Interchangeable modular components allow system customization and future upgrades
- Professional level genlock
- Supports the MediaBahn™ Interconnect System, a real-time digital video bus which provides a pathway for transfer of digital video information between multiple Video Explorer and add-on cards at full video rates
- 32 Mbyte framebuffer memory with multi-stream capability.

**Component Digital Module Features**

**SMPTE 259M Compatibility**

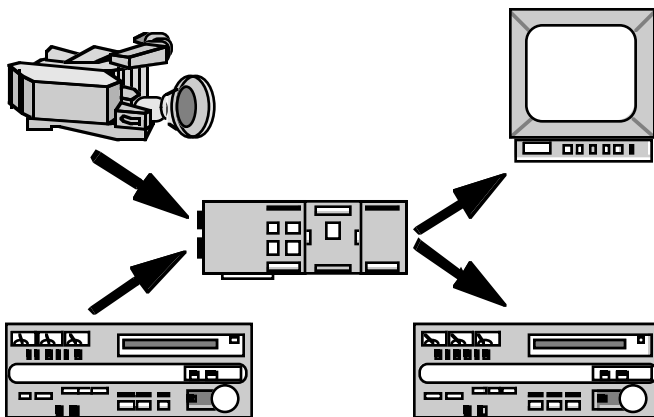
The Serial Digital Daughterboard supports communications with digital component devices such as VTR's (D1, DCT and Digital Betacam), switchers, DDR's and other peripherals. The board accepts and generates Component 4:2:2 signals at data rates from 270Mb/s to 540Mb/s.

**Multi-Channel Support**

The Dual Serial Digital Daughterboard accepts up to two component serial digital inputs. The second input can be used as a second video stream or as a key channel input.

The board also supports two Component Serial Digital outputs. The second output can be used to mirror the primary output, can output a key channel, or can output any other video stream in the Video Explorer 2 system.

**Video Flow**



**MSIC Digital Processing**

The Video Explorer 2's internal 4:4:4, 10/16 bits per component digital processing provides flexible signal processing with exceptional fidelity. The MSIC processing ICs are primarily used to provide color space conversion, gamma correction and adjustments of the video parameters but many other video effects can be performed on the video flowing through these devices.

## Host System Requirements

System Software:	Windows/NT or MacOS 8.6 or greater
Recommended RAM:	32MB Min.
Computer Monitor:	17" Color Preferred
Video Monitor:	Studio Quality Serial Digital Monitor Preferred
Number/Kind of Slots:	One full size, +5V, 33Mhz PCI Slot

## General Specifications

Interface:	PCI 2.1 Compliant
Card Size:	12.3"x4.2"(5.84cm x 10.67cm)
Operating Temperature:	0 to 70°C
Framebuffer Memory:	32MB SDRAM
Video Ports:	2 Serial Digital Inputs 2 Serial Digital Outputs
Video I/O Standards: (currently supported)	SMPTE 259M Component 4:2:2 NTSC PAL 720 x 486 (4:3 aspect) 720 x 576 (4:3 aspect)
Data Word Length:	10 bits per component
Bit Rates:	270Mb/s 360Mb/s 540Mb/s
Genlock:	
Source	Sync Embedded in CCIR 601 Stream.
Lock Criteria	Stable Source - TBC or VTR w/ Time Base Correction.

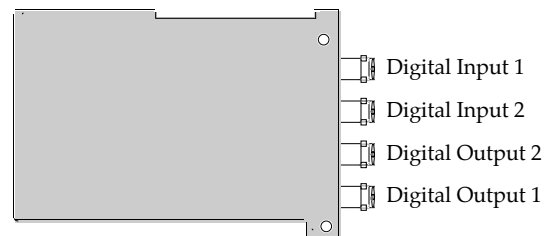
## Video Input

Color Space Conversion:	YUV 4:2:2 to RGB 4:4:4, or YUV 4:2:2 Internal
Sampling Structure:	4:2:2 In 4:4:4:4 Internal 4:2:2 Output
Gamma Correction:	MSIC Programmable
YCrCb Range:	MSIC Programmable

## Video Output

Component Digital:	800mV $\pm$ 10% @ 75 $\Omega$ , 1%
YCrCb Range:	MSIC Programmable
Gamma Correction:	MSIC Programmable

## I/O Connections



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