

6U VME
REAL - TIME
VIDEO
WINDOWING
SYSTEM

RGB/View 8000 RGB/View 8001 Multi-input Display Processors

Displays up to eleven real-time inputs

Compatible with graphics inputs up to 1600 x 1200 pixels

RGB, DVI, NTSC/PAL and S-Video inputs

Windows independently positioned and scaled

Zooming within windows

Chromakey overlays

Software independent

30-bit color processing

Control over VMEbus, RS-232 port and Ethernet

Frame grabbing over

VMEbus and Ethernet

The RGB/View® 8000 and 8001 controllers display up to eleven real-time video windows on a high resolution monitor. Each window can be independently positioned, scaled to any size, overlaid with computer graphics or overlapped with other windows. In addition, the user can pan and zoom within each image.

The system was developed for applications requiring the simultaneous real-time display of high quality video and computer-generated images. The RGB/View 8000 offers up to four video and two high resolution RGB inputs on a single VME board. The RGB/View 8001 supports up to eight video and three RGB inputs in two VME slots.

The RGB/View processor guarantees real-time video performance under all conditions. Its architecture has a unique advantage: the multi-image display imposes no burden on the host CPU, frame buffer or bus.

Features include frame grabbing of individual inputs or the combined screen image, over the VMEbus or Ethernet port, a fully digital signal path available with DVI input and output, and a chromakey for overlays.

Excellent video quality, real-time performance, a unique set of features and compatibility with virtually all VME CPU and graphics boards, make the RGB/View 8000 and 8001 the finest video windowing systems available.



Specifications

High Resolution Graphics Inputs

Analog RGB Interlaced or non-interlaced

2 (model 8000), 3 (model 8001) Number (max)

RGB and YPbPr (HD) Signal formats

Video level Nominal 0.7 V pk-pk (1.0 V composite pk-pk)

Input impedance 75 ohms Sample rate Up to 205 MHz

15 kHz to 100 kHz non-interlaced Horizontal scan rate

Frame rate Up to 100 Hz

Resolution 640 x 480 to 1920 x 1200 pixels

3 wire (sync on green, bi-level or tri-level), 4 wire (separate composite sync), 5 wire (separate H and V sync) Sync

0.3 V p-p (3 wire bi-level), 0.6 V p-p (3 wire tri-level), 1 to 5 V (4 and 5 wire) Sync level

DVI

1 (model 8000), 2 (model 8001) Number

Connector type DVI-I (integrated analog/DVI 29 pin connector)

1.65 Gbps/channel (DVI single link) Maximim bandwidth

Resolution 640 x 480 to 1600 x 1200

Video Inputs -

Analog Composite

4 composite or 2 S-Video (model 8000) 8 composite or 4 S-Video (model 8001) Number

Video level Composite 1.0 V pk-pk nominal 625 line PAL, 525 line NTSC Format

Input impedance 75 ohms SMA Connector type

High Resolution Graphics Output

Analog RGB

Nominal 0.7 V pk-pk Video level

75 ohms Output impedance

Up to 205 MHz Sample rate

Sync

3 wire (sync on green), 4 wire (separate composite sync), 5 wire (separate H and V sync)

Sync level 0.3 V p-p (3 wire) 5 V (4 and 5 wire)

640 x 480 to 1920 x 1200 Resolution

DVI

Maximum bandwidth 1.65 Gbps/channel (DVI single link)

640 x 480 to 1600 x 1200 Resolution

Functions

Windows Position, priority, scaling, pan and zoom, aspect ratio, ID, freeze frame

Image Brightness, contrast, gamma, hue, saturation,

and test pattern

Frame grab Capture single frames from any input or the combined screen image; transfer over VMEbus or Ethernet network port

Single bit keyer with interactive adjustment Chroma key

Other

< 25W (model 8000) < 48W (model 8001) Power

Control VME, RS-232, Ethernet 10/100 BASE-T

Bus VME 32 slave Size 6U x 160 mm. 1 (model 8000) 2 (model 8001) Slots

March 2004 Specifications subject to change without notice Made in the USA ©2004 RGB Spectrum







Corporate Headquarters 950 Marina Village Parkway Alameda, California 94501 TEL: (510) 814-7000 FAX: (510) 814-7026 WEB: www.rgb.com e-mail: sales@rgb.com

RGB SPECTRUM®

communications company™

