EPM-VID-3

PC/104-*Plus* Video Expansion Module



- ATi Rage Mobility video chip
- 8 MB video RAM
- LVDS, CRT and TV out
- 16.7 Million displayable colors
- PC/104-*Plus* form factor

Highlights

ATi Rage Mobility Video Chip
M1 graphic accelerator provides outstanding performance. Extensive feature set and low power consumption.

8 MB Video RAM
Allows high resolution display output and excellent screen refresh rates.

16.7 Million Displayable Colors
24-bit and 18-bit color supported on LVDS and CRT displays.

Reprogrammable Video BIOS
Simplifies upgrades and customizations.

MPEG-2 Decoding
Hardware-based MPEG-2 decode acceleration with DirectX® support.

High Resolution Output
Maximum 1600 x 1200 resolution output for CRT displays and 1024 x 768 for LVDS. 640 x 480 max. usable TV output on single displays.

PC/104-*Plus* Pass-Through
Feed-through connectors for PC/104 and PC/104-*Plus* connectors allow for use in combination with other modules above and below.

Overview

The EPM-VID-3 is a PC/104-*Plus* video expansion module for PC/104-*Plus*, EPIC, and EBX systems. It provides video output to flat panel, CRT, and composite video displays. It can be used as a primary or secondary video output device or as a temporary video device during system development and testing.

The standard module provides connectors for LVDS, CRT and TV outputs. Custom versions are available with TTL flat panel outputs. Up to three simultaneous outputs are available, with driver support for two independent displays. CRT and TV outputs are automatically detected and configured through the video driver.

This PC/104-*Plus* module can be used to expand any PC/104-*Plus* compatible system. Additional PC/104-*Plus* or PC/104 modules can be stacked above the EPM-VID-3 module.

Like all VersaLogic products, the EPM-VID-3 is designed for high reliability and long-term availability and is backed by VersaLogic's award-winning customer support. It is fully compatible with a wide selection of popular operating systems including most Windows and Real Time Operating Systems. It is thoroughly tested using Environmental Stress Screening (ESS) and functional testing, and includes a two-year limited warranty.

Details

The foundation of the EPM-VID-3 is the ATi Rage Mobility M1 graphic accelerator coupled with 8 MB of video RAM, which supports 18-bit and 24-bit color (16.7 million displayable colors) and CRT resolutions up to 1600 x 1200. LVDS and optional TTL output supports resolutions up to 1280 x 1024). Triview™ video output allow up to three simultaneous displays. Dual display combinations (supported under Windows only) include LVDS/CRT or LVDS/TV.

The EPM-VID-3 features a customizable video BIOS including jumper-selectable flat panel modes. It is pre-programmed for simplified LVDS flat panel setup, and can be customized for other (TTL) panel types.

This module is compatible with most Windows operating systems, Linux, QNX Neutrino, and Wind River VxWorks. Video drivers for this board are available for most Windows and Linux operating systems. Other OS platforms may require development of custom drivers to support advanced display capabilities.

The EPM-VID-3 is compatible with PC/104-*Plus* systems, including most VersaLogic single board computers.

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Ordering Information

*EPM-VID-3 ..... PC/104-*Plus *Video Module*

Accessories

CBL-1010 ..... 10-pin 2 mm latching / S-Video and TV Out
CBR-1201 ..... 12-pin 2 mm latching / 15-pin VGA adapter (RoHS)
CBR-2010 ..... LVDS to FPD adapter cable, Hirose (RoHS)
CBR-2011 ..... LVDS to FPD adapter cable, JAE (RoHS)

Specifications

General	Graphic Accelerator	ATi Rage Mobility M1
	Power Requirements	+5V ±5% @475 ma
	Compatibility	PC/104: pass-through PC/104-*Plus*: full compliance
Mechanical	Board Size	3.55" x 3.775"
	Storage Temperature	-40° to +85°C
	Operating Temperature	0° to +60°C
	Humidity	Less than 95%, noncondensing
Memory	Video RAM	8 MB
Video	Desktop (CRT) Display Interface	18/24 bit, 1600 x 1200 max. resolution. 2 mm 12-pin latching header with CRT detect pins.
	LVDS Flat Panel Interface	18/24 bit, 1024 x 768 max. resolution. 20-pin molex connector. Jumper-selectable settings for the following flat panel configurations: • 800 x 600 18-bit LVDS • 1024 x 768 18-bit LVDS • 800 x 600 24-bit LVDS • 1024 x 768 24-bit LVDS
	TTL Flat Panel Interface*	18/24 bit, 1280 x 1024 max. resolution. Requires custom VBIOS and jumper settings, and the addition of a 44-pin TTL FPD connector.
	TV-Out (Composite Video) Interface	1024 x 768 max. resolution (scaled to NTSC). 2 mm 10-pin latching header.
Software	Operating Systems	Software compatible with Win95/98/NT/CE/XP, Linux, QNX Neutrino, and Wind River VxWorks.
	Video BIOS	Reprogrammable, VESA-compatible BIOS with four 64K areas (3 pre-programmed; one customizable).

** Available on customized versions only.*

Data represent standard operation at 25°C with 5.0V supply unless otherwise noted. Specifications are subject to change without notice. PC/104 is a trademark of the PC/104 Consortium.

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