

Video Processor - VP5



VP5 Video Processor

The VP5 module provides direct connection from analog video sources to a wide range of commercial digital AMLCD display modules.

Features: Based on state-of-the-art image processing technology, the VP5 capabilities include:

- frame rate conversion
- independent horizontal and vertical scaling
- programmable image position within larger background area
- incoming video gain and offset adjustments
- color look-up tables
- optional mezzanine boards for special display or video interfaces
- field-to-frame conversion of interlaced inputs
- Fine phase clock adjustment for pixel sampling
- Image can be reversed left to right
- Image can be flipped top to bottom
- On-screen adjustments of backlight brightness (where applicable), clock phase, horizontal position, vertical position, contrast, and more.

One size fits all? No one video adapter can meet the needs of the myriad of video processing applications. **Westar solves this problem by working closely with each customer, to configure one of our VP products for your exact specifications.**

VP5

- Digitizes computer-generated video
- Drives commercial AMLCD's and Inverters
- Adjustments via OSD or VPtune™ utility software
- Supports re-configuration in-the-field via VPtune™
- Supports up to SXGA displays
- Supports windowing, frame rate conversion, re-sizing, and much more!

Configured for your Requirements:

Westar will configure the VP5 module to meet your unique requirements, including the conversion of your unique video source and driving your specific flat panel display.

We sell our VP products directly to the customer. Our design engineers talk directly to the customer in order to set up a Built-In Operating System (BIOS) to meet the customer's specific requirements. **In most cases, this is done at no extra charge!** Your board will have a unique part number, composed of the board model, a configuration number, and revision (e.g. VP5-472-001)

Can you be more specific about what is configurable?

The VP5 has broad capabilities. Our engineers can apply these capabilities to your application. Rather than buying an already configured video adapter that tries to meet a least common denominator of requirements, you can now get a board specifically configured for your application. For example, your application may call for re-sizing a RGB sync-on-green VGA format to SXGA, with an external potentiometer adjustment for backlight brightness, a push button adjustment for video contrast, and On-screen adjustments for clock phase and X-Y windowing. No problem, our applications engineers will design this BIOS for you!

VPtune™: To aid in your integration, our powerful VPtune™ configuration software is provided free of charge. The VPtune™ application allows the user to perform one-time adjustments on several parameters unique to your installation. These changes are saved to non-volatile storage within the VP5. In addition, the changes can be saved to a file and forwarded to Westar to revise your configuration for subsequent deliveries.

All features of VPtune™ are implemented in an intelligently designed, simple to use, graphical user interface (GUI). The VPtune™ application installs on any Windows XP platform and communicates with the Video Processor module via a serial cable connected to an available communication port on your PC. If changes or upgrades to system devices occur (i.e.; new AMLCD or different video source), the VPtune™ application can be used to download a

new BIOS. Each new customer is provided with our VPtune™ software and all necessary documentation.

VP5 Operation

Typically, the VP5 operates as follows:

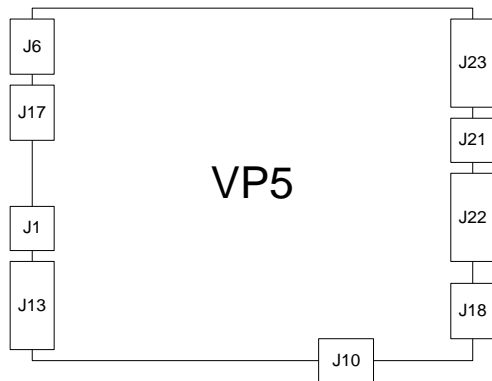
1. Upon power up, the VP5 configures itself based on its internal BIOS
2. When a valid video signal is detected, the VP5 applies power to the display per the manufacturer's power sequencing requirements.
3. When loss of video is detected, the display is then powered down.

How to get started

Please contact us at (636) 300-5110. We will discuss your requirements and respond with a quotation.

Physical Dimensions	5.0" x 4.0" x 0.8" (approx)
Temperature Range	Operating: 0° C to +50° C Storage: -20° C to +70° C
Video Inputs	Up to SXGA resolutions Standard and custom timing Separate sync or sync-on-green NTSC Input (Optional) We configure the module for your video timing!
Video Outputs	single (24 bit) or dual (48 bit) bus panels 3.3 or 5 VDC drivers (configured at the factory) LVDS, TMDS outputs (optional)
Input Power*	+12 VDC, 1.5 Amp typical when driving XGA panel and Inverter
Optional Features	Mating power supply module for multi-voltage AMLCDs (with control for proper power up & power down sequencing)
Control Interface	RS-232

Connectivity (call us to get a complete outline drawing of the VP5)



J1	Factory use only
J6	10 Pin Hirose DF11 for RS-232 Control (or optional DB-9 connector, factory installed)
J10	12 Pin Hirose DF11 for Backlight Inverter Control
J13	22 Pin Hirose DF11 for Power and Contrast
J17	10 Pin Hirose DF11 (or optional AMP HD15 VGA connector for Input Analog Video, factory installed)
J18	16 Pin Hirose DF11 for discrete input/output to display, or pushbutton I/F for OSD
J21	10 Pin Hirose DF11 for control to display
J22	32 Pin Hirose DF11 for digital data to display
J23	32 Pin Hirose DF11 for digital data to display