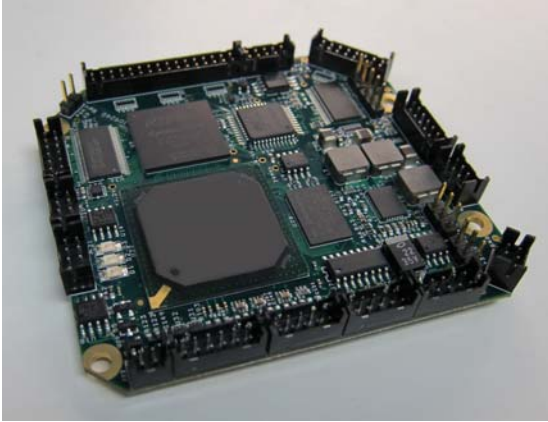


VP7 – 3ATI



VP7 – 3ATI

The VP7-3ATI Video Processing Module interfaces with 3ATI displays and other commercial TFT panels requiring a small form factor.

Features: Based on state-of-the-art image processing technology, the VP7-3ATI capabilities include:

- digitization of computer-generated video sources with separate syncs or sync-on-green
- non-interlaced and interlaced RGB inputs and outputs
- digitization and de-interlacing of consumer video formats, including RS-343 formats
- frame rate conversion
- independent horizontal and vertical scaling
- programmable image position within larger background area for both input and output
- incoming video gain and offset adjustments
- programmable power sequencing to panel
- fine phase clock adjustment for pixel sampling
- image can be reversed left to right
- image can be flipped top to bottom
- interfaces to most common inverters
- remote interface for both set-up and operational control

A specific example

The VP7-3ATI has broad capabilities needed to interface to many 3ATI display devices. The table below shows several 3ATI devices on the market today:

3ATI Manufacturer	Display Model #
American Panel Corporation (APC)	APC 340
International Display Consortium (IDC)	3ATI
Korry	KDM-340
Korry	KDM-340SLED

- **Digitizes computer-generated video sources**
- **Drives commercial AMLCD's and Inverters**
- **Adjustments and re-configuration in-the-field via utility software**
- **Supports up to SXGA displays**
- **Supports windowing, frame rate conversion, re-sizing, color conversions**
- **Approximately 2.9" x 3"**
- **Standard Inputs: TMDS or Analog**
- **Standard Outputs: Parallel Digital or LVDS (single channel)**
- **Non-Interlaced, Interlaced RGB I/O**

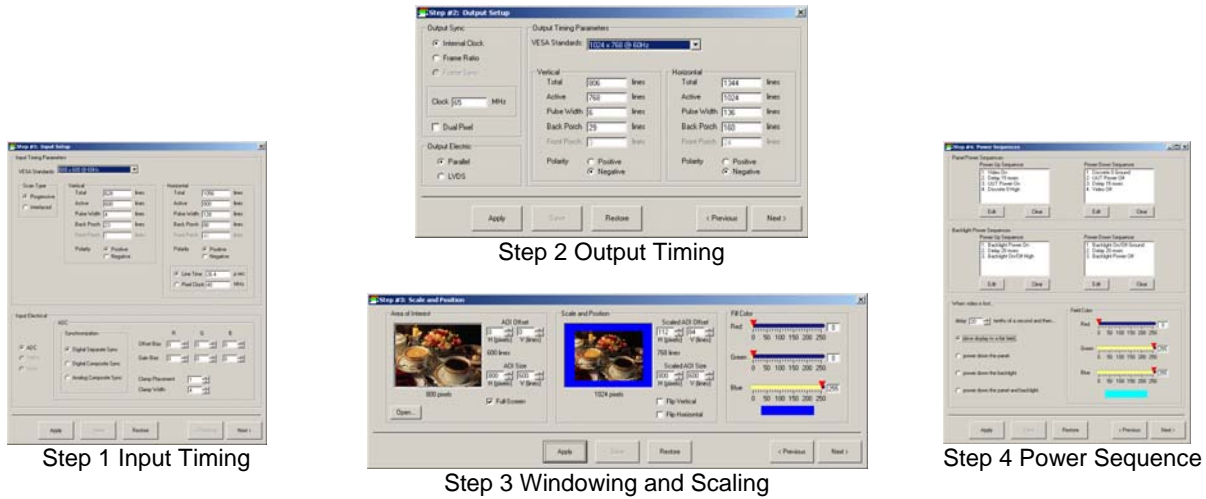
Few video sources supply the video timing and resolution required by the display devices listed above, as well as other small format displays. That's where the VP7-3ATI comes in! The VP7-3ATI accepts analog video or TMDS digital video from a standard PC and enables the user-defined window onto the output digital video stream to your display.

In some cases, such as the IDC 3ATI display and the Korry KDM340SLED, the VP7-3ATI can directly drive the display. Westar offers an ancillary power board to drive the APC 340 display.

How to get started

The VP7-3ATI can be ordered as a standard configuration (VP7-3ATI) with J10, J11 and J12 populated with 2mm pins on the top of the board, or it can be ordered with the three connectors populated with 2mm socket connectors on the back of the board (VP7-3ATI-S). The latter configuration is used when the VP7-3ATI mates to another 3ATI display-specific board. This board could be a power board or passive adapter board to mate the VP7-3ATI to the 3ATI display's unique interface connector.

Please contact us at (636) 300-5164. We will discuss your requirements and respond with a quotation.

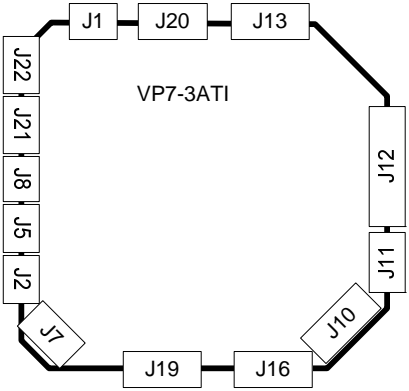


Step	Function	Sets up....
1	Input	the input timing and electrical definitions
2	Output	the output timing and electrical definitions
3	Window/Scale	the areas of interest within the input image and the mapping to the output resolution, thereby defining windowing and scaling functions
4	Power Sequence	how to sequence power and video to the target display

VP7 Configuration Utility: The VP7 Configuration utility is supplied to VP7-3ATI customers. VP7configure is installed on Windows XP platforms, and connects to the VP7-3ATI via an available RS-232 serial cable.

The utility uses a 4-step process to set up the VP7-3ATI for your application.

Physical Dimensions	VP7: 2.9" x 3" x 0.8"
Temperature Range	Operating: 0° C to +50° C; Storage: -20° C to +70° C
Video Inputs	- Up to SXGA resolutions @ 60Hz - Analog Input (110 MHz) DVI Input (110 MHz) - Standard and custom timing - Syncs (Digital Separate, Digital Composite, Analog Composite)
Video Outputs	Single LVTTTL (24 bit panel) Single LVDS output Pixel rate (maximum) = 110 MHz
Input Power	+7 to +28 VDC, 4W power consumption @ XGA resolution (does not include panel and backlight requirements)
Control Interface	RS-232
Ordering Information	VP7-3ATI (Standard configuration, all connectors are pins populated on the top side of the board) Contact the factory for a complete drive solution for your 3ATI display



J1	8 Pin Hirose DF11 for Discrete in and Contrast
J2	10 Pin Hirose DF11 for FPGA configuration
J5	10 Pin Hirose DF11 for RS-232 Control
J7	6 Pin Hirose DF11 for Power input
J8	10 Pin Hirose DF11 for Input Analog Video
J10	16 Pin Hirose DF11 for discrete I/O to display
J11	10 Pin Hirose DF11 for control to display
J12	32 Pin Hirose DF11 for digital data to display
J13	14 Pin Hirose DF11 for LVDS output
J16	14 Pin Hirose DF11 for Backlight Inverter Control
J19	8 Pin Hirose DF11 for BIOS Table select
J20	8 Pin Hirose DF11 for external LED connection
J21	12 Pin Hirose DF11 for TMDS input
J22	4 Pin Hirose DF11 for EDID interface