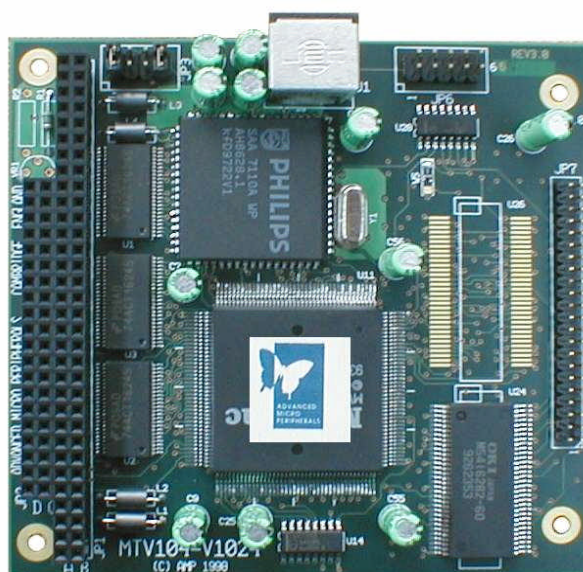


## MTV104

## PC/104 PAL/NTSC Video Frame Grabber



### General Description

The **MTV104 Frame Grabber** is a high performance image capture and video overlay card on a compact PC/104 card format. The MTV104 allows live video capture from Composite PAL/NTSC source to an on-board real time **Frame Store** memory. The **dual-ported** Frame Store is mapped to PC/104 memory space facilitating fast random access for image processing applications. With direct capture to the frame store, whole frame can be captured in real time regardless of the bandwidth limitations of the PC/104 bus. The MTV104 does not require PC/104+ bus.

An optional video overlay feature allows the MTV104 to be combined with the Media104 Display Controller for **Video Overlay and Annotation** applications. This combination allows live video to be captured, re-sized, cropped, positioned and mixed with VGA text/graphics and displayed on CRT and TFT Flat Panel displays.

### Features

- Live image input from NTSC/PAL
- Composite or S-Video input
- Inputs from Video camera, VCR, etc
- 512 x 512 by 16-bit Frame Store
- optional 1024 x 512 by 16-bit Frame Store
- Live Video Overlay and Annotation (option)
- Live video display (with Media104 card)
- C/C++ Library for DOS and Windows
- Standard 16-bit PC/104 interface
- Compact 3.6in x 3.8in PC/104 form factor
- Single +5V power supply

### Applications

- Low cost high performance image capture
- Remote video surveillance
- Medical and Industrial imaging
- Motion detection and Traffic monitoring
- Robotic systems and OCR
- Video Overlay/Annotation for Avionics
- Automatic Vehicle Number Plate Recognition

## MTV104

## PC/104 PAL/NTSC Frame Grabber

<b>Analogue Video Input</b>	Composite or S-Video Inputs 1V pp video inputs with 75Ohm termination Monochrome or Colour NTSC/PAL 5 software-selectable video input video sources 3 Composite and 1 S-Video inputs
<b>Video Input Formats</b>	NTSC-M, PAL-B, PAL-G, SECAM
<b>Video Input Adjustments</b>	Contrast (or luma gain) adjustable from 0 - 200% of original value Saturation (or chroma gain) adjustable from 0 - 200% of original value Brightness (or luma level) can be adjusted from 0 - 255 steps
<b>Video Frame Store</b>	512 x 512 by 16-bit Dual-port Video RAM 1024 x 512 (option) by 16-bit Dual-port Video RAM Memory-mapped for fast random access Direct access from PC/104 bus
<b>Video Storage Formats</b>	16-bit RGB, YUV422, YUV411, monochrome Up to 1024 x 512 pixels
<b>Scaling and Cropping</b>	Programmable option for horizontal and vertical scaling 6-tap horizontal interpolation filter 5-tap vertical interpolation filter Programmable input cropping
<b>Overlay and Annotation</b>	Optional 16-bit live video output port to Media104 Display card Synchronises digital video to Media104 display timing Facilitates mixing of live video with text/graphics on Media104
<b>PC104 Bus Interface</b>	Standard 16-bit PC/104 Interface
<b>Miscellaneous</b>	Single +5V at less than 800mA Operating Temp of 0 to 60degC (Extended Temp option) Standard 3.6 x 3.8in PC/104 form factor
<b>Software</b>	Drivers and libraries for MSDOS, Windows3.11, Linux, PharLap 32-bit DLLs for Windows, static Library for DOS Sample image capture application in C/C++ source code
<b>Related Products</b>	Media104 Display Controller Combines with MTV104 for live video overlay to CRT and Flat Panel
<b>Ordering Information</b>	<b>MTV104-512/512-16</b> Standard MTV104 with 512 x 512 by 16-bit Frame Store <b>MTV104-1024/512-16</b> Standard MTV104 with 1024 x 512 by 16-bit Frame Store <b>MTV104-512/512-16-V</b> MTV104 with 512 x 512 by 16-bit Frame Store, Video Overlay Option <b>MTV104-1024/512-16-V</b> MTV104 with 1024 x 512 by 16-bit Frame Store, Video Overlay Option