

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

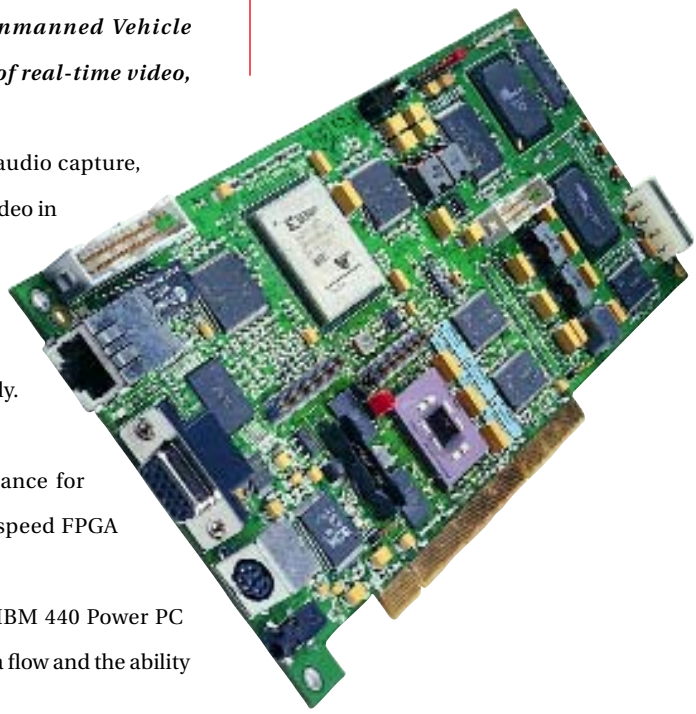
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *L-3 / Titan / VisiCom VigraWATCH* at our website: ***Click HERE***



VigraWATCH
Real-Time MPEG-2 Video, Graphics, and Audio Solutions for Defense Applications

The mission is clear: to empower military forces with enhanced, more integrated video and image intelligence capabilities to conduct rapid, precise operations whenever and wherever needed. The Titan Corporation is transforming real-time video and image capture, processing and display with VigraWATCH™, a powerful system designed to deliver clear, reliable video and graphics imagery to a ground control station or remote data terminal. As a leader in video and imaging solutions for Unmanned Vehicle systems, Titan's VigraWATCH represents the next step in the evolution of real-time video, image, and audio processing for mission-critical applications.



VigraWATCH provides a unique PCI and PMC solution for video and audio capture, simultaneous real-time MPEG-2 compression and decompression, and live video in an SVGA graphics display. The MPEG-2 data can be received and/or transmitted through a 10/100Base-T Ethernet port or over the PCI bus. The decompressed video can be displayed with a non-destructive graphics overlay to a window in a graphics environment or to an SVGA monitor directly. The decompressed audio can be output to stereo speakers.

Power — Powerful real-time image processing and robust performance for MPEG-2 compression/decompression is achieved through a dense, high speed FPGA combined with a feature rich, IBM 440 PowerPC.

Flexibility — The Xilinx Virtex 2 family of FPGAs coupled with the IBM 440 Power PC provides the flexibility and processing power to handle the high volume of data flow and the ability to react to changing requirements.

ADVANCED PRODUCTS & DESIGN DIVISION

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

TITAN
National Security Solutions



Easy software integration for existing VigraVision customers. With the exception of adding support for new features, the VigraWATCH software API and user interface remains identical to VigraVision, Titan's proven real-time image and video processing solution, and the de facto standard video/graphics card for UAV ground control stations. VigraWATCH is complimentary to VigraVision and operates without conflict in the same system.

Extensibility — The reconfigurable architecture supports off-the-shelf and custom real-time image processing algorithms, such as object tracking and image stabilization. VigraWATCH allows developers to adapt changes in application-specific functions without changing the hardware.

VigraWATCH is compatible with Titan's VigraVision®, which is the current defacto standard for analog video and graphics display for UAV ground control stations. Compatibility between the two products facilitates an easy migration to digital video.

Special Features:

- Single PCI or PMC module combine video and audio capture, real-time full duplex MPEG-2 compression/decompression, and stereo audio output and video display
- High bandwidth, hardware accelerated image computing architecture is designed to support user defined, real-time image processing and enhancement algorithms such as averaging, edge detection, warping, de-interlacing, and rotation
- Image computing operations are performed on-board VigraWATCH, and minimize host CPU processing and bus bandwidth
- Digital daughter card connectors provide a path for an after market addition of I/O such as Camera Link input and Panel Link output
- Two independently driven SVGA outputs with supporting live video windows with a choice of one composite (CVBS), one S-Video inputs, or two video channels from one MPEG-2 Transport Stream
- Operating System support for Solaris

VigraWATCH provides user-flexibility with multiple input and output formats:

- Composite or S-Video (NTSC and PAL) input formats, selectable from the host computer
- MPEG-2 via 10/100Base-T Ethernet (IEEE 802.3u)
- MPEG-2 across the PCI bus to/from host processing and/or storage
- PCI interface is 64 bit/66 MHz and can be upgraded to PCIX
- Live video display in two SVGA graphics displays; de-interlaced video to SVGA monitors
- Stereo audio input and output sampling rates are 32 KHz, 44.1 KHz, or 48 KHz and output audio data resolution up to 24 bits per second
- Video Interface Port (VIP)
- 50 pin digital I/O connectors (2) on the PCI card and (1) on the PMC for daughter cards or customer specific I/O

Full duplexed MPEG-2 compression and decompression:

- Conforms to government-mandated MPEG-2 specification
- Real time MPEG-2, Main Profile @ Main Level (MP@ML) up to a maximum bit rate of 15 Mbps
- MPEG-2 directly to/from an on-board Ethernet Port minimizes bus loading and video latency
- Low-latency mode for MPEG-2 supported (I and P frames only or I frames only)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

"VigraWATCH is the next step in the evolution of real-time Unmanned Vehicle video, image, and audio processing."

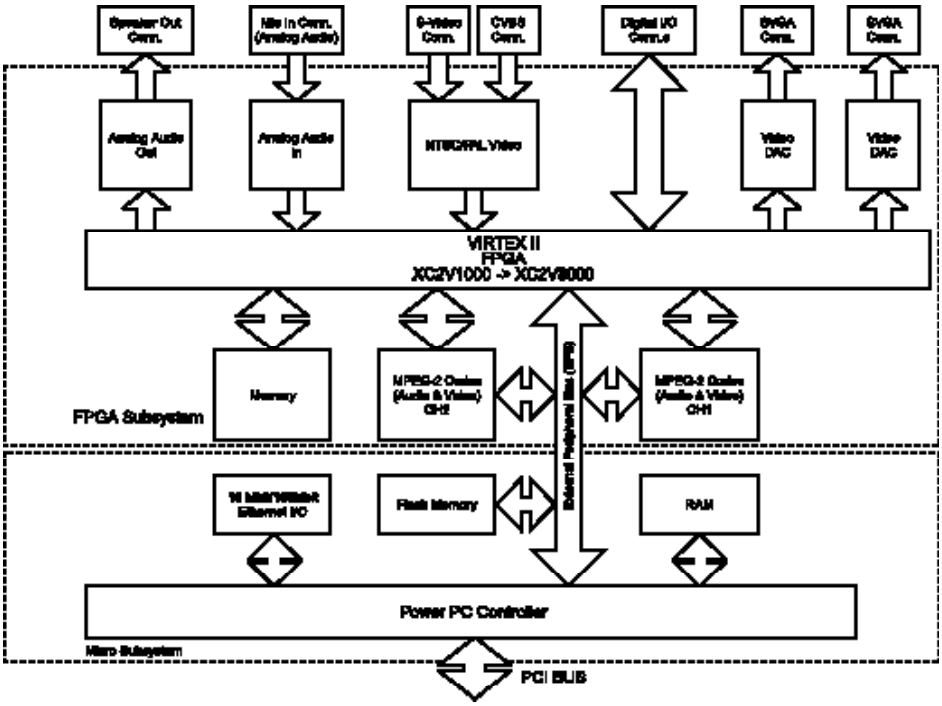
- MPEG-2 output format is a Transport Stream
- Extraction of metadata in real time from an MPEG-2 stream



Display and Graphics Capabilities:

- Non-destructive overlay displays video and graphics simultaneously to a window in a graphics environment
- VigraWATCH supports two independent graphics displays
- Obsolescence issues associated with standard graphics chips are greatly minimized by implementing the graphics in the programmable FPGA
- Accelerated 2D graphics displays with resolutions up to 1600 x 1200 x 24 bits and refresh rates up to 75 Hz on one display, and up to 1024 x 768 at 85 Hz on the second; higher resolutions are available at lower refresh rates
- Support for two independent video windows (1 window scalable up to 1 K x 1 K pixels, the other up to 720 x 484 pixels)
- 32 MB Primary Frame Buffer (Graphics)
- 48 MB Secondary Frame Buffer (Video)
- Video Interface Port (VIP) can route digital video to any third party graphics card that also supports a VIP interface





VIGRAWATCH FUNCTIONAL BLOCK DIAGRAM

TITAN
National Security Solutions

Technical Specifications:

Form Factor:

- VigraWATCH PCI: Single Board Solution, 3 7/8" wide x 10 1/2" length
- VigraWATCH PMC: Single Board solution, 6" wide x 6" length (inclusive)

Operating Systems Supported:

- Solaris
- Contact Titan's Advanced Products & Design Division (AP&D) for information regarding support for other operating systems

Power Consumption:

- 15 Watts Typical / 20 Watts Max

Operating Temperatures:

- 0° to 60° C

Storage Temperatures:

- -20° to 85° C

Ordering Information:

- Contact AP&D's Sales Department for specific part numbers and pricing
- Ask about ruggedized versions

For additional information, visit our website at www.titan.com, keyword search "VigraWATCH". Or contact us via email at boardproducts@titan.com, via phone at (800) 621-8474 or +1 (858) 527-6100.

Note: Information herein is subject to change without notice. Capabilities may vary slightly with host platform and operating system. All trademarks and/or registered trademarks are the property of their respective companies.

TITAN CORPORATION'S ADVANCED PRODUCTS & DESIGN DIVISION (AP&D), OFFERS A UNIQUE PRODUCT AND SERVICE PORTFOLIO FOR COMMERCIAL AND GOVERNMENT CUSTOMERS REQUIRING MISSION-CRITICAL AND REAL-TIME APPLICATIONS. AP&D DEVELOPS AND MARKETS FULLY CONFIGURABLE, CUSTOMIZED DSP BOARDS TARGETING REAL-TIME VIDEO, IMAGING, AND AUDIO APPLICATIONS; PROVIDES INNOVATIVE EDA DESIGN SERVICES TO RAPIDLY RETARGET OBSOLETE SUBSYSTEMS AND COMPONENTS; OFFERS PRODUCTS FOR THE GOVERNMENT MARKET, INCLUDING VME NTDS BOARDS AND VALUE-ADDED PRODUCTS OFFERED THROUGH THE GSA SCHEDULE; AND PROVIDES CUSTOM SYSTEMS INTEGRATION SERVICES FOR SPECIFIC CUSTOMER REQUIREMENTS.

TITAN
ADVANCED PRODUCTS & DESIGN DIVISION
10636 SCRIPPS SUMMIT COURT, SUITE 101 SAN DIEGO, CA 92131
(800) 621-8474 (858) 527-6100 FAX (858) 527-0150 WWW.TITAN.COM

1075010001
PN# MKTGVW101303

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP