



Triad Communications brings you Cramm, a powerful software package with a variety of applications to serve the worldwide e-Learning markets.

Cramm is a fully scaleable, multi-platform, multi-language, multi-format media engine that can:

- Create the interactive training program, tests and tracking reports
- ► Interface with LMS systems
- Provide workplace simulation using force feedback 3D and Virtual Reality

Cramm is a user-friendly multimedia training system that allows users to customize their own training experience using Video, Audio, 3D and Virtual Reality to train and test interactively for maximum retention and confident application.









Contact



Please contact **Roland Loughhead** for more information on Hardware and Software Triad Communications Ltd. 2751 Oxford Street Vancouver, BC, V5K 1N5, Canada Phone: 604-253-3990 Toll Free: 1-800-600-9762 Fax: 604-253-0770 email: roland@comwave.com



Features

USER-INTERFACE

Can be organic, of any size or shape and is multi-monitor capable. The program auto-adjusts taking into account the technical differences between video projectors, TV screens, computer monitors and plasma displays to always show the best visual quality of the user-interface. Users can view courseware using different view-points including flat planar image, 360 degree surround-view in globular or cubic mode, and 3D real-time rendered fly-through modes. Input methods such as touch-screen, voice recognition and guestural are supported.

MULTI-FORMAT SUPPORT

You can import, edit and play 3rd party audio & video files that are in Microsoft Media, Apple Quicktime, Real Video, MPEG-1, MP3, MPEG-2/DVD and other formats using our universal player software. Just drag and drop a video panel onto your courseware and the files will play without any need for audio/video conversion or translation. You can present a single, consistent user interface allowing keyboard or remote control.

WORKPLACE SIMULATION

Using our 3D rendering capability, users can interact with simulated user environments such as factory operations, vehicles, aircraft, ships, control rooms, and mechanical systems.

The simulated 3D environment will react to user input through joysticks, steering wheels, levers, foot pedals, etc, allowing a learner to safely practice normal and emergency operations.

The Learning Management System can record the training scenarios and operation results for later review. Instant feedback via video replay or text prompting enhances the learning process.

IMPORT AND EXPORT

Built-in data import and export functions allows one to exchange data with other applications using XML, HTML, multiple Bitmap and Vector image formats, external databases such as DB2, Oracle, SQL Server, Informix, etc, and plain text. We have Built-in API's that allows user to automatically interpret and format the incoming data so you can create courseware that uses external data created by 3rd party applications. Data can also be formatted and exported.

TEMPLATES

Templates allow you to re-use interface elements, and pre-built test objects for other projects. You can also order, download and modify these templates to fit your needs.

<u>AUTHORING TOOLS</u>

We include various tools such as VideoWasher, Template Maker and DataMaker which allow you to record, edit and and clean up audio & video files, create re-useable user interface and test objects, and allow you to re-format or translate 3rd party data such as spreadsheets, images, word processing files, databases, etc.

ENCRYPTION AND SECURITY

We have built-in military-grade, multi-algorithm encryption at all levels using 512 bit and longer encryption keys. This allows for the total security of test reports, emails, videos, templates, video-conferences and instant messages. Passwords can be assigned and maintained at the individual, group or department level.

MULTI-LANGUAGE CAPABLE

Multiple language versions of Text, Videos, Graphics and other elements can be included on one single disc. The playback system will autodetect the language in question and display the appropriate user interface. Latin-based languages such as English, French, Spanish, German, Italian, Portuguese and ideographic languages such as Russian, Arabic, Chinese, Japanese, Korean are all supported.

STANDARDS

SCORM compatible using high-level meta-language constructs, plug-in architecture, detailed specifications of file formats and database record structures. Source code is platform independent.











Advantages and Innovations

USER FRIENDLY

All Courseware and Test Modules development is graphically based, using a drag & drop metaphor allowing end-users to quickly create learner-friendly, touch-screen capable interfaces of any size and shape.

COMPREHENSIVE TESTING

Learners are interactively challenged by the test modules to a higher standard of knowledge retention. Some of these interactive methods include:

- 1) Drag & drop of objects over live video
- 2) Identification and selection of Video and Audio samples
- 3) Response to questions via essay style and long form text input
- 4) User feedback with hardware devices such as joysticks, steering wheels, etc
- 5) Fly-through and interaction with real-time rendered 3D environments
- 6) Team-based learning via audio & video conferencing and instant messaging
- 7) Hyper-linking and web-based browsing
- 8) Instant feedback to learner to identify and correct areas of difficulty that can include audio & video replay of course material.

TEST TRACKING AND REPORTING

We have integrated at the base level, all elements of Tracking & Reporting, LMS and CLMS. This allows learners to keep track of their own skill sets and progress on an individual basis. Administrators receive detailed reports on individual, group and company-wide inventories of aptitudes, skill-sets, and competencies.

Our reports will give the administrator a big-picture view of all the aptitudes, skills, and competencies of your employees and the departments in which they reside. Charts and graphs allow you to monitor and highlight various trends.

REUSABILITY

We can save you time and money because all courseware elements such as test objects, user interfaces, video & audio files, graphics and other elements are automatically saved to an encrypted Universal Resource File which can be re-used for other projects without translation or re-formatting.

HARDWARE COMPATIBILITY

Our testing and media playback engine automatically detects monitor resolution, available memory resources, and network bandwidth. The user interface and degree of user interaction will be auto-adjusted to take into account the available horsepower of your computer.

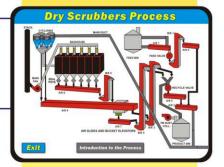
RETURN ON INVESTMENT (R.O.I.)

A superior suite that makes possible greater knowledge application. This produces a safer and more responsible and productive workforce.









Contact

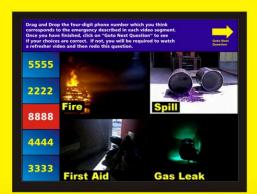


Please contact **Roland Loughhead** for more information on Hardware and Software Triad Communications Ltd. 2751 Oxford Street Vancouver, BC, V5K 1N5, Canada Phone: 604-253-3990 Toll Free: 1-800-600-9762 Fax: 604-253-0770 email: roland@comwave.com









- **Customizable User-Interface**
- Multi-format support
- Workplace simulation
- Import and export capable
- Time saving templates
- Authoring tools
- Encryption and security
- Multi-language capable
- Standards

Standard PC End User Recommended Minimum System Requirements

- 450 MHZ AMD K3 or Pentium 3
- ► 128 MB RAM
- 24xCDROM and/or 8xDVDROM
- 8 MB Graphics card capable of 1024x768 resolution and 32 bit color

PDA End User Recommended Minimum System Requirements

 Subject to software version and specific system configurations.
 Please contact for more information.







Training Manual for Users and Administrators also available



If your company requires powerful Multi-Media Training Computers and you have purchased Crammarian Software, Triad is able to offer you the latest in P.C. Hardware configured and tested by Triad specifically for the implementation of demanding computer-based training software.

The ultimate combination of power, portability and pricing, the **Cramm** system is the smallest non-proprietary platform available today, with virtually inaudible noise levels and very low power consumption. **Cramm** can be left on 24 hours a day, 7days a week, providing you with instant access all day, every day with the added benefit of significant long-term savings on energy consumption compared to standard desktop PC's.

Components

- 1) Case/Power Supply/Stand
 - HDD bracket
 - DVD bracket
 - > Front USB port
- 2) Epia MII Motherboard 10000
 - VIA C3 Processor
 - ➤ CPU Clock Speed 16hz
 - > 8X 2D/3D graphics & MPEG2 decoder
 - ➤ Support for IEEE 1394 and USB 2.0
 - Card Bus Type II and CF slot
 - ▶ 10/100 ethernet card
- 3) Hard Drive 2 ½"
 - ➤ Fujitsu model MHT2040AT
 - ▶ 40GB X 2MB X 4200
 - ➤ 40GB x 8MB x 5400 (optional)
- 4) RAM
- ► 1 x 512MB DDR 266 DIMM
- > 1 x 1GB DDR 266 DIMM (optional)
- 5) DVD/CD-ROM Drive
 - > 1 only 8x DVD Slimline player with adapter
- 6) OS System
- Microsoft Windows 2000, complete with full image backup
- ➤ Windows XP and Linux (optional)
- 7) Software
- All standard audio and video codecs
- Power DVD software DVD player
- 8) Installation
- System supplied fully formatted and partitioned, with software installed and Image backup (DVD)
- 9) Additions
- Wireless Type G card, keyboard, mouse, monitor and speakers
- Controls: Joystick, Paddles, Wheels, etc...



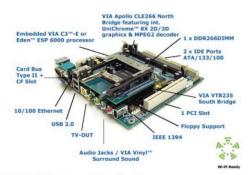
The stylish, sleek look and feel combined with optional built-in wireless technology (802.1 type G) allows for clean, hassle-free integration in the training room.

Contact



Please contact **Roland Loughhead** for more information on Hardware and Software Triad Communications Ltd. 2751 Oxford Street Vancouver, BC, V5K 1N5, Canada Phone: 604-253-3990 Toll Free: 1-800-600-9762 Fax: 604-253-0770 email: roland@comwave.com





VIA EPIA-M Mainboard Specifications

The ultimate platform for the next generation of innovative digital media devices and industrial applications.

Processor	- VIA C3/EDEN EBGA Processor, CPU 1GHZ		
Chipset	- VIA CLE266 North Bridge - VT8235 South Bridge		
System Memory	- 1 DDR266 DIMM socket - Up to 1GB memory size		
VGA	- Integrated VIA Unichrome AGP Graphics with MPEG-2 decoder		
Expansion Slots	- 1 PCI		
Onboard IDE	- 2 X UltraDMA 133/100/66 Connector		
Onboard Floppy	- 1 x FDD Connector		
Onboard LAN	- VIA Vt6103 10/100 Base-T Ethernet PHY		
Onboard Audio	- VIA VT1616 6 channel AC'97 Codec		
Onboard TV Out	- VIA Vt1622 TV out		
Onboard 1394	- VIA VT6307S IEEE 1394 Firewire		
Application	- VIA FliteDeck™ Luxurious Utility - MissionControl-H/W Monitoring, Remote SNMP management - FlashPort-Live BIOS Flash		
BIOS	- Award BIOS - 2/4Mbit flash memory		
System Monitoring & Management	- CPU voltage monitoring - Wake-on-LAN, Keyboard-Power-on, Timer-Power-on- System power management - AC power failure recovery		
Form Factor	- Mini-ITX (4 layer) - 17 cm x 17 cm		

The VIA EPIA M-Series Mini-ITX Mainboard is a revolutionary, ultra-compact x86 platform optimized for today's killer digital applications. At just 17cm x 17cm, Mini-ITX is the world's smallest native x86 mainboard platform, and is fully compatible with Microsoft® and Linux Operating Systems. Available with an embedded VIA Eden™ ESP processor core for fanless systems with ultra low-power requirements, or an embedded VIA C3™ E-Series processor for more demanding digital multimedia applications, the EPIA M-Series is the perfect platform for a whole range of small form factor, low-power digital media devices and home entertainment centers.

The EPIA M-Series' VIA Apollo CLE266 chipset features an embedded MPEG-2 decoder for silky smooth DVD playback, and integrated 2D/3D graphics for a rich multimedia experience. With the sizable memory bandwidth of DDR266 SDRAM and the high data transfer speeds of ATA/133, the EPIA M-Series ensures the high performance levels

required of today's most popular digital media applications. The user's digital media experience is further enhanced by support for 5.1 surround sound, courtesy of the onboard VIA VT16166 Channel AC'97 codec.

The latest in high-bandwidth connectivity is supported with both IEEE 1394 and USB 2.0 connections provided, as well as S-Video and RCA TV-Out (NTSC & PAL) and 10/100 Ethernet for seamless broadband connectivity. The EPIA M-Series also offers support for the latest LVDS embedded LCD panels, has one PCI slot for expandability options, and is compatible with a full range of Mini-ITX chassis as well as FlexATX and MicroATX chassis.



Onboard I/O	- 1 USB connectors for 2 additional USB 2.0 ports - 2 1394 connectors for 2 1394 ports - Front-panel audio connectors (Mic and Line Out) - CD Audio-in connector - SIR connector - CIR connector - Wake-on-LAN, Wake-on-Ring - CPU/Sys FAN/Fan 3 - System intrusion connector - 1 I2C connector - 1 LVDS connector (Optional) - Serial port connector for second com port
Back Panel I/O	- 1 PS2 mouse port - 1 PS2 keyboard port - 1 Parallel - 1 RJ-45 LAN port - 1 Serial port - 2 USB 2.0 ports - 1 VGA port - 1 RCA port (SPDIF or TV out) - 1 S-Video port - 3 Audio jacks: line-out, line-in and mic-in; can be switched to 6 channel output



Color		- Silver and Black			
Case dimensions		- 2.5" (H) x 8.65" (W) x 10.75" (D)			
Main Board Size (mm)		- VIA Mini-ITX Form Factor (170 x 170)			
HDD Bracket		- Slim Type (2.5") x 1			
CD-ROM Bracket		- Slim type x 1			
Front Access USB ports		- 2 (version 2.0)			
Internal Power Supply (DC-DC Converter)					
Dimensions (mm)	- 160 (L) x 45 (W)				
Input	- DC 12V in (From External AC Adapter)				
Output:		5VSB	1.50A		
	+5V		4.50A		
		+3.3V	4.00A		
	+12V		1.50A		
Maximum Output	- 62.40 Watts				