

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.

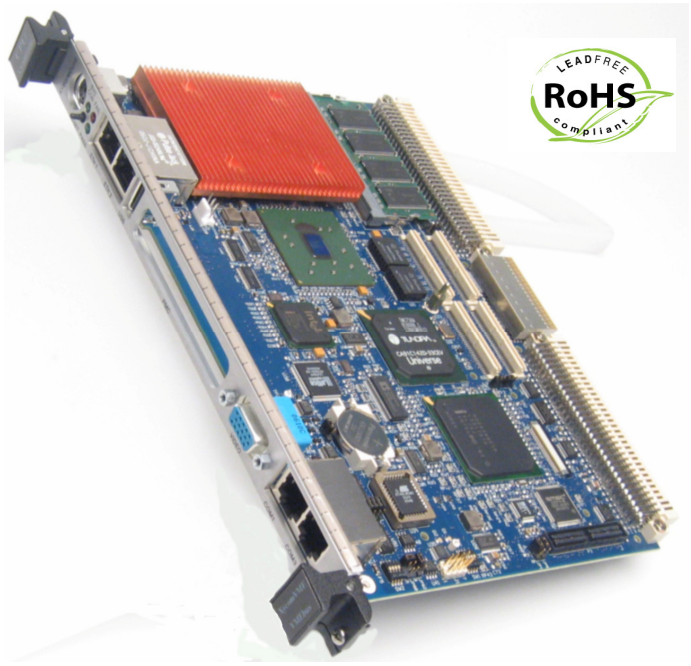
Find the *Acromag / Xembedded / Xycom XVME-690/812* at our website: *Click HERE*

EMBEDDED

Products you can count on!

XVME-690

Intel® Pentium® M Processor



Overview

The XVME-690 is a powerful VMEbus PC compatible processor module from Xembedded, the pioneer and leader in VMEbus PC technology.

The XVME-690 VMEbus processor integrates an Intel® Pentium® M or Celeron® M processor running in a range of 1.5GHz to 1.8 GHz with a PCI-to-VMEbus interface. This VME processor module allows users to take advantage of the powerful multiprocessing capability of the VMEbus while using standard off-the-shelf PC software, operating systems and VMEbus I/O modules.

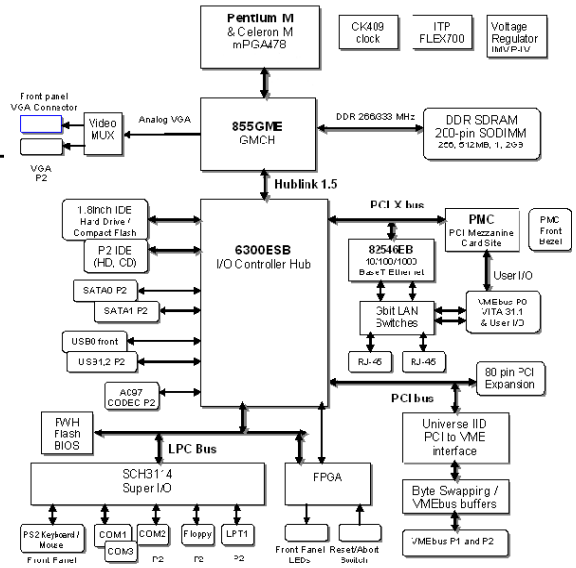
Features

- Single Slot 6U single board computer
- Intel® Pentium® 1.8GHz or Celeron 1.5GHz processor with up to 2MB of level 2 cache
- Enhanced Intel® SpeedStep®
- 855GME and 6300ESB chipset
- VGA Graphics out front panel or rear video support (Pixel resolution up to 1600 X 1200 at 85Hz)
- 256MB, 512MB, 1GB of ECC or Non-ECC DDR, 266/333MHz SDRAM
- EIDE Ultra-100 DMA controller supports up to three EIDE devices (compatible with XVME-977 and XVME-979 Mass Storage Modules)
- Optional EIDE On-board 1.8" hard drive or optional Compact Flash carrier
- Two Serial ATA150 (SATA150) external devices
- Floppy disk interface (compatible with XVME-977
- Dual 10/100/1000BaseT out front or Vita 31.1 on optional P0 rear connector
- One PMC 32/64-bit 33/66MHz site (IEEE P1386/P1386.1) with front panel I/O bezel and user I/O on optional P0 rear connector
- PMC expansion for two additional PMC sites using the XVME-976
- Headless operation using serial console mode including BIOS setup
- Rear operation using USB keyboard/mouse and rear video options
- VME-64 support with Tundra Universe IID A32/A24/A16/D64/D32/D16/D8, MBLT64 and fast hardware byte-swapping
- Parallel Printer Port (ECP, EPP and IEEE1284)
- USB 2.0 Ports, one on front two out rear connector
- Three serial ports (BIOS selectable)
  - COM1 RS-232/422/485 on front
  - COM3 RS-232 on front
  - COM2 RS-232 out rear connector
- Long duration watchdog timer
- Front panel reset switch and status LEDs
- Audio - line level stereo input and output
- Software support Libraries for **Windows® XP, Windows® XP Embedded, RTX®, Linux®, QNX® and MS-DOS® (others available on request)**
- Optional IEEE1101.10 (VME64x Compact PCI type) handles available at order time.

Xembedded LLC. 1050 Highland Drive, Suite E, Ann Arbor, MI 48108 Ph. 877.944.1942 Fax 734.975.0588
www.xembedded.com DS_74690_Rev K

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

XVME-690
Intel® Pentium® M Processor Module



CPU
- Two CPU versions available
  - 745 Intel® Pentium® M 1.8 GHz (2MB of L2 Cache)
  - 370 Intel® Celeron® M 1.5 GHz (1MB of L2 Cache)

Memory
- 256Mb, 512Mb, 1Gb memory sizes available using one 200-pin, 266/333MHz ECC DDR SODIMM

Mass Storage

EIDE Ultra-DMA 100 interface-
- Two channels via P2 or XVME-977/979 Modules
- One channel on-board for optional 1.8" EIDE or our Compact Flash carrier
- Two Serial ATA150 channels via P2
- Floppy Drive interface via P2 works with XVME-977

Graphics Interface
- Intel® 855GME 2D/3D graphics Controller
  - Resolutions up to 1600x1200 at up to 16 million colors
  - Analog video via front panel or P2

Ethernet
- **Using Intel®** 82546GB, dual 10/100/1000Mbps ports via the RJ-45 front panel or Vita 31.1 support out the P0

Stereo Audio
- AD1981B AC97 audio CODEC
- Line level stereo input and output via P2

Serial Ports
- One RS-232/422/485 (COM1) ports via front panel
- One RS-232 (COM3) port via front panel
- One RS-232 (COM2) port via P2 (XVME-990)

PMC Site
- One PMC site with I/O via front panel or optional P0 connector
- 32/64-bit, 33/66MHz PCI operation
- On board PMC site is 3.3V interface levels
- Use our XVME-976-209 to expand to three PMC sites.

Two XVME-976-209s can be stacked to provide 5 PMC sites.

USB 2.0 (Universal Serial Bus)
- One USB 2.0 port via front panel
- Two USB 2.0 ports via P2 connector

Keyboard and Mouse port
- Via front panel

PC-Compatible Real Time Clock

Parallel Port interface (ECP, EPP and IEEE1284) via P2

Long Duration Watchdog timer

Environmental

RoHS Compliant module

Thermal

Operating 0 to 55°

Non-Operating -40 to 85°

Operating Extended

-25 to 70°

Non-Operating Extended

-40 to 85°

Humidity

Operating/Non-Operating

10-95% RH, non-condensing

Shock

Operating

30g Peak acceleration, 11mSec duration

Non-operating

50g Peak acceleration, 11mSec duration

Vibration 5-2KHz

Operating 0.015" (0.38 mm) Peak to Peak displacement, 2.5g max. acceleration

Non-Operating 0.030" (0.76 mm) Peak to Peak displacement, 5.0g max. acceleration

Altitude

Operating Sea level to 10K feet (3Km)

Non-Operating Sea level to 40K feet (12Km)

EMI/EMC

Emmisions EN 55022 **Immunity** EN 50082-2

NOTE: The XVME-690 requires 300LFM of air flow during operation.

VMEbus Interface

Using Tundra Universe II D

- Complies with VMEbus Specification, VME-64X (ANSI/VITA 1.1-1997)
- A32/A24/A16:D64/D32/D16/D08 (EO) DTB Master
- A32/A24/A16:D64/D32/D16/D08 (EO) DTB Slave
- R(0-3) Bus Requester
- Interrupter I (1)-I(7) DYN
- IH(1)-IH(7) Interrupt Handler
- SYSCLK and SYSRESET Driver
- PRI, SGL, RRS Arbiter
- RWD, ROR bus release
- Form factor: Double 233.7 mm X 160.0 mm (9.2" X 6.3")

Electrical Specification

- +5V@6.8A typical (using 1.8GHz w/ 1Gb DRAM)
- +/- 12V routed to PMC site only, not required for normal operation.

Order Information

XVME-690/8YX ● 1.8 GHz Intel® Pentium® M CPU
XVME-690/5YX ● 1.5 GHz Intel® Celeron® M CPU

XVME-690/8YXE ● 1.8 GHz Intel® Pentium® M CPU
XVME-690/5YXE ● 1.5 GHz Intel® Celeron® M CPU

Y=1 VME-64 (Standard VME type handles)	**X =1 for 256MB ECC DRR SDRAM**
Y=2 VME-64x (cPCI type handles)	**X = 2 for 512MB ECC DRR SDRAM**
Y=3 VME-64 VME handles P0 (Vita 31.1/ PMC rear I/O)	**X = 3 for 1GB ECC DRR SDRAM**
Y=4 VME-64x CompactPCI handles P0 (Vita 31.1/PMC rear I/O)	**E= Extended Temperature**

Accessory Products

XVME-990/01 Rear Transition Module used to connect external devices to the P2 and P0 connectors of the XVME-690. Mounts on back side of the VMEbus chassis.

XVME-990/02 Same as XVME-990/01 but without the P0 connector and 68-pin PMC I/O. **XVME-977/xx** Single slot mass storage module with 2.5" hard drive and 3.5" 1.44Mb floppy drive. *Connects to the P2 of the XVME-690 via a 96 pin ribbon cable.*

XVME-979/0xx Single slot mass storage module with 2.5" hard drive and CD-ROM R/W drive (optional DVD/CD-ROM R/W available). *Connects to the P2 of the XVME-690 via a 96 pin ribbon cable provided with the XVME-979.*

XVME-976 Single Slot dual PMC carrier module for use with the XVME-690, provides two 32/64-bit/33/66MHz 3.3V or 5V PMC sites with front panel I/O cutout. Two carriers can be stacked to provide a total of 5 PMC sites. (Available with Standard VME or CompactPCI handles)

XVME-912/1 Compact Flash mounting kit for XVME-690. (Flash module not included)

XVME-913/60 On-Board 1.8" hard drive kit for XVME-690.

Xembedded LLC. 1050 Highland Drive, Suite E, Ann Arbor, MI 48108 Ph. 877.944.1942 Fax 734.975.0588
www.xembedded.com DS_74690_Rev K

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