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.

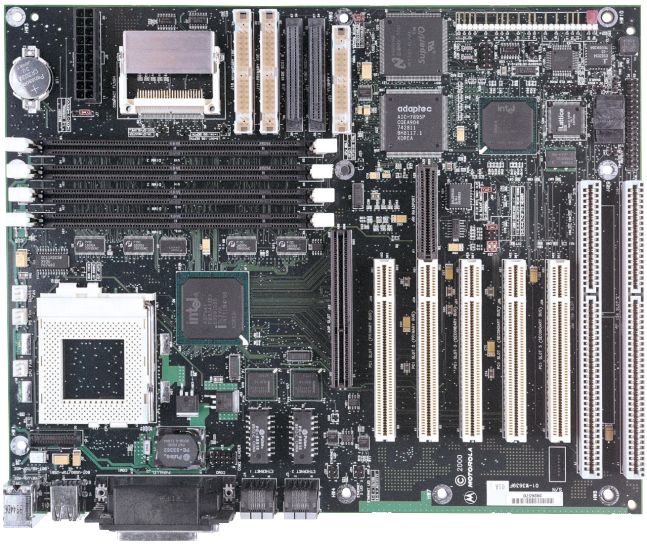
- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

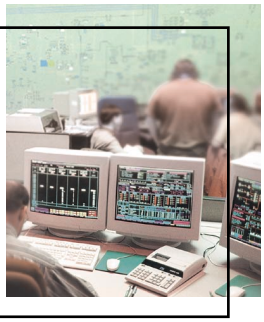
Expert team | Trust guarantee | 100% satisfaction

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

Find the *Motorola VP22* at our website: ***Click HERE***

MOTOROLA
intelligence everywhere™





MOTHERBOARD PRODUCT GUIDE

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

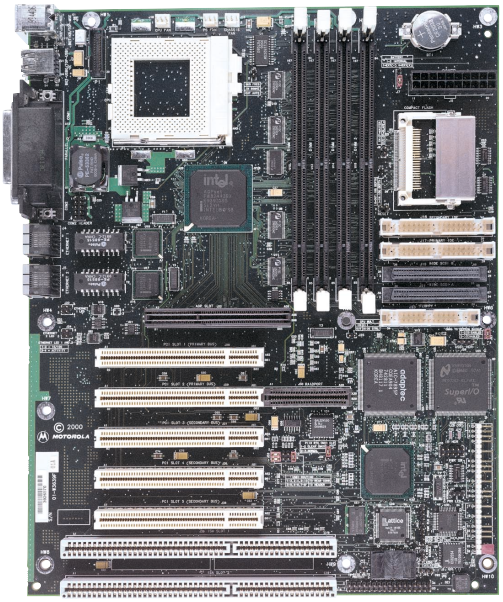
MOTHERBOARD SOLUTIONS

Designed for long-life embedded applications, high-reliability motherboard products from Motorola Computer Group are available in industry-standard form factors and run a wide spectrum of real-time kernels and popular operating systems.

Motorola offers a wide array of motherboard solutions in many form factors and chipsets that are completely CPU-independent. Form factors offered include ATX, microATX and EBX. Chipsets available are Motorola MPC107 and Intel® 440BX, 815E and 840. You can choose from motherboard products based on either PowerPC™ architecture or Intel Architecture microprocessors.

Embedded data processing-intensive industries such as industrial automation and control; digital printing and imaging; medical diagnostics and imaging; and data storage have Motorola's broad, technology-leading motherboard portfolio to select from to help meet and exceed their technology requirements. Rich in features, our motherboard products are designed to provide the optimal solution for these long-life industrial embedded applications.

Motorola's strong engineering innovation and leadership, coupled with industry-leading technology, enables you to quickly adapt your technology needs and parameters to be winners in your marketplace.



Motorola provides a robust selection of standard solutions and support to help meet your ideal motherboard requirements:

- **Choice of BIOS (Phoenix® and Award,® quick and quiet boot, user selectable boot, user selectable boot order, network booting and serial console)**
- **Multiple form factors**
- **I/O (dual and single Ethernet, SCSI, Rapid I/O™, Gigabyte Ethernet)**
- **Multiple timers**
- **Engineer-to-engineer relationships**
- **Revision control/management**
- **Technology innovations**

> INNOVATION - EXPERIENCE THE MOTOROLA ADVANTAGE

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

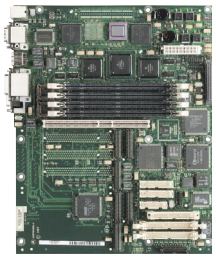
MOTHERBOARD OVERVIEW

	PATX3070	PATX5000	MBX2000	VP22	MTX	MTX Plus	LoPEC	LoPEC II
Form Factor	ATX	ATX	EBX	microATX	ATX	ATX	ATX	ATX
Processor[1]	300–566 MHz Intel® Celeron® w/66 MHz FSB or 700MHz – 1 GHz Intel® Pentium® III, 100 MHz FSB, 370-pin PGA	Single/dual 733 MHz – 1 GHz Intel Pentium III, 133 MHz FSB, 370-pin PGA	266/333 MHz Intel® Pentium® II, 66 MHz FSB; BGA1 package soldered on board	Single 566 MHz – 1 GHz Pentium III or Celeron for PGA370 socket	Single 200 MHz MPC603e class or single/dual 300 MHz MPC604e class, 256KB L2 cache	Single/dual 300 or 400 MHz MPC604e class, 512KB L2 cache	Single 200 MHz or 333 MHz MPC750 class	Single 400 MHz MPC7410
Chipset	Intel® 440BX AGPset	Intel® 840	Intel 440BX AGPset	Intel® 815E	Falcon/Raven	Falcon/Raven	MPC107	MPC107
Memory	4 DIMM sockets, up to 1GB ECC SDRAM memory	4 RIMM sockets, up to 2GB Rambus®	DIMM socket, up to 256MB ECC SDRAM memory	3 DIMM sockets, up to 512MB SDRAM unbuffered	4 DIMM sockets, up to 1GB ECC EDO memory, 5MB Flash	4 DIMM sockets, up to 1GB ECC EDO memory, 9MB Flash	2 DIMM sockets, up to 1GB ECC SDRAM	2 DIMM sockets, up to 1GB ECC SDRAM
Ethernet	Single/dual 10/100BaseT, Intel® 82559	Single/dual 10/100BaseT, Intel 82559	10/100BaseT , Intel® 82559ER	10/100BaseT	10/100BaseT	Dual 10/100BaseT	10/100BaseT	10/100BaseT
Storage	EIDE, floppy, dual-channel Wide Ultra SCSI with RAID support	EIDE, floppy, optional Ultra-2 dual-channel SCSI	EIDE, floppy	ATA100 EIDE	EIDE, floppy, SCSI-3 (Fast, Wide and Ultra)	EIDE, floppy, SCSI-3 (Fast, Wide and Ultra)	EIDE	EIDE, SCSI
I/O Ports	Serial (2), parallel, floppy, USB, IrDA, keyboard, mouse	Serial (2), parallel, floppy, USB, IrDA, keyboard, mouse	Serial (2), parallel, floppy, USB, IrDA, keyboard, mouse; two additional serial ports – RS232/422/485, digital I/O	Serial (2), parallel, floppy, USB (4), IrDA, keyboard, mouse	Serial (2), parallel, keyboard, mouse	Serial (2), parallel, keyboard, mouse	ASYNC serial (3), peripheral parallel	ASYNC serial (3), USB (2) peripheral parallel
Graphics	2XAGP slot	4XAGP slot	C&T 69030 – flat panel or SVGA	Integrated video – SVGA	With add-in card	With add-in card	With add-in card	With add-in card
Audio	With add-in card	With add-in card	With add-in card	Integrated audio	With add-in card	With add-in card	With add-in card	With add-in card
Expansion Slots	Up to five PCI, one ISA, one shared PCI/ISA	Two 64-bit/66 MHz PCI, one 32-bit/ 33 MHz PCI, one ISA, one shared PCI/ISA slot	PC/104™, PC/104-*Plus*™	Four 32-bit PCI	Three 32-bit PCI, or one 64-bit PCI and two PMC (or other configurations)	One 64-bit PCI and six 32-bit PCI	One 32-bit PCI	One 32-bit PCI
Additional Features	Type II CompactFlash™ socket, hardware monitor, EEPROM backup, watchdog and interval timers	Type II CompactFlash socket, hardware monitor, EEPROM backup, watchdog and interval timers	Type II CompactFlash socket, hardware monitor, EEPROM backup, watchdog and interval timers	–	Watchdog and interval timers	Watchdog and interval timers	Watchdog and interval timers	Watchdog and interval timers
Firmware	Phoenix BIOS	Phoenix BIOS	Phoenix BIOS	Award BIOS	PPC Bug	PPC Bug	PPC Bug	PPC Bug

[1] All Intel processors have heatsinks bundled with them.

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

MOTHERBOARDS – PowerPC Architecture







MTX Motherboard

- Single or dual MPC604e or MPC603e class processor (currently up to 300 MHz)
- Three PCI slots or dual 64-bit PMCs
- 10/100BaseT Ethernet controller
- Ultra SCSI interface
- Peripheral parallel port (target)
- Four 168-pin DIMM sockets, up to 1GB total DRAM
- 5MB Flash memory
- ATX form factor
- Supports AIX® and leading real-time operating systems (RTOS)

MTX Plus Motherboard

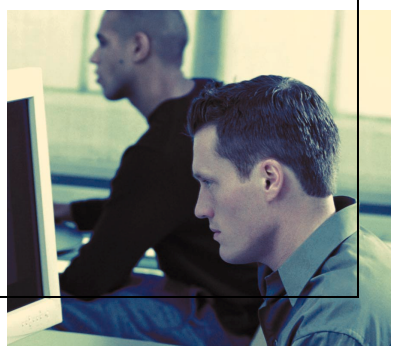
- Single or dual MPC604e class processor (up to 400 MHz)
- Seven PCI slots, one shared ISA slot
- Dual 10/100BaseT Ethernet controllers
- Ultra SCSI interface
- Four 168-pin DIMM sockets, up to 1GB total DRAM
- 9MB Flash memory
- 8KB NVRAM/RTC, watchdog timer
- 512KB look-aside L2 cache
- Super I/O
- Supports AIX and leading RTOS

LoPEC and LoPEC II (Low-Profile Embedded Controllers)

- MPC750 class or MPC7410 microprocessor (up to 400 MHz)
- MPC107 chipset with support for 66/100 MHz processor side bus
- Up to 1GB ECC SDRAM, two 168-pin DIMM sockets
- 1MB on-board, 4 or 8MB expansion Flash memory
- Up to 2MB of L2 cache
- Two 32-bit, 33 MHz PMC sites
- 10/100BaseT Ethernet interface
- Three asynchronous serial ports and one peripheral parallel port
- 32KB NVRAM and RTC with battery backup
- Four 31-bit interval timers, watchdog timer
- Supports VxWorks®, Linux® and other industry-leading operating systems

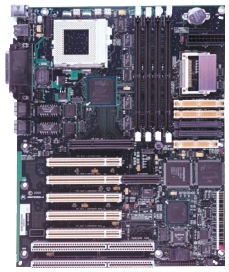
Optional Configurations for LoPEC and LoPEC II

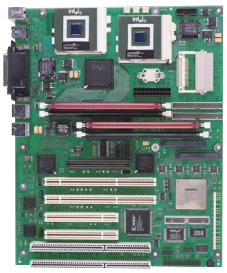
- One 32-bit PCI expansion slot
- Ultra-2 SCSI interface
- One EIDE port (3.5" or 2.5" drives)
- Two USB ports
- Type II CompactFlash socket (accepts one Type I or one Type II card)



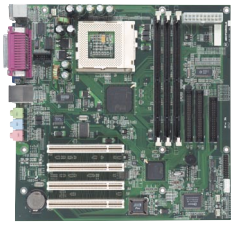
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

MOTHERBOARDS – Intel Architecture









PATX3070

- Single Intel® Pentium® III or Celeron® processor for PGA370 socket
- Intel® 440BX AGPset with support for 66/100 MHz processor side bus
- Four DIMM slots, supporting 3.3 V, PC100-compatible SDRAM memory
- 10/100BaseT Ethernet interface (single or dual population options)
- Ultra ATA/33 EIDE interface with CompactFlash Type II socket on one EIDE channel
- Hardware monitor, watchdog and interval timers
- Optional dual-channel Wide Ultra SCSI interface with RAID support
- Two RS-232 serial ports, parallel, floppy, PS/2 keyboard/mouse support and IrDA header
- One 2X AGP slot, two 32-bit/ 33 MHz PCI slots or five 32-bit/ 33 MHz PCI slots if configured with additional PCI-to-PCI bridge (one shared if PCI-to-PCI bridge option used), two ISA expansion slots (one shared if PCI-to-PCI bridge option used)
- Supports Microsoft® Windows NT®, Linux and VxWorks operating systems

PATX5000

- Single or dual Intel Pentium III processor for PGA370 socket
- Intel 840 chipset with support for 100/133 MHz processor side bus
- Four RIMM slots, 1.5 V and 3.3 V, with support for up to 1GB Rambus memory
- 10/100BaseT Ethernet interface (single or dual population options)
- Ultra ATA/66 EIDE interface with CompactFlash Type II socket on one EIDE channel
- Optional dual-channel Ultra-2 SCSI interface
- Two USB channels
- Two RS-232 serial ports, parallel, floppy, PS/2 keyboard/mouse support and IrDA header
- Hardware monitor, watchdog and interval timers
- One 4X/2X AGP slot, two 64-bit/66 MHz PCI slots, two 32-bit/33 MHz PCI slots and two ISA slots, one shared with PCI
- Supports Windows NT, Linux and VxWorks operating systems

MBX2000 Embedded Controller

- Intel Pentium® II BGA 1 processor – Low Power module
- Intel 440BX AGPset with support for 66 MHz processor side bus
- One DIMM slot supporting 3.3 V SDRAM, PC100-compatible SDRAM memory
- 10/100BaseT Ethernet interface
- Accelerated 2D graphics with 4MB video memory; VGA or flat panel connectors
- Four RS-232 serial ports (two RS-232, two RS-232/422/485), parallel, floppy, PS/2 keyboard/mouse support, two USB ports, IrDA header and 16 digital I/O channels
- PC/104 and PC/104-*Plus* expandability (ISA and PCI headers)
- Hardware monitor, watchdog and interval timers
- ATA/33 EIDE interface with CompactFlash Type II socket on one EIDE channel
- Supports Windows NT, Linux and VxWorks operating systems

VP22 microATX

- Single Intel Pentium III or Celeron processor for PGA370 socket
- Intel® 815E chipset with support for 66/100/133 MHz processor side bus
- 256KB of L2 cache (Pentium III), 128KB of L2 cache (Celeron)
- Three 168-pin DIMM sockets with up to 512MB PC133 SDRAM memory
- Four 32-bit, 33 MHz PCI expansion slots
- 10/100BaseT Ethernet interface
- Video and audio interfaces
- Two asynchronous serial ports, parallel port, PS/2 floppy port, PS/2 keyboard/mouse support, three USB ports, two EIDE Ultra DMA/100 hard drive ports and an infrared header
- Hardware monitor
- Supports Windows NT, Windows 2000, Linux and VxWorks operating systems

> *OUR PRODUCTS ALLOW YOU TO MAKE CHOICES , NOT COMPROMISES*

computers

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

PrPMC

PROCESSOR PMC

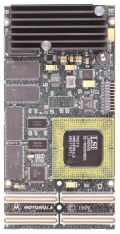
PCI Mezzanine Cards (PMCs) have traditionally been considered an ideal choice for I/O expansion within VMEbus, CompactPCI®, motherboard and custom designs. This popular form factor has evolved beyond simple I/O to incorporate the CPU itself, resulting in time savings for the CPU board designer. In performance-driven medical equipment, time-sensitive digital imaging equipment and flexible telecom applications, these modules can help simplify CPU and memory upgrades.

Processor PMC (PrPMC) modules provide a complete host CPU and memory sub-system to a base board full of PCI-based I/O controllers in a compact, industry-standard form factor. The PrPMC isolates the high-speed CPU, cache and memory signals, presenting a 33 or 66 MHz PCI bus to the carrier. PrPMCs are moving through the standardization process to establish the VITA 32-199x standard.



PrPMC600 Module

- 200 and 250 MHz MPC8240 processor
- 32–64MB ECC DRAM
- Expansion to 256MB ECL memory
- Front-panel 10/100BaseT Ethernet
- 9MB Flash memory
- Runs leading RTOSs



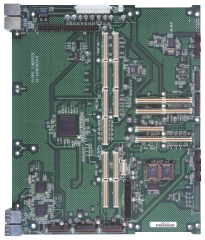
PrPMC750 Module

- 233 and 350 MHz MPC750 class processor
- High-performance PowerPlus II Architecture
- 1MB L2 cache
- 32–128MB on-board ECC memory
- Expansion to 768MB ECC memory
- 8MB Flash memory with expansion on carrier board
- Runs leading RTOSs



PrPMC800 Module

- 450 MHz MPC7410 with AltiVec™ or MPC750 class processor
- High-performance Power Plus 3 Architecture
- 2 or 1MB L2 cache
- 32MB on-board Flash memory
- Up to 512MB ECC SDRAM
- 33/66 MHz 64-bit PCI interface
- Optional 10/100BaseT Ethernet interface
- Runs leading RTOSs



PrPMC Carrier

- Five 33 MHz PMC sites (one Monarch and four standard)
- Low profile solution
- 32/64-bit support
- Dual 10/100BaseT Ethernet
- Monarch support including PCI clock and arbitration
- 10" x 12" ATX-like form factor

> SMALL, FAST AND FLEXIBLE

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

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

> GO TO THE INFORMATION SOURCE

Data sheets for these products can be viewed or downloaded at www.motorola.com/computer/literature/

www.motorola.com/computer/

Worldwide Headquarters:
Motorola Computer Group
2900 S. Diablo Way
Tempe, AZ 85282
800 759 1107

Regional Offices:
NORTH AMERICA
Tempe, AZ
800 759 1107 or 602 438 5720

EUROPE
Loughborough, UK
+44 1509 634300

EAST MEDITERRANEAN
Tel Aviv, Israel
+972 3 568 4388

ASIA
Shanghai, China
+86 21 5292 5693

PACIFIC RIM
Tokyo, Japan
+81 3 5424 3101

ASIA/PACIFIC
Hong Kong
+852 2966 3210

MOTOROLA

MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office. CompactPCI and PICMG are registered trademarks of PCI Industrial Computer Manufacturers Group. All other product or service names are the property of their respective owners.
©Motorola, Inc. 2001

This brochure identifies products, their specifications, and their characteristics, which may be suitable for certain applications. It does not constitute an offer to sell or a commitment of present or future availability, and should not be relied upon to state the terms and conditions, including warranties and disclaimers thereof, on which Motorola may sell products. A prospective buyer should exercise its own independent judgement to confirm the suitability of the products for particular applications. Motorola reserves the right to make changes, without notice, to any products or information herein which will, in its sole discretion, improve reliability, function, or design. Motorola does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent or other intellectual property rights or under others. This disclaimer extends to any prospective buyer, and it includes Motorola's licensee, licensee's transferees, and licensee's customers and users. Availability of some of the products and services described herein may be restricted in some locations.

MBPG–BR

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