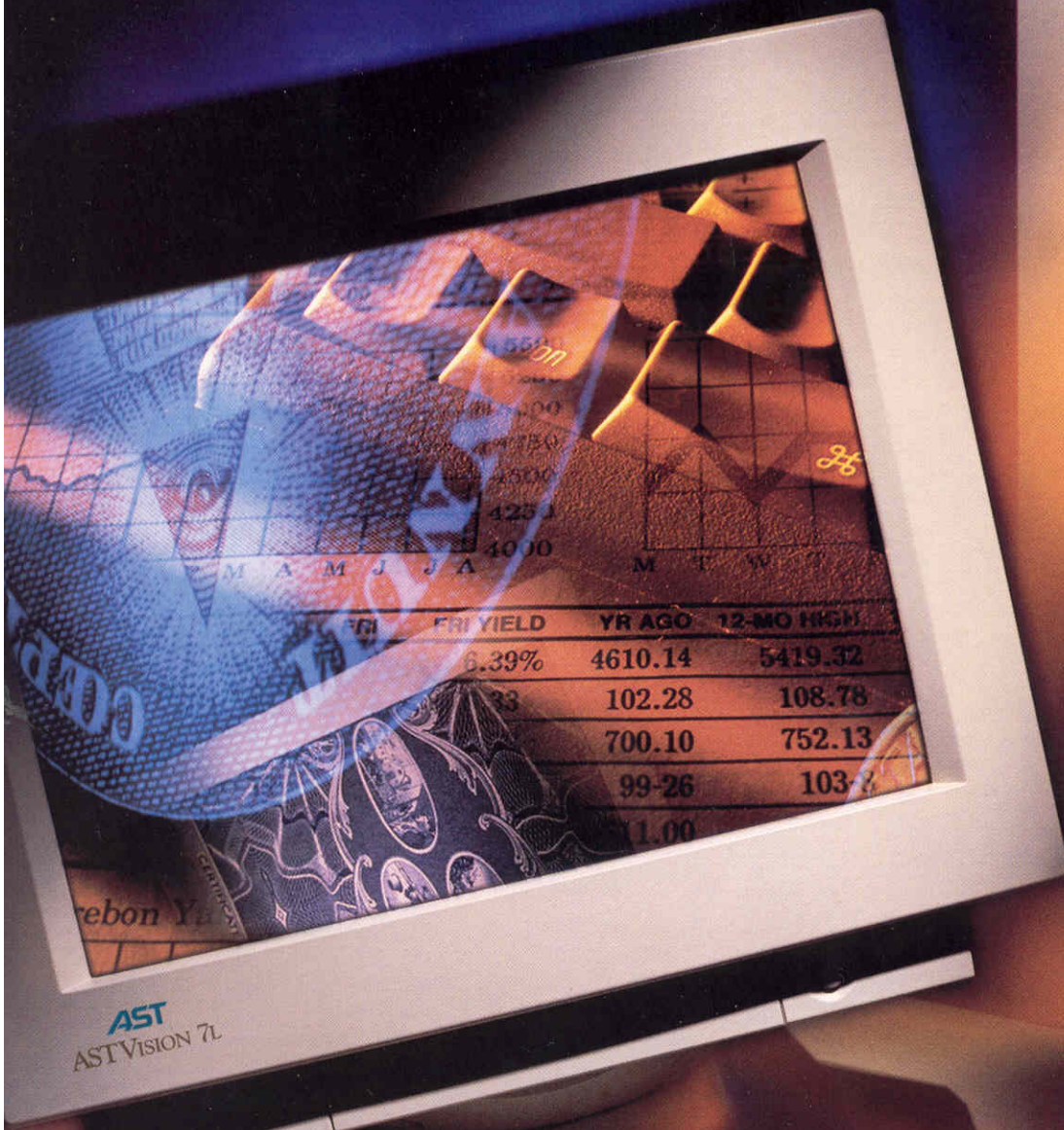


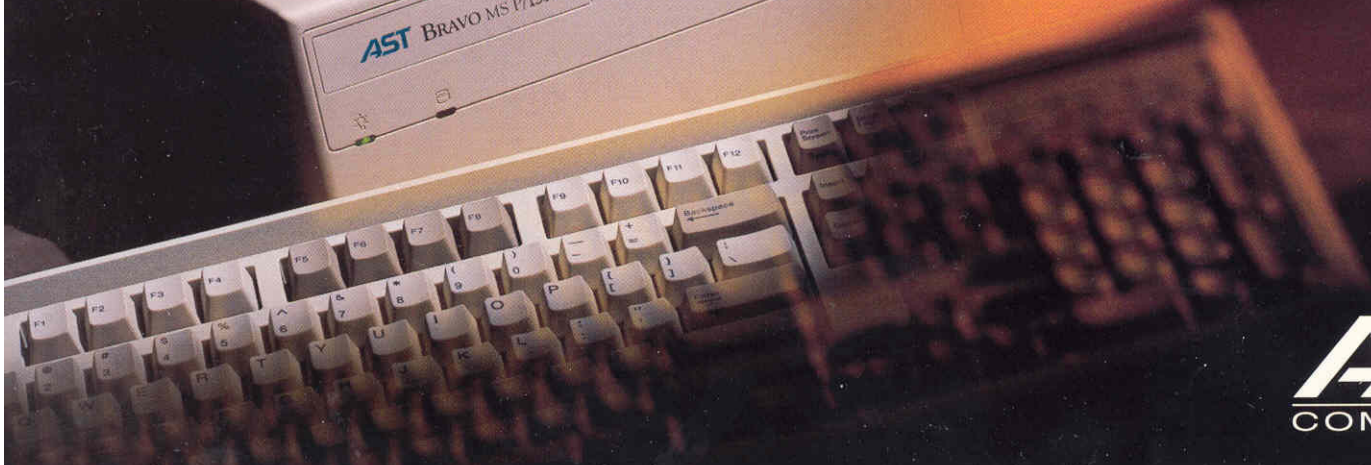
BRAVO MS SERIES

HIGH-PERFORMANCE
MEETS VALUE.



AST
AST VISION 7L

AST BRAVO MS P/133



AST
COMPUTER

BRAVO MS SERIES

PERFORMANCE DESKTOPS, ENTICINGLY PRICED.

With Bravo MS computers, we've designed systems that deliver high-end performance now, with plenty of room for future upgrades to maximize their potential. With Pentium® processing across the board, and

P
75
TO
133

256 KB standard cache, the speed of the Bravo MS is outstanding. The systems even support faster EDO RAM, to enhance data speed to the cache. ■ And thanks to an integrated PCI-based 64-bit ATI graphics chip, video capabilities are taken to new heights. Graphical interfaces have more clarity. Windows applications respond faster.

And presentation graphics are manipulated instantly. ■ Do your storage demands reach critical mass? Huge hard drives help make storage overloads a thing of the past. And to make the picture complete, we've added sound. 16-bit Sound Blaster® compatible stereo audio, to be precise. Annotate files with sound bites, or run the latest software that incorporates audio. ■ Some Bravo MS models even include quad-speed CD-ROM drives, for faster downloading and utilization of the latest software. Take a closer look at the Bravo MS systems. And see how AST proves you *can* afford a higher caliber solution.

**SOUND
BLASTER
COMPATIBLE**

**4X^{QUAD SPEED}
CD-ROM**

The Bravo MS-T — The added expansion capabilities of a mini-tower, if you anticipate larger growth demands.



The Bravo MS — Our business flagship, in an efficient, mid-size enclosure.

FASTER GRAPHICS, GREATER EXPANSION.



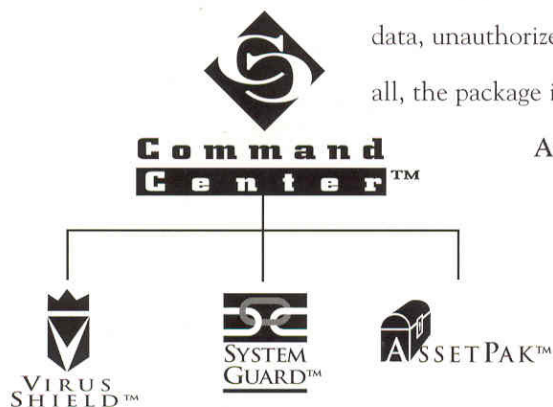
The integrated 64-bit accelerated PCI local-bus graphics include an ATI mach64 chip. Graphics memory can be expanded from 1 MB to 2, so your video will come alive with rich clarity and outstanding response time. The PCI bus of the Bravo MS family includes two 32-bit PCI expansion slots, plus two available ISA slots on Bravo MS and five on the Bravo MS-T. There is also support for up to 4 PCI-based Enhanced IDE devices, and our E-IDE hard drives come in 850 MB, 1.2 and 1.6 GB sizes. And when system changes are made, you never have to access the chassis to revise the BIOS. AST FlashBIOS allows revisions directly from a floppy or over a network.

4 E-IDE DEVICES

MORE DMI AND PROTECTION FEATURES.

FOR A SMART INVESTMENT THAT'S EASIER TO MANAGE.

The Bravo MS management tools are part of **AST-CommandCenter™** technology; a package of tools that includes very extensive virus protection, a host of security features, and DMI capabilities, all designed to ease the support costs of running an enterprise. **AST-VirusShield™** encompasses a strategy for advanced virus protection, including both software and hardware-level anti-virus technologies, based on technology from industry leader McAfee Associates, Inc. You won't find more comprehensive standard protection. **AST-SystemGuard™** employs multiple levels of security, protecting against system tampering, exposing data, unauthorized access, file copying and more. All in all, the package includes twelve different safeguards!



AST-AssetPak™ is a group of DMI (Desktop Management Interface) tools that make tracking computer equipment locally or over a network possible. DMI is a specification that allows a user or administrator to view many

system attributes, including system serial number, processor type, processor speed, etc. Bravo MS systems far exceed the minimum compliance requirements of the industry's Desktop Management Task Force.

KEY FEATURES:

- **Intel® Pentium Processors** exclusively, up to 133 MHz
- **Fast Graphics.** PCI-based, 64-bit ATI mach64 chip
- **16-bit Audio** - integrated Sound Blaster compatible
- **Quad-Speed CD-ROM** models available
- **Enhanced IDE Hard Drives** - 850 MB, 1.2 GB, 1.6 GB sizes
- **Dual-Install Capable.** Choose Windows® for Workgroups 3.11 or Windows 95, easing business transitions
- **Advanced Power Management.** Energy Star and DPMS compliant
- **Plug-n-Play Ready.** Add peripheral cards with a minimum of effort

AST
COMPUTER

BRAVO MS SERIES

QUALITY AND RELIABILITY OF A WORLDWIDE LEADER.

Each Bravo MS comes with an excellent warranty, plus extensive online support, and a host of optional warranty programs to customize service to your needs. We're ready to serve. We're AST, one of the most respected personal computer manufacturers in the world.



FEATURES	BRAVO MS	BRAVO MS-T
INTEL PROCESSORS*: *Pentium OverDrive® Processor Upgradable	• 133 MHz Pentium • 120 MHz Pentium • 100 MHz Pentium • 75 MHz Pentium	• 133 MHz Pentium • 120 MHz Pentium • 100 MHz Pentium
DISK DRIVES:	• 5 drive bays One 3.5" floppy drive Two 5.25" external Two 3.5" internal • Supports 4 local-bus Enhanced IDE devices	• 7 drive bays One 3.5" floppy drive Three 5.25" external Three 3.5" internal • Supports 4 local-bus Enhanced IDE devices
CHASSIS:	• Mid-size • 17.25"(W), 4.25"(H), 16.25"(D) (43.8 cm(W), 10.8 cm(H), 41.3 cm(D)) • Approx. 22 lbs. (9.97 kg)	• Mini-tower • 8.25"(W), 15.25"(H), 17"(D) (20.9 cm(W), 38.7 cm(H), 43.1 cm(D)) • Approx. 27 lbs. (12.3 kg)
EXPANSION SLOTS:	• Two 32-bit PCI • Two 16-bit ISA	• Two 32-bit PCI • Five 16-bit ISA
POWER SUPPLY:	• 145 watt (front panel power switch) • 115 VAC switchable to 220 VAC	• 200 watt • 115 VAC switchable to 220 VAC

* Models may vary by country

INCLUDED IN THE BRAVO MS SERIES:

CACHE:

- Primary: Integrated 16 KB cache
- Secondary: 256 KB standard
- Type: Direct mapped; write back

HARD DRIVE MODELS:

- 850 MB, 1.2 GB and 1.6 GB
- 4X CD-ROM configurations also available

GRAPHICS:

- Integrated 64-bit accelerated PCI local-bus (ATI mach64)
- 1 MB standard, upgradable to 2 MB
- Max. Resolution: 1280 x 1024 NI, 64 K colors at 72 Hz

MEMORY:

- 8 MB or 16 MB RAM
- Expandable up to 128 MB on systemboard
- 72 pin JEDEC, non-parity, 70 ns
- Four SIMM sockets

POWER MANAGEMENT:

- Energy Star certified
- VESA DPMS compliant

SOFTWARE:

- AST-CommandCenter Utilities
 - AST-VirusShield
 - AST-SystemGuard
 - AST-AssetPak
- AST-VoiceCommand™ Utilities
 - Verbex's Listen for Windows 2.0
 - Centigram's TruVoice text-to-speech
- AST-AudioWorks™ Windows for Workgroups 3.11 Utilities
 - Crystal's Audio Mixer, Transport and Input utilities
 - Sierra Audio Rack
- MS-DOS® 6.22 (Model 3)
- Dual Install: DOS/Windows for Workgroups 3.11 or Windows 95 (HD models)
- AST FlashBIOS

STANDARD I/O:

- 2 serial ports (16550 UART)
- 1 bi-directional parallel port
- 1 PS/2-compatible mouse port

TEMPERATURE RANGE:

- Operating: 50° to 90° F (10° to 35° C)
- Shipping: -22° to 140° F (-30° to 50° C)
- Relative Humidity (non condensing)
Operating: 20-90%

KEYBOARD/MOUSE:

- Standard 101/102-key layout plus three Windows 95 keys
- Mini DIN connector
- Microsoft Defender mouse (HD models)

DOCUMENTATION:

- User's manual
- Windows 95 manual (HD models)
- MS-DOS/Windows for Workgroups manual (HD models)



pentium
PROCESSOR

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