## Bravo MS

[ **S E R I E S** ]



Breaking

Performance

BARRIERS.



## Bravo MS

# THE HIGHER CALIBER SOLUTION.

AST has gone to the extreme, to create an absolute best-of-class business PC. It's sophisticated performance for the sophisticated business user.



From the processing, to the

graphics, to the new, smartly designed chassis, the Bravo MS is our most leading-edge system, aggressively priced. It's the personification of our commitment to be first to market with the latest technology.

AST has pushed the limits of PC performance with highly tuned critical subsystems and components. The Bravo MS is engineered and designed to

256 KB CACHE

incorporate the latest technologies which break prior performance barriers. The most advanced cache and memory available are coupled with data transfer rates of up to 16 MB per second, plus utterly cutting-edge graphics capabilities — the result of a long-term strategic partnership with ATI, an industry leader in video technology.

And as if all this weren't enough, AST has gone even farther, by incorporating voice recognition software! So when it's crucial to embrace the latest technologies, and be ready for increasing performance demands, the Bravo MS is the definitive choice. AST is introducing a revolutionary standard in power computing.

#### KEY FEATURES:

- Choose from ultra-fast 100, 133
   166 or 200 MHz Intel® Pentium®
   processors
- 256 KB of pipeline-burst synchronous cache - upgradable to 512 KB
- 16 MB of EDO RAM upgradable to 192 MB
- PCI-based 64-bit ATI
   mach64™ VT graphics with
   1 MB SGRAM, upgradable to
   2 MB
- Integrated 16-bit Creative Labs
   Vibra Sound Blaster® audio
- 1.2 or 2.0 GB Enhanced IDE hard drives. EIDE Mode 4 support
   (16 MB/sec.)
- Choice of newly designed desktop or expandable minitower chassis
- Energy Star and DPMS compliant

#### INCREDIBLY ADVANCED PROCESSOR SUBSYSTEM.

To create this exemplary system, AST chose only the fastest Intel® Pentium® processors which deliver the best value. Its new Intel® 430HX PCIset is the next generation of the highly touted Triton chipset — the fastest Intel® core logic available, and AST has it first. Crucial to maximizing processing speed is the expandable 256 KB pipeline burst synchronous cache, which synchronizes operations with the speed of the CPU, and sends data in bursts for increased speed. The EDO (Extended Data Output) RAM of the Bravo MS is faster too, and the system can automatically support parity RAM.

#### STUNNINGLY VIVID GRAPHICS.

ATI is an industry-leading producer of graphics technology. AST has maintained a developmental partnership with ATI for years, allowing us to



integrate their latest and most remarkable chip early. The new ATI *mach*64<sup>™</sup> VT chip achieves benchmark scores that a year ago seemed unreachable. And AST went even further by

being the first to incorporate up to 2 MB of the new, leading-edge SGRAM (synchronous graphics RAM) to propel system speed to unheard-of heights.

#### THE ULTIMATE SOFTWARE SUPPORT.

Cost of ownership is a driving factor in choosing business systems, so AST put our engineering team to task to address your needs. AST-CommandCenter™ is the result — an incredible value adding package of software utilities which debuted over a year ago on every Bravo system. AST-CommandCenter software utilities are not just good for the user, they benefit your whole Corporation. Competing systems are SHIELD™

far behind in offering the types of extensive virus protection, security safeguards and DMI measures we've had for some time. And today, we've added AST-VoiceCommand<sup>TM</sup> for voice recognition and audio control! AST-AudioWorks<sup>TM</sup> software which makes audio clips easy to manipulate. And AST-RemoteQuery<sup>TM</sup> for remote network administration. Plus, with optional AST-LifeLine<sup>TM\*</sup> real time diagnostic support, it's the most comprehensive spectrum of software in its class. Of course.

<sup>\*</sup>Currently available in U.S. and Canada only.

### Bravo MS

#### QUALITY AND RELIABILITY FROM A WORLDWIDE LEADER.

The Bravo MS Series comes with an excellent warranty, a host of optional warranty programs, and extensive online support, including a World Wide Web site at http://www.ast.com. With AST, you're getting a product from one of the largest and most respected personal computer manufacturers in the world.

Features	Bravo ms	Bravo ms-t
INTEL® PENTIUM® PROCESSORS*: Pentium® OverDrive® Processor Upgradable (except 200 MHz)	<ul> <li>100 MHz</li> <li>133 MHz</li> <li>166 MHz</li> <li>Intel® 430HX PCIset</li> </ul>	<ul> <li>100 MHz</li> <li>133 MHz</li> <li>166 MHz</li> <li>200 MHz</li> <li>Intel® 430HX PCIset</li> </ul>
DISK DRIVES:	<ul> <li>5 drive bays</li> <li>One 3.5" floppy drive</li> <li>Two 5.25" external</li> <li>Two 3.5" internal</li> <li>Supports 4 local-bus Enhanced IDE devices</li> </ul>	<ul> <li>7 drive bays</li> <li>One 3.5" floppy drive</li> <li>Three 5.25" external</li> <li>Three 3.5" internal</li> <li>Supports 4 local-bus Enhanced IDE devices</li> </ul>
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:	<ul><li>Two 32-bit PCI</li><li>Three 16-bit ISA</li></ul>	<ul><li> Two 32-bit PCI</li><li> Five 16-bit ISA</li></ul>
POWER SUPPLY:  * Models may vary by country	<ul><li>145 watt (front panel switch)</li><li>115 VAC switchable to 220 VAC</li></ul>	<ul><li>200 watt (front panel switch)</li><li>115 VAC switchable to 220 VAC</li></ul>

#### INCLUDED IN THE BRAVO MS SERIES:

#### CACHE:

- Primary: Integrated 16 KB cache • Secondary: 256 KB standard,
- upgradable to 512 KB
- Pipeline burst synchronous RAM

#### GRAPHICS:

- New PCI-based 64-bit ATI mach64 VT graphics
- 1 MB SGRAM standard, upgradable to 2 MB
- Max. resolution: 1280 x 1024 NI, 256 colors @ 72 Hz or 1024 x 768 NI 64K colors @ 72 Hz

#### HARD DRIVE MODELS:

- 1.2 GB, 2.0 GB EIDE
- EIDE Mode 4 support
- 8X speed CD-ROM (some models)

#### MEMORY:

- 16 MB EDO RAM
- 6 SIMM sockets
- Expandable to 192 MB on systemboard
- 72-pin JEDEC, non-parity, 60 ns
- Support for parity

#### POWER MANAGEMENT:

- Energy Star certified
- VESA DPMS compliant

#### SOFTWARE:

- AST-CommandCenter utilities
  - -AST-VirusShield™
  - -AST-SystemGuard™
  - -AST-AssetPak™
  - -AST-RemoteQuery featuring Intel® LANDesk® technology
  - -AST-VoiceCommand
    - -Verbex's Listen for Windows 2.0
    - -Centigram's® TruVoice® text-to-speech
  - -AST-AudioWorks
    - -Creative EnsembleCD
    - -Creative EnsembleMIDI
    - -Creative Mixer
  - -Creative EnsembleWave
  - -AST-LifeLine ready\*\*
- Operating Systems -Dual install: MS-DOS\*/
- Windows® for Workgroups 3.11 or Windows 95
- -Windows NT® 4.0 models
- AST FlashBIOS

- Creative Labs Vibra 16S
- Sound Blaster compatible\*\*
- Stereo headphones with built-in microphone

\*\*Currently available in the U.S. and Canada only.

#### STANDARD I/O:

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

#### TEMPERATURE RANGE:

- Operating: 50° to 95° 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

#### DOCUMENTATION:

- User's manual
- MS-DOS/Windows for Workgroups Basics
- Windows 95 or Windows NT manual

#### NETWORK OPTION:

• Intel® EtherExpress<sup>TM</sup> PRO/100B PCI Network Adapter







#### WORLDWIDE **HEADQUARTERS**

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