

# B R A V O M S

POWER AND PERFORMANCE MADE EASY

QUALITY AND RELIABILITY  
FROM A WORLDWIDE LEADER

Bravo MS systems are backed by the shared resources of AST Computer and Samsung Electronics, a \$92 billion company. So when you purchase from AST, you're not only getting a product from one of the largest and most respected personal computer manufacturers in the world, but you're getting it from a company that is dedicated to responding to the needs of our customers. Because at AST, we're working to make life easier for your business.

| FEATURES                             | BRAVO MS (DESKTOP)  | BRAVO MS (MINI-TOWER)   |
|--------------------------------------|---|---|
| <b>INTEL PENTIUM II PROCESSORS*:</b> | <ul style="list-style-type: none"><li>• 266 MHz with MMX technology</li><li>• Intel 440LX AGPset</li></ul>  | <ul style="list-style-type: none"><li>• 266 MHz with MMX technology</li><li>• 300 MHz with MMX technology</li><li>• Intel 440LX AGPset</li></ul>            |
| <b>INTEL PENTIUM PROCESSORS*:</b>    | <ul style="list-style-type: none"><li>• 166 MHz with MMX technology</li><li>• 200 MHz with MMX technology</li><li>• 233 MHz with MMX technology</li><li>• Intel 430TX PCset</li></ul> | <ul style="list-style-type: none"><li>• 200 MHz with MMX technology</li><li>• 233 MHz with MMX technology</li><li>• Intel 430TX PCset</li></ul>             |
| <b>DISK DRIVES:</b>                  | <ul style="list-style-type: none"><li>• Four drive bays</li><li>- One 3.5" floppy drive</li><li>- Two 5.25" external</li><li>- One 3.5" internal</li></ul>                            | <ul style="list-style-type: none"><li>• Six drive bays</li><li>- One 3.5" floppy drive</li><li>- Three 5.25" external</li><li>- Two 3.5" internal</li></ul> |
| <b>AST FLEXCHASSIS:</b>              | <ul style="list-style-type: none"><li>• Mid-size</li><li>• 17.75" W x 5.45" H x 17.25" D</li><li>• Approx. 28 lbs.</li></ul>  | <ul style="list-style-type: none"><li>• Mini-tower</li><li>• 8.02" W x 17.5" H x 17.5" D</li><li>• Approx. 31 lbs.</li></ul>                                |
| <b>EXPANSION SLOTS:</b>              | <ul style="list-style-type: none"><li>• Two 32-bit PCI</li><li>• One 16-bit ISA</li><li>• One PCI/ISA shared</li><li>• One 32-bit AGP (Pentium II only)</li></ul>                     | <ul style="list-style-type: none"><li>• Three 32-bit PCI</li><li>• Four 16-bit ISA</li><li>• One 32-bit AGP (Pentium II only)</li></ul>                     |
| <b>POWER SUPPLY:</b>                 | <ul style="list-style-type: none"><li>• 200 watt (front panel switch)</li><li>• Suspend/resume mode supported</li></ul>   | <ul style="list-style-type: none"><li>• 200 watt (front panel switch)</li><li>• Suspend/resume mode supported</li></ul>                                     |

\* Models may vary by country

## INCLUDED IN THE BRAVO MS SERIES:

**CACHE:**

- Primary: Integrated 32 KB
- Secondary: Integrated 512 KB

**GRAPHICS:**

- Integrated PCI-based ATI Rage II+ 3D graphics
- 2 MB SGRAM standard, upgradable to 6 MB
- ACP ready (Pentium II only)
- Maximum resolution: 1600 x 1200
- NI, 65K colors @ 76 Hz or 1280 x 1024 NI, 16.7M colors @ 75 Hz

**HARD DRIVE MODELS:**

- 2.0 GB, 3.0 GB, 4.3 GB
- EIDE UltraDMA-33
- S.M.A.R.T. Drive Technology

**MEMORY:**

- 32 MB SDRAM
- Three DIMM sockets
- Expandable to 384 MB on systemboard
- 168-pin, non-parity SDRAM
- ECC support

**CD-ROM:**

- 24X maximum EIDE (Pentium II only)
- 16X maximum EIDE (Pentium with MMX technology)

**POWER MANAGEMENT:**

- Energy Star compliant
- VESA DPMS compliant
- APM 1.2 compliant
- ACPI support

**LAN:**

- Integrated Intel 10/100Mbps PCI Ethernet controller
- Magic Packet technology (provides wake-up signal)
- Three LAN LEDs
- Disable via BIOS setup

**SOFTWARE:**

- AST-CommandCenter™ utilities
- Intel LANDesk 3.0
- McAfee VirusScan
- McAfee WebScan
- AST-SystemGuard™
- AST-AudioWorks™ (ESS AudioRack, ESS AudioRecorder)
- Operating Systems
- Choice of Microsoft® Windows® 95 or Windows NT® 4.0
- AST FlashBIOS

**AUDIO:**

- ESS 1869 (16-bit stereo)
- Sound Blaster compatible
- Spatializer™ 3D Stereo
- Integrated Wavetable Support

**STANDARD I/O:**

- Two USB ports
- Two serial ports (16550 UART)
- One parallel port (EPP/ECP)
- One PS/2 compatible mouse port
- Audio: line-in, line-out, microphone
- Ethernet

**KEYBOARD/MOUSE:**

- Standard 101/102-key layout plus three Windows 95 function keys
- Mini DIN connector
- Microsoft mouse

**DOCUMENTATION:**

- User's manual Microsoft Windows 95 or Windows NT 4.0

**HARDWARE MONITORING:**

- Temperature, voltage, fan speed, chassis intrusion

**BIOS:**

- DMI 2.0 compliant
- Soft on/Soft off
- Two level password
- 2 Mbit EPROM, boot block
- Year 2000 compliant
- PC 97 compliant (Pentium II only)

**ADVANCED TECHNOLOGIES:**

- AST System Noise Reduction (SNR)
- AST FlexChassis



AST is a registered trademark and AST Computer, the AST logo, Working for your business, AST-CommandCenter, AST-AudioWorks and AST-SystemGuard are trademarks and Guardian Care is a service mark of AST Research, Inc. Intel, Pentium, LANDesk, the Pentium II Processor logo, and the Intel Inside logo are registered trademarks and MMX and the Intel LANDesk technology logo are trademarks of Intel Corporation. Microsoft, Windows, Windows NT and the Windows 95 and Windows NT logo are registered trademarks of Microsoft Corporation. Sound Blaster is a registered trademark of Creative Technology, Ltd., McAfee is a registered trademark and VirusScan and WebScan are trademarks of McAfee Associates, Inc. IBM is a registered trademark of IBM Corporation. Spatializer is a registered trademark of Spatializer Audio Laboratories, Inc. ATI is a registered trademark and 3D Rage is a trademark of ATI Technologies, Inc. All other product or service names mentioned herein may be trademarks or registered trademarks of their respective owners. The information in this brochure is subject to change without notice. Reference to the Energy Star program does not represent EPA endorsement of any product or service. AST Research, Inc. shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance or use of this material. Copyright © 1997, AST Research, Inc. All rights reserved. Printed in U.S.A. U.S. English Version 9/97 040006-769

WORLDWIDE  
HEADQUARTERS

AST Research, Inc.  
16215 Alton Parkway  
Irvine, CA 92618-3618  
*In the U.S. and Canada*  
Call 1-(800) 876-4278

*International inquiries*  
Call (+1) (714) 727-9292

WORLDWIDE WEB ADDRESS:  
<http://www.ast.com>

AFRICA  
Tél: (+44) 181-587-3000

AUSTRALIA  
Tél: (+61) 2-9952-6400

CANADA  
Tél: (+1) (905) 507-3278

CHINA, PEOPLE'S  
REPUBLIC  
Tél: (+86) 10-6849-8318

FINLAND  
Tél: (+358) 9-5492 5400

FRANCE  
Tél: (+33) 1-47-52-22-22

HONG KONG  
Tél: (+852) 2806-4333

INDONESIA  
Tél: (+62) 21-526-7951

ITALY  
Tél: (+39) 2-269751

LATIN AMERICA/MEXICO  
Tél: (+1) (972) 702-0388

MALAYSIA  
Tél: (+60)-3-202-3302

MIDDLE EAST  
Tél: (+971) 4-816816

NORWAY  
Tél: (+47) 66-84 21 00

PAKISTAN  
Tél: (+92) 21-577953/576946

SINGAPORE  
Tél: (+65) 4711312

SWEDEN  
Tél: (+46) 8-473 73 00

SWITZERLAND  
Tél: (+41) 1-744-58-58

THAILAND  
Tél: (+66)-2-655 1491/1495

U.K./EIRE/EUROPE  
Tél: (+44) 181-587-3000

**AST**  
COMPUTER

Working for your business.™

# B R A V O M S

RAISING THE BAR FOR CORPORATE DESKTOPS

As technology continues to advance and become increasingly complicated, it's more important than ever to choose business solutions that are easy to purchase, maintain and manage. Enter Bravo MS, the new family of business PCs from AST®. You'll find that these high performance network solutions not only incorporate the leading-edge capabilities that keep you ahead of the competition, but their ingenious design makes them the easiest PCs to use and support.

The Bravo MS is setting a new standard in the world of corporate desktops by offering a full range of Intel® Pentium® processors with MMX™ technology and Pentium II processors, unsurpassed graphics, the industry's first NLX push-button FlexChassis design and further advances in environmentally friendly PCs. And that's only half the story. AST knows that hardware alone isn't enough. So we have a fleet of customer programs tailored to your needs. These programs, combined with the highly advanced Bravo MS design, give your company the tools — and the room — it needs to grow.

ADVANCED TECHNOLOGY FOR YOU  
AND YOUR ENVIRONMENT

Once again AST leads the way in environmentally friendly computing. In addition to installing power and money saving suspend/resume modes on all of our new PCs, the Bravo MS is the industry's first "Quiet PC." AST's System Noise Reduction (SNR) technology makes the Bravo MS up to 70% quieter than our competition. By lowering the

amount of "white noise" to about 28 decibels, this whisper quiet computer far exceeds the National Institute for Occupational Safety and Health's (NIOSH) guidelines. Your ears might not realize how much better this environmentally sensitive design is for them, but you will undoubtedly notice the difference it makes during conference

calls, training sessions or just trying to concentrate. The Bravo MS is the

first business PC on the market to make your office more peaceful while increasing your productivity.

**AST**  
COMPUTER

