



For the insatiable power user, AST delivers the fastest performance possible in 386™ technology. The powerful, 33 MHz AST Premium 386/33 provides the computational capabilities of an engineering workstation, while maintaining true PC compatibility.

For power users who need a desktop computer that can deliver the fastest 80386™ technology available, the AST Premium 386/33 is the ultimate solution. With enhanced 33 MHz processing, 36 MB of 32-bit, zero wait-state memory, large disk capacity and vast expansion capabilities, the AST Premium 386/33 satisfies a broad range of performance-sensitive and power-hungry applications.

Using the 33 MHz, Intel® 80386 microprocessor as a cornerstone, AST packs several speed-enhancing features into the AST Premium 386/33. For starters, we've added the most advanced cache memory architecture available, including 32 KB of high-speed, 25 nanosecond RAM for faster data retrieval. Users will also find up to 36 MB of zero wait-state processing to accommodate the most complex software applications and utilities.

A Powerful Productivity and Networking Tool

The AST Premium 386/33 is your best resource in multiuser, LAN and multitasking environments where performance is everything. In single-user environments it tackles concentrated computational tasks, such as volumetric and regression analysis with ease. It's also effective with tasks that may not require as much computation, but rely rather on fast retrieval of large amounts of data, such as data base queries.

All together, a broad range of applications typically reserved for an engineering workstation environment are supported by the AST Premium 386/33, including 3-D animation, geophysical disciplines, such as oil well simulation, large data base sorts, city planning and development, machine design and more.

Premium Features

With a stylized modular design, consisting of a 'plug-in' CPU card in a locking chassis, the AST Premium 386/33 is one more example of AST's commitment to providing a high-performance system today that won't be obsolete tomorrow.

On the CPU card is the 33 MHz, Intel 80386 chip, an Intel 82385 cache

controller with 32 KB of zero wait-state cache memory, sockets for up to 4 MB of memory (expandable to 36 MB total system memory), and support for the simultaneous operation of both an 80387 numeric coprocessor chip and the advanced Weitek 3167 coprocessor. The Weitek coprocessor provides three to four times the speed of the 80387 chip for optimal numeric coprocessing in specialized scientific and engineering applications.

The ROM BIOS, floppy drive controller, two serial ports, one parallel port and seven expansion slots are built into the system, providing full capability for LAN-based systems and other applications requiring several add-in cards.

How Cache Memory Improves Performance

The AST Premium 386/33 utilizes the most advanced cache design available today. The cache controller facilitates high-performance, 0 wait-state access by keeping the most frequently used data in a 32 KB cache memory. Because less time is spent seeking data from system memory, information is processed faster.

Memory and Storage To Accommodate The Most Demanding Power User

The AST Premium 386/33 comes standard with 2 MB of zero wait-state RAM, expandable to 4 MB on the CPU board. For higher performance requirements, you may add two 32-bit, 16 MB memory boards for a total of 36 MB system memory. It can easily be configured as conventional, extended, or expanded; and it's EMS 3.2 and EMS 4.0 compatible. An added convenience is our readily available, 32-bit SIMMs, allowing you to add memory in 1 MB increments to the full 36 MB limit.

The AST Premium 386/33's flexible configuration options give you the choice of a fast-access (up to 16 ms average time), high-capacity 110 or 320 MB fixed drive with an ESDI controller. With an interface that supports two half-height or full height drives, the system gives the user access to up to 640 MB of high-speed storage.

The AST Premium 386/33 also supports three floppy drives operating at once. The 5.25", 1.2 MB floppy comes standard; 3.5", 1.44 MB floppies or 5.25" 360 KB floppies are optional.

Operating System and Application Software Support — The Extra Mile

The AST Premium 386/33's powerful processing capabilities allow you to take advantage of the most sophisticated applications available using advanced operating systems, such as UNIX®, Windows/386 and OS/2™.

You can also continue to use your favorite MS-DOS® software programs, including timing-sensitive applications. Keyboard-selectable speeds allow the user to choose 33 MHz, AT® or XT™ operation. Because MS-DOS and GW-BASIC® are included as a standard feature, you can have your system up and running immediately.

AST's Award-Winning Software

AST provides a wealth of award-winning software that makes operating the AST Premium 386/33 easy and convenient. Take memory management for example. The AST Premium 386/33 is configured with ASTEMM™, a fully EMS 4.0 compatible Expanded Memory Manager that breaks the 640 KB limit. With it, you can multitask memory-intensive MS-DOS applications, as well as tackle powerful new operating environments and application software.

Here's a list of some more award-winning AST software programs:

- ASTCache™, the fastest fixed disk caching program available, greatly reduces data access time.
- AST's Shadow RAM feature loads system BIOS into high-speed 32-bit RAM for enhanced ROM BIOS performance.
- ASTSETUP™ makes configuring your system simple. Configuration information is stored in battery-maintained CMOS memory and is automatically read every time you start or reset your system.
- ASTMENU™ provides a user-friendly menu-driven interface, streamlining the process of setting up your system, installing and running AST utility software and running key MS-DOS utilities.

Modular CPU card with the 33 MHz, 80386 chip, an 82385 cache controller with 32Kb of cache memory, sockets for up to 4 MB of memory and support for an 80387 or Weitek 3167 coprocessor chip.

Available with 110 and 320 MB high-performance fixed disk drives.

Three user-selectable speeds for guaranteed software compatibility. Password security prevents unauthorized use.

Highly integrated motherboard provides 7 expansion slots, 2 serial ports, 1 parallel port and controller support for up to 3 floppy drives.

Altogether, up to 36 MB of memory can be added using two 32-bit memory cards, each supporting up to 16 MB. Memory can be expanded in affordable 1 MB increments.

5.25", 1.2 MB diskette drive standard, optional 3.5" or 5.25" secondary diskette drives.

Enhanced low profile 101/102 key keyboard with separate keypad; dedicated cursor control and extra function keys. International version available.

AST: The Total Solution Company

AST is the only computer manufacturer that can boast a long track record of continuously providing the most popular enhancement and data communications products in the industry. When you're ready to add a communications link, memory, ports, or other functions to your AST Premium 386/33, you can count on AST's enhancements and data com-

munications products to be not only the best available, but also fully compatible for enhanced system performance. AST also provides a full line of award-winning 286-based and 386-based high-performance computers to meet a broad range of needs.

AST Support Whenever, Wherever You Need It

AST's dedication to supporting both

our dealers and customers is second to none. The AST Product Support Center is staffed by a fully-trained technical support team that is able to resolve most product problems by telephone. Should a system require repair, service depots are located nationwide, and optional on-site service is available from AST authorized dealers and third-party service organizations.

Specifications

Standard Equipment

CPU: 33 MHz, 80386; adjustable to AT and XT equivalent speeds.

Cache Memory: Intel 82385 cache controller with 32 Kilo-bytes of zero wait-state memory.

Expansion Slots: 7 total; one 32-bit CPU slot; two dual-purpose 32-bit memory/AT-compatible slots, three 16-bit AT-compatible slots; and one 8-bit XT slot.

Memory: 2 Megabytes RAM on the CPU card; expandable to 36 Megabytes with the addition of two 16 Megabyte boards.

Coprocessor: Intel 33 MHz 80387 and Weitek 33 MHz 3167 coprocessor support. Both can operate simultaneously.

Diskette Drive: Half-height 5¼-inch, 1.2 Megabyte drive.

Hard Disk Drive: 110 Megabyte, 16 ms drive on Model 105; 320 Megabyte, 16 ms on Model 325.

Drive Bays: Supports 3 externally accessible half-height drives and 1 full-height internal drive.

Built-In Drive Interface: For AT Embedded Controller Drives

Disk Controller: High-performance ESDI on Model 325.

Input/Output Ports: Two serial ports; one parallel port.

Keyboard: AST Premium keyboard (101 key) with separate cursor control and numeric keypad and two position height adjustment, removable key caps; optional (102) version supporting international alphabets.

Front Panel Controls: Cold-boot Reset button; indicator lights for operating speed and fixed disk access.

Software and Documentation

Software: MS-DOS; GW-BASIC; AST Utility Software including FASTDISK; SuperSpool™ print spooler; ASTEMM, ASTCache, ASTMENU user-friendly interface; and complete documentation.

Security: Chassis lock and password security.

Power: Voltage — 115 VAC at 60 Hz, 230 VAC at 50 Hz, external switch selectable; Rating — 220 Watts.

Warranty: One-year limited warranty.

Options

AST Premium Display/VGA

Color: VGA display, 14-inch diagonal, non-interlaced, supporting 720 x 480 text and graphics resolutions.

AST Premium Display/Enhanced Color

Enhanced Color: Enhanced Color Display, 14-inch diagonal, up to 64 colors, supporting 640 x 350, 640 x 200 text and graphics resolutions.

AST Premium Display/Monochrome

Monochrome: Monochrome display, 14-inch diagonal, black

and white, supporting 720 x 350, 640 x 200 text and graphics resolutions.

Memory Expansion: Memory expansion board with 1 Megabyte installed; expandable in 1 Megabyte DRAM SIM modules for up to 16 Megabytes. System supports two 32-bit memory boards for up to 36 Megabytes of total system memory.

Diskette Drive: Half-height 5¼-inch, 360 Kilobyte or 1.2 Megabyte drive; or 3½ inch, 1.44 Megabyte drive.

Internal Tape Backup Unit:

Half-height, 5¼-inch, 40 Megabyte cartridge.

AST Video Adapter:

AST-VGA Plus supporting IBM® VGA, EGA, CGA, MDA and Hercules™ graphics and text modes for high resolution, full spectrum color graphics.

Other Options: AST PC enhancement products, including memory, multifunction, graphics, data communications, local area networks.

Models

Model 5: 2 Megabyte, 32-bit memory; 1.2 Megabyte diskette drive; keyboard.

Model 105: 2 Megabyte 32-bit memory; 1.2 Megabyte diskette drive; 110 Megabyte hard disk; keyboard.

Model 325: 2 Megabyte, 32-bit memory; 1.2 Megabyte diskette drive; 320 Megabyte hard disk and ESDI controller; keyboard.

Physical Dimensions:

	Inches			Millimeters		
	W	H	D	W	H	D
System Unit	19.25	6.25	16.50	489	159	419
Keyboard	19.25	1.50	8.25	489	38	210
Color Monitor	14.10	12.19	14.17	358	310	360
Monochrome Monitor	12.60	11.42	11.93	320	290	303

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