

MacIvory model 3 Specifications

Host System (partial list):

Macintosh II, IIfx or IIfx with minimum 1 MB SIMM memory, software license and Apple documentation

Ivory Coprocessor Board:

40-bit tagged Ivory architecture (32-bit data and 8-bit tag)
32K x 48-bit board-level Ivory cache
10 MB (2 MWord) ECC-protected Ivory memory
Comprehensive run-time error checking
Hardware-supported object-oriented programming environment
Hardware-supported garbage collection

Symbolic Option:

Floating point accelerator (WEITEK™ 3164)
IEEE-compliant

Relative Performance:

MacIvory model 1™: 1.00
MacIvory model 2™: 1.75
MacIvory model 3™: 3.50

Ivory Memory:

2MW (10MB) on-board ECC memory

Symbolics Options:

Up to 6MW (30MB) additional ECC memory

Communications:

TCP/IP, NFS™ and X Window System™
SNA™ and DECnet™ also available

NuBus™ Requirements:

1 slot for coprocessor
2 slots with Ivory memory expansion module
and/or floating point accelerator

Console:

Color and monochrome monitors
Apple® extended keyboard
Apple one-button mouse
Keyboard overlay

Symbolics Options:

Symbolics Genera keyboard and three-button mouse
8- and 32-bit color frame buffers

Symbolics

The MacIvory™ System model 3

Symbolics™ introduces the new high-performance

standard for development and deployment of complex,

real-world applications. The MacIvory model 3 operates at

twice the speed of the model 2 and 3^{1/2} times the speed of the model 1.

Like those proven versions, this MacIvory

achieves real synergy between its object-oriented Genera®

technology and support for Macintosh® standards. The

increased speed of the model 3 will continue to make

MacIvory the environment of choice for a wide range of

commercial and government applications.

Disk Drive:

Choice of SCSI 5.25-inch fixed disk drive in 320MB, 640MB or 1 GB capacity

Symbolics Options:

CD-ROM drive

Tape Drive Options:

40 MB tape drive (QIC-100 format), one required per site
2, 3 GB drive

Genera® Software:

Genera delivery software

Symbolics Options:

Genera development system software

Symbolics Application Building Blocks Options:

Joshua®
Stattice®
Symbolics Concordia™
CLOE®
COLOR

For further information on MacIvory model 3 or other Symbolics products, please contact:

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The MacIvory model 3™

Symbolics

Incorporates the very best of MacIvory performance with the very newest Symbolics technology.

The same Ivory processor chip and optional floating point accelerator that made Symbolics' XL1200™ and UX1200S™ products so popular are incorporated in the new MacIvory system. Model 3 enhancements provide dramatic performance increases over previous MacIvory systems. Plus:

- A redesigned memory bus means faster access for memory-intensive applications.
- A new compact design lets the MacIvory model 3 plug into a wider range of Macintosh II models.
- Attractive volume discounts provide for economical, wide-scale application deployment.

Symbolics delivers a responsive system that puts development productivity first.

This remarkable new system has a highly responsive feel—a feel that approaches that of Symbolics' high-end workstation products.

Prototyping and development performance have been dramatically enhanced. Thanks to an attractive Symbolics upgrade program, this improved performance is available to existing MacIvory model 1 and model 2 owners very economically.

Like its predecessors, the cornerstone of the MacIvory model 3 is Genera—the very best environment for solving complex, real-world application programming problems. A fast edit-compile-debugging loop supports an effective, incremental approach to program development.

Genera's object-oriented operating system also features a large, highly reusable class library. It's a platform that supports Common Lisp, CLIM and CLOS—the richest set of object-oriented programming standards in existence today.

Symbolics' systems provide the unique ability to automatically manage many low-level system details. That frees up programmers to focus on application problem solving, rather than on software engineering. MacIvory's hardware-assisted garbage collection, for example, takes care of memory deallocation—a task that can be particularly burdensome in complex, memory-intensive applications.

Symbolics has engineered the ideal platform for early deployment.

When your aim is to quickly get an application out of the development stage and into the hands of end-users, MacIvory model 3 delivers. It offers the most powerful set of deployment features available anywhere.

The unique development strategy supported by Symbolics' systems not only reaches beyond the program design stage, but into the earliest stages of deployment as well. With most alternative software development environments, the delivery of a program to the end-user marks the end of development. But with the MacIvory model 3 and Genera, software application designers can get prototype programs into the hands of typical end-users well before the program has reached final form. End-user input and experience can be incorporated into the design before product shipment.

Symbolics supports this unique methodology by allowing the application programmer to issue small, incremental code changes directly to the end-user, quickly and easily. Loading of these patch updates is simple for the user, too—long, complicated recompilation or linking is almost never required. In fact, patches can almost always be loaded without disturbing any programs that are already running on the user's machine. And unlike alternative systems, a full regression test isn't needed every time a patch is released. Symbolics computers have built-in hardware that automatically

checks for common programming errors, greatly reducing the chance of a newly-introduced code patch creating undetected or dangerous side effects.

Macintosh II standards and Genera support enhanced application delivery.

Thousands of corporate and government organizations have recognized Macintosh II as an emerging computer standard. That's why MacIvory is the ideal platform for delivery of Genera-based applications to even the most demanding end-user environments.

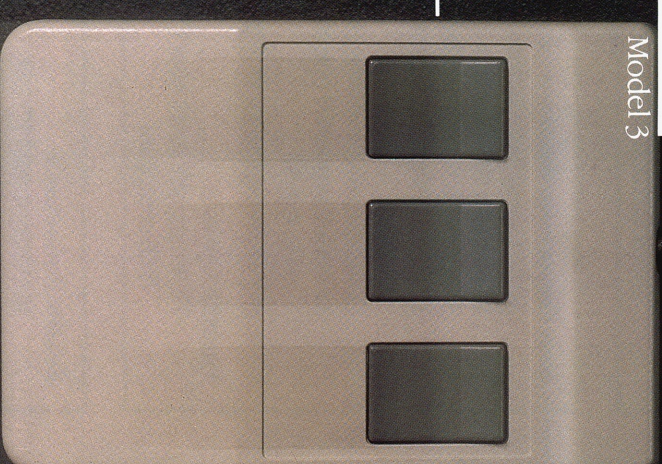
Users have access to both Macintosh applications and Genera applications on a single, affordable platform. With the click of a mouse button, a Genera-based application running on a MacIvory model 3 can be called up or hidden away—just like any native Macintosh application.

The new design of the MacIvory allows deployment in a wider range of Macintosh II systems than ever before. An aggressive volume discount program makes MacIvory model 3 the platform of choice for large-scale application development and deployment.

The new model 3 has the performance features that make it the logical solution.

- Based on the Apple® Macintosh II computer and the Symbolics Ivory™ Lisp processor
- Versatile platform incorporates new revision of Symbolics' remarkable Ivory chip for the development and delivery of symbolic processing applications
- Powerful Genera software development environment for building advanced applications—expert systems, CASE tools, CAD systems and decision support systems
- Enhanced speed for solving complex programming problems quickly
- Cost effective platform for object-oriented applications, providing access to full range of Macintosh applications
- Fully compatible with applications developed on a Symbolics 3,600™ or on Symbolics UX or XL family products, providing a range of options for application delivery
- Allows users the option of working on a range of modular Macintosh systems

3.5



Model 3

1.75

Model 2

1.0

Model 1

MacIvory Relative Performance