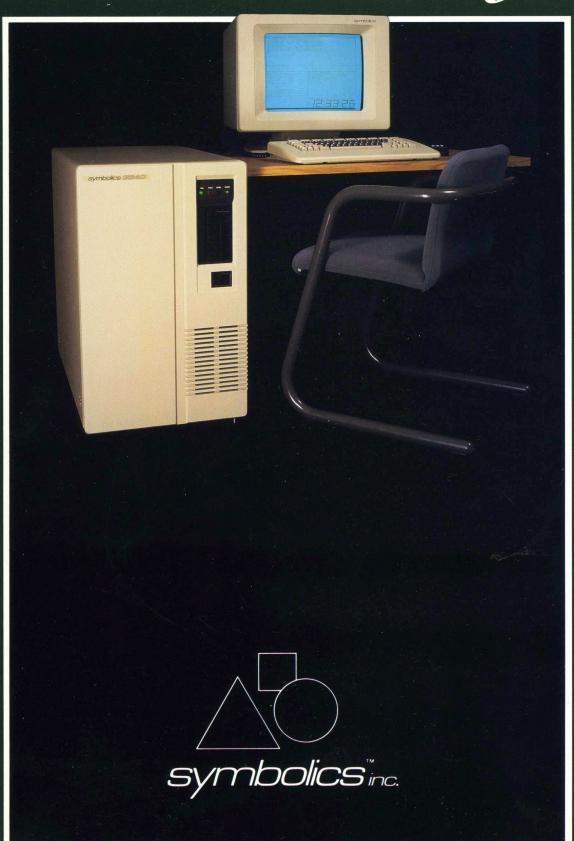
APPLY THE POWER OF SYMBOLIC PROCESSING TO SOFTWARE ENGINEERING:

THE SYMBOLICS 3640



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APPLY THE POWER OF SYMBOLIC PROCESSING TO SOFTWARE ENGINEERING:

THE SYMBOLICS 3640°

The successful development of advanced applications requires a combination of high performance hardware and powerful software—at an affordable price. Now, the Symbolics 3640™ meets these needs with an affordable, networked software engineering system in a compact package that allows the user to apply the power of symbolic processing to software development.

The 3640 is a networked system designed to deliver all the necessary computing performance to attack complex software applications, at a price attractive for a single-user. Typical applications could include for example, software engineering, CAE/CAD/CAM, expert system development, artificial intelligence research, natural language understanding and translation, artificial vision, robotics, and simulation and training.

The 3640 offers a powerful and supportive development workstation environment. It provides an extensive development environment and integrated toolset to handle increasingly complex problems, boost productivity, and reduce costs and time-to-market. It places a powerful symbolic processing system with Zetalisp, $^{\text{TM}}$ sophisticated software tools, powerful hardware, a responsive human/machine interface, and exceptional array of hardware and software options in the hands of the software engineer. As a networked system, it can be connected to a Symbolics 3670 $^{\text{TM}}$ or other host machines acting as file servers and linked to other computing resources to share information, applications, and other capabilities.

Productivity and Creativity:

The 3640 Software Environment

Like the Symbolics 3670, the 3640 supplies a sophisticated and supportive software engineering environment. Beginning with the Zetalisp language, the 3640 offers a complete set of tools for productive and creative software development. This environment makes exploratory programming and rapid prototyping practical and allows for the easy creation and maintenance of large software systems.

The Zetalisp language offers extensible data structures for maximum flexibility in data representation and manipulation. It also offers intrinsic data typing, dynamic storage allocation, dynamic linking, and support for structured and modular programming. Text and data structures are represented in identical manner so programs that generate other programs can be easily written. Combined with a powerful macro capability, it is possible to make syntactic extensions to the language. The programmer can write new constructs or even completely new languages and easily build them on top of Zetalisp to handle a particular problem domain. Zetalisp also supports an interactive multiprocessing environment including process synchronization and inter-process communication.



3640 Configuration:

A Networked Development System

2 Megabytes of main memory—expandable to 8 Megabytes maximum one 140 Megabyte Winchester disk drive—fixed nonexpandable four backplane expansion slots (one dedicated to the FPA option) a high resolution display with pipelined video memory for fast image creation and editing a mouse (pointing device) an innovative keyboard floating point accelerator option optional modem optional TC45, quarter inch cartridge tape drive high resolution 8-bit color graphics option

3670 Configuration:

A Standalone research and Development System That Can Also Be A File Server For 3640s

2 Megabytes of main memory – expandable to 30 Megabytes maximum one 167.5 Megabyte or 474 Megabyte fixed media disk drive in the processor cabinet expandable to a maximum of eight 474 Megabyte drives with the expander cabinet a free standing removable 300 Megabyte disk drive option
15 backplane slots for expansion (including one dedicated to the FPA option)
a high resolution display with pipelined video memory for fast image creation and editing a mouse (pointing device)
an innovative keyboard color graphics options (high resolution 8 or 24-bit)
floating point accelerator option optional modem optional TC45, quarter-inch cartridge tape drive optional TD80, nine track, 1600/3200 bpi, 100/50/25 ips, half-inch, tape drive (a

maximum of two per system)

Physical Dimensions:

	Width	Height	Depth	Weight
Processor:	17.5"	30"	31"	227-261 lbs.
	444.5mm	762mm	787.4mm	103-118 kg
Display:	20"	20"	15"	50 lbs.
	508mm	508mm	381mm	23 kg
Keyboard:	18.5"	2.75"	9.5"	5.25 lbs.
	470mm	70mm	241mm	2.4 kg
Mouse:	2"	1.3"	3.25"	5 oz
	51mm	83mm	83mm	0.142 grams

Specifications subject to change

Electrical Requirements-Domestic

Processor/Display/Keyboard Voltage.....120 VAC Frequency.....60 Hz Current.....9 Amps max Receptacle.....20 Amp NEMA L5-20R

Electrical Requirements-International

100 VAC-240 VAC/50 Hz versions available

Operating Environment

Temperture..... + 32 to + 100F (0 to + 40 C)Relative Humidity.....15-80% (noncondensing) Heat Dissipation....3276 BTU/hour

(96 watts max)

DISK DRIVE

140 Mbyte unformatted

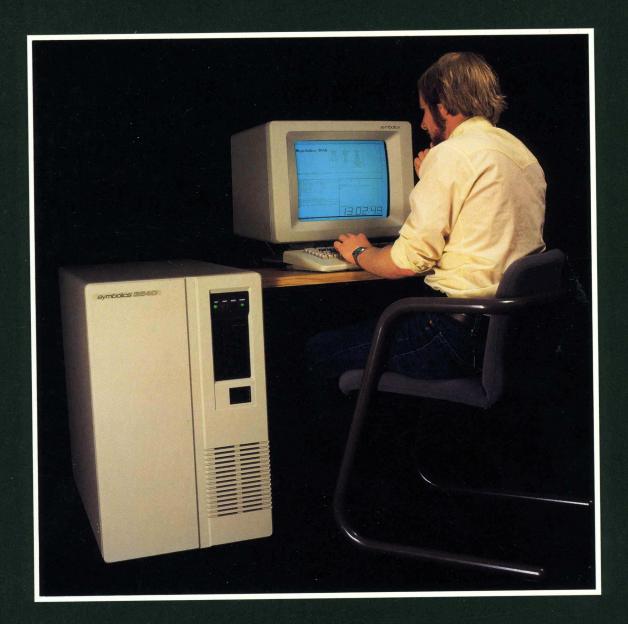
Type: Fixed-media Winchester Minimum Seek Time: 5ms. Average Seek Time: 30ms. Maximum Seek Time: 48ms. Latency Time: 8.33ms

Transfer Rate: .625 Mbytes/sec.

TAPE DRIVE

TC 45 quarter inch

Type: Cartridge Tracks: 9 serial



International sales:

Symbolics GmbH Eschborn, West Germany Telephone: 6196-47004 Telex: 418397

Delphi Electronic Design Systems Viareggio, Italy

Telephone: 0584 395161

Telex: 623558

Domestic sales:

Symbolics Inc. Corporate Sales Headquarters Four Cambridge Center (7th Floor) Cambridge, MA 02142 (617) 576-2600

Metrologie Asnieres, France Telephone: 790 62 40 Telex: 611448 **Nokia Electronics** Helsinki, Finland Telephone: (90) 1871 Telex: 122401

Scientific Computers Ltd. West Sussex, England Telephone: 44 46 5101 Telex: 87183 **Nichimen Corporation** Tokyo, Japan Telephone: 277-5920 Telex: 22329

