alpha micro Marketing Bulletin

AMB2003-06 November 14, 2003

Announcing the Eagle 800™

Astounding Performance in an AMOS® Midrange Server

Dear Alpha Micro Dealer:

Alpha Micro is pleased to introduce a new family of midrange servers representing a quantum leap in performance over the existing Eagle 250 and 450 systems.

The recently introduced AM-8000 has set a new standard for AMOS system performance. Now you can offer speed approaching that of the AM-8000 to smaller user count environments. Based on the same technology responsible for Alpha Micro's top-of-the-line AM-8000 system, the Eagle 800 brings a huge advance in throughput to midrange system users.

Users of older Alpha Micro systems in particular will appreciate the Eagle 800's substantial speed increase. In some cases the purchase price of an Eagle 800 will be even less than the cost of adding networking capability to an older Alpha Micro.

How Fast Is It?

The Eagle 800 runs from 6 to <u>over 30</u> times the speed of an Eagle 250, depending upon the benchmark involved**.** Be sure to look at the system performance ratings starting on page 5 of the attached "Eagle 800 Information Package" for detailed performance data.

Two Versions Available: Eagle 800 and Eagle 800LC

To meet different market requirements, the Eagle 800 is available in two configurations: the standard Eagle 800, and a low-cost version, the Eagle 800LC. The LC model is intended to meet the needs of price-sensitive, small user count environments.

The 800LC is limited to 16 AMOS port licenses. It also uses a slightly slower processor than the 800. Despite the low cost, the 800LC is significantly faster than its predecessor midrange systems. See the benchmarks for full details.

AM-8000 Technology and Performance Applied To A Smaller System

The AM-8000 breaks new ground in AMOS system performance. The same technology that makes the AM-8000 so breathtaking has been ported downwards to a midrange system configuration, resulting in the Eagle 800. The 800 runs the same AMOS 8.x operating system as the AM-8000.

From its sophisticated 68000 emulation to its use of embedded operating systems to accelerate both performance and future product development, there is a lot to say about the Eagle 800's radically different architecture. For complete details about the new generation AMOS system design, please refer to the *AM-8000 Introduction Marketing Bulletin* AMB2003-05 from July, 2003, which is available at: http://www.alphamicro.com/mktbultn/03-05.pdf

As a general design goal, the Eagle 800 is intended to handle about 25-33% of the simultaneous user load of an AM-8000. In some cases, application speeds between the two systems may appear very similar until user loads are added.

Take a look at what's inside:

AMD Athlon XP® Processor

The Eagle 800 is based on the AMD Athlon XP 2400+ processor, whereas the 800LC employs an Athlon XP 1800+ CPU. As processors evolve, both models will be upgradeable to faster CPUs to further enhance performance.

As with the AM-8000, we tested AMOS performance extensively with midrange x86 processors. We then chose the best processors for the midrange AMOS environment.

High Speed ATA-133 IDE Disk Drive

A 40 GB, 7200 RPM, ATA-133 disk drive is included in the standard Eagle 800 configuration. This high-speed IDE interface runs at over six times the speed of the Eagle 250's 20 MB/sec. Wide SCSI controller.

In real world terms, an AMOS COPY of a 32 MB logical to another logical takes 498 seconds on an AM-7000 and *only 18 seconds* on an Eagle 800!

Optional Dual Bus Ultra 40 SCSI Controller

For compatibility with Alpha Micro tape drives and older disk drives, the Eagle 800 may be configured with an optional Ultra 40 SCSI controller. This controller sports both Narrow and Wide SCSI connectors, permitting both kinds of devices to be attached to it without a Wide-to-Narrow Adapter.

If you have a mixture of Wide and Narrow SCSI devices to connect, you can take advantage of the controller's second SCSI bus, which also has both Wide and Narrow SCSI connectors. For example, you can keep your Narrow device(s) on one SCSI bus, and your Wide device(s) on the second SCSI bus, thereby maximizing throughput for the Wide SCSI device(s).

10/100 Ethernet

A 10/100 Ethernet interface is built in to the Eagle 800. Existing 10BaseT Ethernet installations will benefit from an upgrade to 100 megabit per second speed, particularly if your AMOS system is functioning as an FTP, mail, or web server.

Standard CD-RW Drive, Optional 4.7 GB DVD-RAM

A CD-RW drive is provided with every Eagle 800 for emergency booting. Norton Ghost® software is included to aid you in creating bootable backups. You may optionally upgrade to a DVD-RAM drive, which adds the capability to serve as an AMOS backup device. DVD backups are a modern, fast, and convenient alternative to tape backups, at a fraction of the cost of tape.

Generous RAM Included

The Eagle 800 comes standard with 512 MB PC2700 RAM, while the 800LC has 256 MB. Much of this memory is utilized by a sophisticated disk caching system that enhances the outstanding performance of AMOS 8.x.

Up to 22 Serial Ports

The Eagle 800 supports up to 22 serial ports. Four Alpha Micro-style RJ-45 serial ports and two PC COM-style serial ports are standard with the system. You may optionally add 4 port and 8 port PC COM-style expansion cards, or an external 16 port expansion box, to attain a maximum of 18 COM ports. Added to the four Alpha Micro serial ports, this yields a total of 22 ports.

AMOS Port Licensing Rules

AMOS 8.x on the Eagle 800 may be licensed to support up to 32 AMOS ports at the regular AMOS per port price. A higher price per port applies beyond 32 ports. The Eagle 800LC may be licensed up to a maximum of 16 AMOS ports, with no expansion beyond that point permitted. As with the SuperFalcon, the per-port license charge for expansion of the 800LC (beyond 8 AMOS ports) is higher than for the regular Eagle 800, to emphasize its role as a low end / starter system for small or cost-sensitive sites.

Users who outgrow the Eagle 800LC's 16 port limit may upgrade to a regular Eagle 800.

EAMOS and XPE Embedded Operating Systems Improve Performance

Just like the AM-8000, the Eagle 800 family employs Windows XP Embedded® ("XPE") and Embedded AMOS™ ("EAMOS") to provide low-level system services. This frees up AMOS 8.x to service user jobs. XPE is configured to provide only those functions needed by AMOS, and thus results in a virus and worm-proof system like earlier AMOS server models.

At power on, the Eagle 800 boots on the console monitor into two "windows": One is for the Eagle 800's diagnostic status screen, and the other for the AMOS boot job, which comes up in either U.A. Systems' AlphaLAN Lite™ or COOL.STF's ZTERM, both of which are included. The Eagle 800's monitor may be used as a user workstation.

AMOS 8.x: Accelerate As Well As Emulate

Running the same new version of AMOS as the AM-8000, the Eagle 800 benefits now and in the future from Alpha Micro's Research & Development program to improve AMOS performance by gradually moving more of the AMOS monitor's functions over to native x86 code. For example, Eagle 800 users will be able to upgrade to the forthcoming *LightningBASIC*™ to further accelerate system performance. For more information about *LightningBASIC*, please refer to the *AM-8000 Introduction Marketing Bulletin* from July, 2003.

An Attractive Chassis For An Impressive System

The Eagle 800 is housed in a smaller version of the AM-8000's chassis. A keyboard and mouse are included. The AM-8000's visually sharp 15" LCD flat screen monitor is available as an option. Recognizing many sites' need to keep costs down, you may elect to supply your own monitor.

As with the AM-8000 and other Alpha Micro systems, the Eagle 800 has full FCC and CE regulatory certification.

Order Configuration

Unlike previous Alpha Micro Eagle-class servers, the base Eagle 800 includes as standard equipment: 256 MB (Eagle 800LC) or 512 MB (Eagle 800) RAM, one 40 GB 7200 RPM disk drive, a CD-RW drive, and a floppy drive. You may optionally order an LCD monitor, DVD-RAM drive, SCSI controller, tape backup device, additional disk drives, and additional RAM. Orders for Eagle 800 systems must also include an order for an AMOS operating system license, or an authorized transfer of the license from a traded-in system.

New Trade-In Policies

Trade-in allowances for various older AMOS system models towards a regular Eagle 800 are detailed in the Eagle 800 Reseller Supplement, attached to this Marketing Bulletin.

Up to 16 ports of an original AMOS license on an older AMOS system may be credited towards an upgrade to an Eagle 800. You must purchase port licenses beyond the original 16 if you wish more. For example, if you are upgrading from a 25 user Eagle 500 to an Eagle 800, 16 of those port licenses will be carried over at no charge. If you require more than 16 AMOS ports, you will need to purchase the additional port licenses at the regular AMOS price.

No AMOS license or older system hardware trade-in credit is given towards an Eagle 800LC, however an SSD may be migrated from an older system to an 800LC. In such a case, the AMOS license is not transferred. For example, if you have an AM-2000M system with an 8 user AMOS

license, and you wish to re-use that SSD on an Eagle 800LC, you must pay for AMOS users 5 through 8 on the 800LC, because the 800LC includes a 4 port AMOS 8.x license.

For both the Eagle 800 and 800LC, you have the option of downgrading the AMOS license. For example, you may choose to have a 6 user license on the 800LC rather than the 8 user license on the original AM-2000M.

Lowered Pricing on Peripherals

As with the AM-8000, Alpha Micro's cost to select and test RAM and disk drives for the Eagle 800 has decreased, and we are passing these savings on to you.

Two Week "Test Drive" Available

Alpha Micro has a limited number of Eagle 800 and 800LC systems available for two week test drives. We strongly encourage you to prove the value of an Eagle 800 to your customers by letting them see its incredible performance in their own environment, with their own software.

Testing Via Telnet

Because the Eagle 800 and the AM-8000 are based on the same software architecture, you may test compatibility issues by Telnetting in to our AM-8000 test system. Telnet in to: am-8000.alphamicro.com (with or without the dash). Log in as SYSTEM SERVICE. You may ftp files to it, using user ID AM and password 8000. Each night, this system will be restored to original condition, unless special arrangements are made in advance.

Eagle 250 and 450 Product Phase-Out

Alpha Micro has a limited supply of Eagle 250, 250LC, and 450 systems in stock. No more new units will be manufactured unless you specifically advise us now that you will require some. If you have a particular requirement for these system models, please call Order Administration as soon as possible. Refurbished Eagle 250s and 450s may be available from time to time.

Expansion products for earlier Eagle models, such as the AM-318-10 8 port I/O board, will continue to be manufactured.

The Most Compelling Midrange Alpha Micro Yet

With a dramatic performance leap over earlier midrange Alpha Micro systems, including the immediate predecessor Eagle 250 and 450 systems, the new Eagle 800 provides an enticing entry level server for new AMOS users, and a compelling upgrade for existing AMOS sites.

Eagle 800s are available for immediate shipment.

FOR FURTHER TECHNICAL DETAILS ON THE EAGLE 800 SYSTEM, SEE THE EAGLE 800 INFORMATION PACKAGE, ATTACHED TO THE END OF THIS MARKETING BULLETIN

Eagle 800

Information Package

Table of Contents

Introducing the Eagle 800 & 800LC!

Product Overview

Table 1 highlights the technology features that place the Eagle 800 family in the mainstream of the AMOS system product line. Compared to previous midrange and lower-end systems, the Eagle 800's most distinctive feature is performance. A CPU SI (System Index) rating of 744 alone positions the Eagle 800 in excess of ten times that of the previous mid-range system, and up near the performance of our high-end AM-8000 system. Note that overall throughput is application dependent.

Architecture

The Eagle 800 incorporates technology developed for our new high end system, the AM-8000, along with some lower cost configurations that result in a mid and lower range set of systems like no other we've ever designed, while at the same time maintaining application software compatibility. The hardware incorporates an industry standard CPU motherboard technology that includes an AMD Athlon XP processor, dual UDMA-66 / 100 / 133 bus master IDE interface, and 10 / 100 Mbps Ethernet controller to provide plenty of power for the middle and lower end of the product line.

The system configuration is expanded via industry standard technologies. A PCI bus is included to accommodate special function boards, such as our AM-113-45. This board, included in the standard Eagle 800 configuration, is a high speed serial I/O controller that manages four on-board serial I/O ports, and includes special AMOS functions such as a standard SSD interface.

The standard system configuration also includes a CD-RW drive (or optionally a DVD-RAM drive), floppy drive, keyboard, and mouse.

The system is housed in a modern deskside enclosure, with plenty of room for future expansion. The Eagle 800 houses the standard CD-RW drive, floppy, and first hard disk drives, up to 3 additional 5.25"/3.5" peripherals, and up to 2 additional 3.5" devices. Figure 1, later in this document, shows the details.

Advanced Technology

The Eagle 800 leverages leading-edge technology in several areas:

Advanced Microprocessor technology — The Eagle 800 incorporates an AMD Athlon XP 2400+ CPU, while the 800LC uses an AMD Athlon XP 1800+.

DIMM main memory — The Eagle 800 CPU Board has three on-board DIMM (dual inline memory module) expansion slots, which support PC2700 DDR SDRAM DIMM modules. Memory capacities from 128 MB to 3 GB are supported.

High Performance IDE interface — The Eagle 800 contains dual UDMA-66 / 100/ 133 bus master IDE interface controllers, allowing high speed communication with IDE compatible peripherals, such as the 40 GB system disk drive included in the system configuration.

Integrated Ethernet — An integrated Ethernet interface, supporting both 10 and 100 Mbps, allowing you to configure your network architecture to meet the needs of your application.

Table 1. AMOS Product Line

	AMOS-based System Product Line						
	Eagle 250LC	**Eagle 800LC**	**Eagle 250**	**Eagle 800**	**Eagle 450**	**AM-7000**	**AM-8000**
System							
Performance: SI	**59.9**	**573.5**	**59.9**	**744**	**68.5**	**191.8**	**816**
CPU Main Processor	**ColdFire**	**Athlon 1800+**	**ColdFire**	**Athlon 2400+**	**ColdFire**	**MC68060-75**	**2xAthlon 2800+**
Memory: min./max.	8MB/256MB	256MB/3GB	8MB/256MB	512MB/3GB	8MB/256MB	32MB/512MB	1GB/4GB
Main Peripheral Bus	SCSI	IDE	SCSI	IDE	SCSI	SCSI	SCSI Ultra320
Input/Output							
Separate I/O Processor	None	ColdFire RISC	None	ColdFire RISC	None	None	ColdFire RISC
Serial ports, standard	4	6	8	6	8	4	6
Serial ports, maximum	4	16	24 ③	22	32	200+	240+
I/O Expansion Cards	None	4 or 8 Port COM	AM-314 / 318	4, 8, or 16 Port COM	AM-314 / 318	AM-359	AM-359 & 4, 8, or 16 Port COM
Parallel Ports	1	1	1	1	1	4	1
Networking							
Ethernet ports: min/max	1 / 2	1 / 1	1 / 2	1 / 1	1 / 2	2	2
10BaseT port	Standard	Standard	Standard	Standard	Standard	Standard	Standard
100BaseT port	None	Standard	None	Standard	Optional	Standard	Standard
Gigabit Ethernet port	None	None	None	None	None	None	Standard
SCSI Support							
SCSI Bus technology	8- or 16-bit	Optional 8- or 16-bit Ultra 40	8- or 16-bit	Optional 8- or 16-bit Ultra 40	8- or 16-bit	8- or 16-bit Ultra40	8-, 16-bit Ultra320
Maximum transfer rate for Wide SCSI devices	20 MB/sec	40 MB/sec	20 MB/sec	40 MB/sec	20 MB/sec	40 MB/sec	320 MB/sec
Wide SCSI Repeater for external devices	Optional AM-441	Optional AM-441	Optional AM-441	Optional AM-441	Optional AM-441	Optional AM-441	Optional AM-441
AMOS							
AMOS Versions Supported	2.3A	8.0	2.3A	8.0	2.3A	2.3A	8.0

Notes

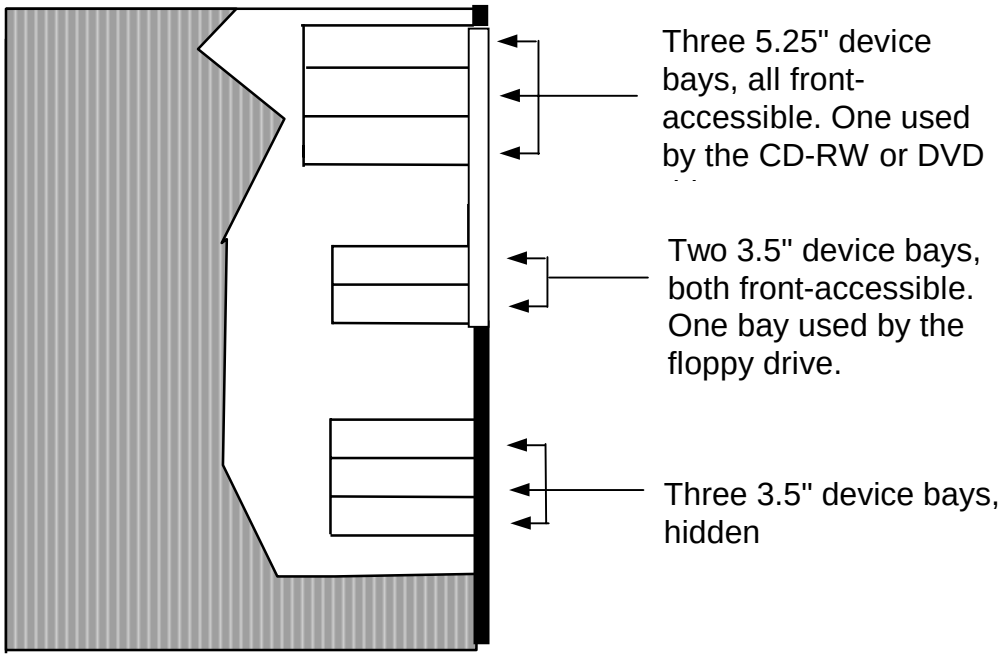
③ If optional RJ-45 ports are used in place of eight standard DB-9 ports, a maximum of (32) RJ-45 ports can be achieved.

Eagle 800 Product Description

Chassis

The Eagle 800 is furnished in a deskside mid-size tower chassis. Specifications of the chassis are as follows:

- **Dimensions**—17.25" high x 8.1" wide x 18.6” deep (43.8 cm x 20.5 x 47.3)
- **Power requirement**—5 amp @ 115VAC; 2.5 amp @ 230VAC
- **Peripheral mounting**—The chassis accommodates up to eight peripheral devices. Figure 1 shows the details.



Cutaway view from left

Figure 1. Eagle 800 in Deskside Chassis

Main Memory

Main memory for the Eagle 800 is implemented in high-speed PC2700 DDR SDRAM, packaged in DIMM modules on the Eagle 800 main CPU board. The system supports a minimum of 128 MB and a maximum of 3GB. 512 MB is included as standard with every Eagle 800, and 256 MB is included with every Eagle 800LC. DIMMs are offered in capacities of 128 MB, 256 MB, 512 MB and 1 GB each, identified by new part numbers PFB-00720-XX.

The Eagle 800 main CPU board is equipped with three DIMM sockets.

Serial I/O

The Eagle 800 comes with six serial I/O ports as standard. The ports appear as four RJ-45 jacks and two PC style DB-9M connectors on the rear of the Eagle 800 system. Additional serial ports are optional and can be added via 4 or 8 port PCI compatible multi-port serial I/O boards, or an external 16 port USB to serial port adapter. Or, you can connect a terminal server via an Ethernet connection to the Eagle 800.

Note that the Eagle 800LC is limited in the size of the AMOS license allowed to a total of 16 ports.

Optional SCSI Support on the Eagle 800

The Eagle 800 base configuration does not include any SCSI bus capability. If you need to include SCSI peripherals in your system configuration, you can optionally add a PCI compatible SCSI controller into one of the two available PCI slots, leaving room for only one additional PCI board for future expansion. This controller is a dual channel Ultra SCSI controller, with both wide and narrow bus connectors, allowing you to connect to both narrow and wide peripherals without the use of adapters.

SCSI Devices for the Eagle 800

A wide choice of disks, tapes, and other SCSI devices helps tailor the Eagle 800 to specific site requirements.

SCSI Disk Drives

The Eagle 800 supports all Fast-Wide SCSI-2 and Ultra SCSI drives (PDB-00440-XX). Usually, the system will be configured with high speed IDE disk drives.

SCSI Tape Drives

The Eagle 800 supports all current SCSI tape drives.

SCSI DVD-RAM Drives

The Eagle 800 does not support SCSI DVD-RAM drives, however, it does support the DVD-RAM format through the optional ATAPI DVD-RAM drive. DVDs prepared on a SCSI DVD-RAM on a previous Alpha Micro system may be read by the Eagle 800's DVD-RAM drive.

AM-448 RAID Subsystem

For Eagle 800 installations that require large, highly reliable mass storage, specify our AM-448 RAID Subsystem along with a PFB-00283-20 SCSI Controller. Configurations start as small as 80GB of usable storage with RAID 1 (mirroring). The subsystem can be expanded to over 280GB of RAID 5 storage in the same desktop enclosure. The RAID subsystems are UltraWide SCSI with 80 megabyte-per-second transfer rate. The AM-448 includes facilities for system installers and support managers to:

- Configure the AM-448 with hot spare disk drives for on-site support.
- Configure the AM-448 as a bootable SCSI device; the subsystem can coexist with other SCSI devices in the same Eagle 800.

For more information see Marketing Bulletin AMB2002-11, *New RAID Subsystems Announced*, October 28, 2002.

Software

AMOS Operating System

Eagle 800 systems require AMOS 8.0 or later.

Other Alpha Micro-Produced Software

AlphaCALC®, AlphaDDE, AlphaFAX, AlphaNET, AlphaTCP, AlphaWRITE®, and MULTI have been tested and are known to work.

MAKACD and MAKDVD are known not to work at present.

Third Party Software

Autolog™, Metropolis™, SuperVUE, UltraSafe, and VICS Models & Macros have been tested and are believed to work 100%.

System Performance

Performance of the Eagle 800, like that of any computer, is application dependent. The best way to determine actual throughput is to run an application and measure the results. If such a test isn't practical, benchmarks can provide a relative measurement.

The benchmarks in this bulletin are offered for general comparison analysis and example only. For definitive measurements, VARs and end users should verify actual performance based upon their specific applications and environments. The benchmarks we use give an overall indication of system throughput. It's important to note that the way your application software uses the system may produce results different from those suggested by our benchmarks.

System Index (SI)

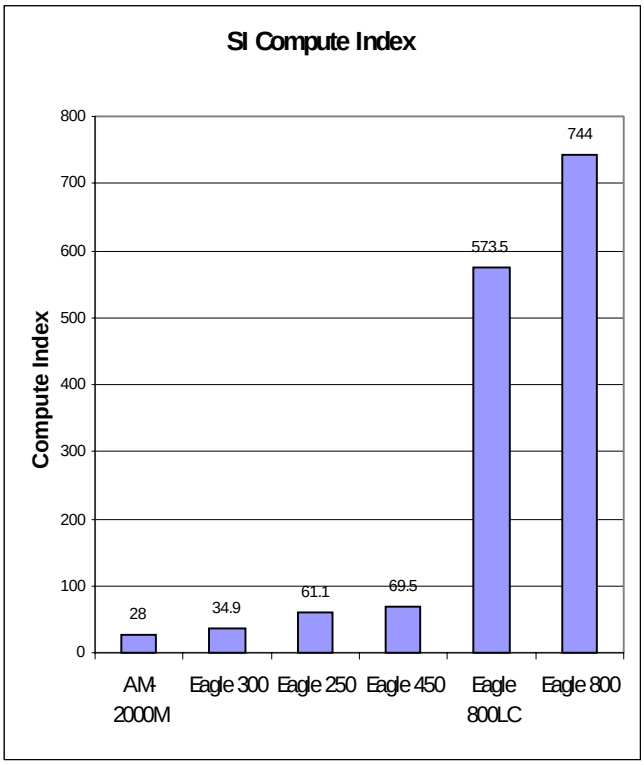
The SI benchmark measures processor and memory performance in the AMOS environment. The measure is relative to the original 68000-based Alpha Micro computer, the AM-100/L, which was arbitrarily assigned an SI of 1. See Table 3 below, and the graph on the following page; bigger numbers are better.

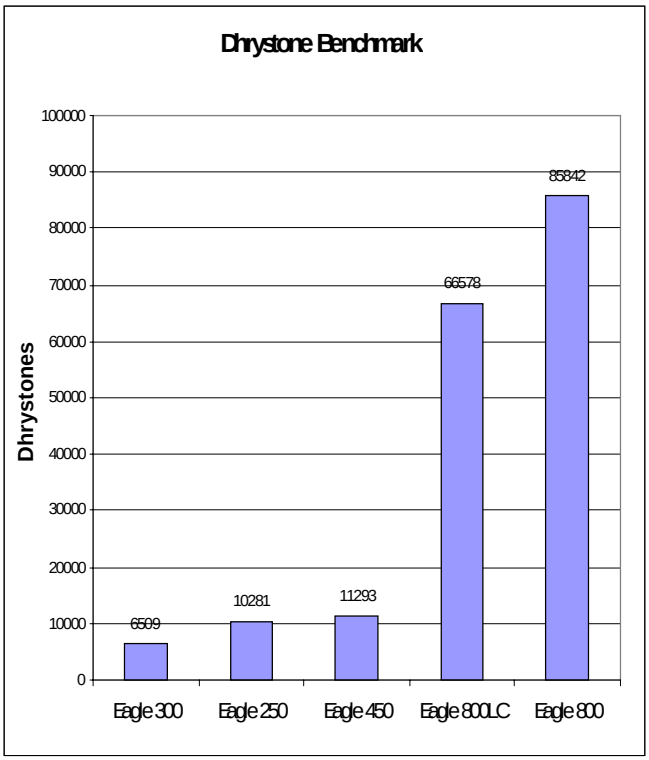
Keep in mind that the SI reflects processor, floating point, and disk speed only, not overall system performance as users will experience it. Factors such as disk accessing and the effect of multiple users are not measured. For a more comprehensive view, see the DOABEN benchmark in the next section.

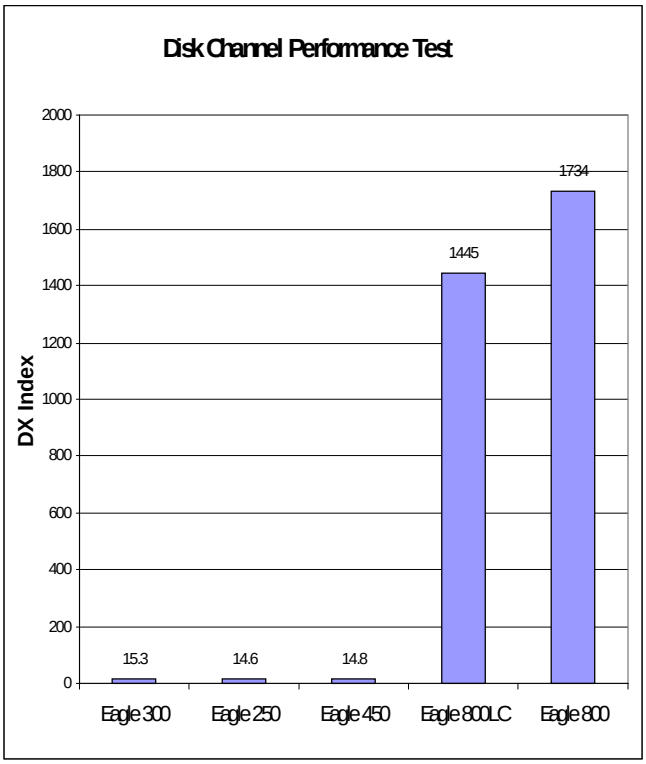
Table 3. AMOS System Performance Comparison Chart

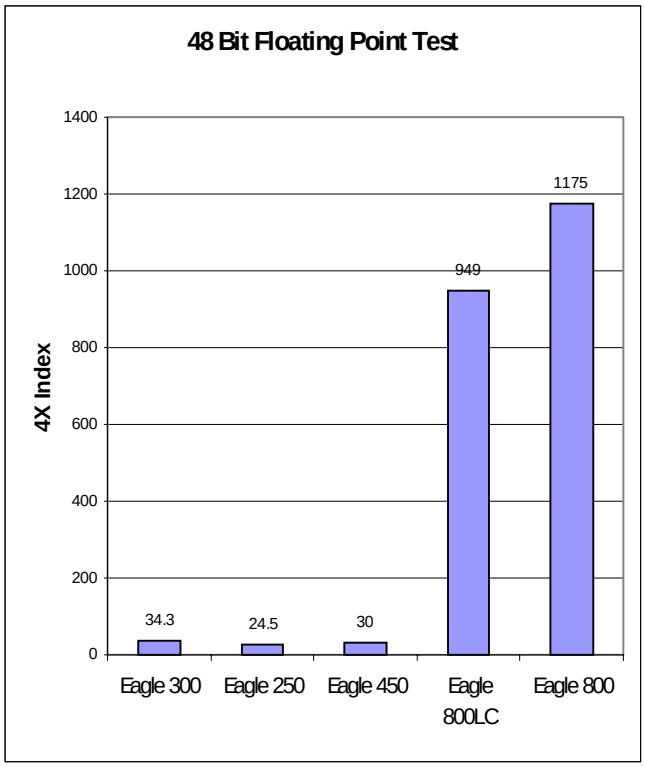
System Model	CPU	Performance Tests: *SI* Compute Index	*DRY* Dhrystone Benchmark	*DX* Disk Channel	*4X* 48-bit Math
AM-100/L	68000	1.0			
AM-1400	68010	6.1			
AM-1600	68020	22.6			
Falcon/AM-PC	68340	16.1			
AM-2000M (33 MHz)	68020	28.0			
Eagle 100	68030	39.1			
Eagle 250	ColdFire	61.1	10281	14.6	24.5
Eagle 300	68030	39.1	6509	15.3	34.3
AM-3000 VME	68030	43.6			
AM-4000M	68040	66.1			
Eagle 450	ColdFire	69.5	11293	14.8	30.0
Eagle 500	68040	79.9			
Super Eagle	68040	79.9			
AM-6000/6060	68060	146.3	15531	21.0	39.7
AM-7000	68060-75	193.3	21316	39.0	53.3
Eagle 800LC	**Athlon XP 1800+**	**573.5**	**65866**	**1530**	**958**
Eagle 800	**Athlon XP 2400+**	**744**	**85842**	**1734**	**1175**
AM-8000	Dual Athlon MP 2800+	816	93567	2601	1345

Eagle 800 Benchmarks









DOABEN Benchmark

DOABEN (**do a ben**chmark) is a suite of tests that measure multi-user throughput on Alpha Micro computer systems. Performance is measured in units called Milestones, which represent the number of tasks that can be done in a certain period of time for a prescribed number of users. Programs in the DOABEN suite exercise the system by cycling through functions such as database access, program loading, and CPU usage.

The results of DOABEN testing on the Eagle 800, 800LC, and two other midrange systems, the Eagle 450 and the Eagle 250, are shown in Figure 3 below.

- **More than 5 times as fast as either the Eagle 250 or 450** — The Eagle 800 delivers about 6 times the throughput of the Eagle 250 and 450 using the DOABEN test.

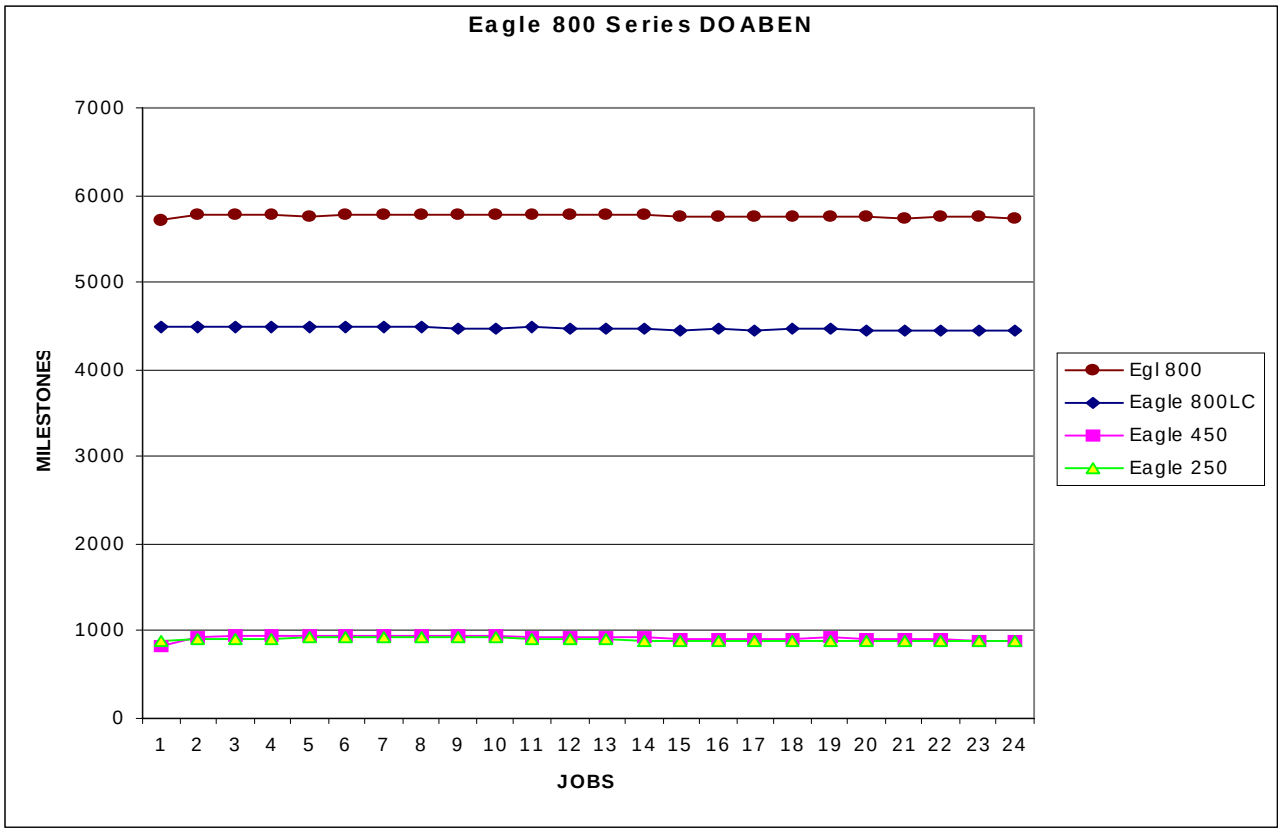


Figure 3. DOABEN Comparison: Eagle 800 & 800LC versus Eagle 450 and Eagle 250

Eagle 800 Test Environment — *Disk Drive: 40*GB DMA ATA 133, 7200 RPM (PFB-00431-62)

The Hoffmeister Benchmark

Another popular benchmark in the AMOS community comes from Jim Hoffmeister at Test Analysis & Development, a long-time Alpha Micro dealer in Boulder, Colorado. This benchmark is based on a software package, written in AlphaBASIC and ISAM, that processes a 450 person payroll. Running from a standard database of test payroll "employees", the system performs tax calculations, generates checks, and posts the results to various other files.

Because the Hoffmeister benchmark is written entirely in AlphaBASIC and ISAM, it gives a realistic indication of application performance. Also, because it performs many math operations and generates tremendous activity, it uses—and therefore benefits from—CPU features and disk inter-face features to their maximum. The results shown in Table 4 below were measured on systems with Extended directory structure, as representative of systems actually running today.

The Hoffmeister benchmark is a real-world application that uses real data. When run in a benchmarking environment, however, it is the only task running on the system. The typical installation, by contrast, runs many tasks concurrently, all competing for system resources. To that extent the benchmark can't take into account the underlying reason for the popularity of Alpha Micro systems—multi-application versatility in multi-user, multi-tasking environments.

Table 4. Hoffmeister Benchmark - Eagle 450 vs Eagle 800

Benchmark Phase	Eagle 450 Running Time	Eagle 800 Running Time	Eagle 800 Advantage
Pre-ISAM build—Create work files to start the benchmark	2 sec	1 sec	
Payroll system—Prepare payroll for the employees in the database; assign check numbers	39 sec	15 sec	
Post—Post General Ledger; calculate year-to-date totals, etc.	32 sec	8 sec	
Totals:	73 sec	24 sec	**3 times as fast!!**

Configuration Note:

Results shown above were obtained in tests performed at Alpha Microsystems.

Dhrystone Benchmark

The Dhrystone benchmark is a widely used measure of CPU performance. The Dhrystone algorithm is written in the C programming language and performs a variety of tasks including manipulating strings and arrays, and handling integer math and subroutines. While the Dhrystone test measures CPU performance only, and not disk activity or other system loading, it does provide a useful comparison of one processor with another.

Our Dhrystone tests of the Eagle 450, Eagle 800, and Eagle 800LC gave these results (bigger is better):

Eagle 450:	11293 Dhrystones per second
Eagle 800:	85842 Dhrystones per second
Eagle 800LC:	65866 Dhrystones per second

The Eagle 800 outperformed the Eagle 450 by about 760%. See the Dhrystone comparison information in the graph on page 8 of this section for further comparisons.

The Bottom Line

The Eagle 800, our first midrange system incorporating high performance x86 microprocessor architecture, is the first step in bringing AM-8000 technology down the product line. It’s also the latest evidence of our commitment as a company to design, manufacture, and support the computers and the software you need to satisfy your clients’ ever-increasing computing needs.