P E R F O R M A N C E

By Design

PRODUCT CATALOG • SPRING 1985 • $3.00

STRIDE MICRO

Formerly Sage Computer

An Open Company

". . . Stride Micro is still the leading outfit developing low-cost usable micro systems based on the Motorola 68000 CPU chip family."

—Jerry Pournelle, *BYTE*, June 1985—

Stride™ Micro. It's a new name that says a lot about who we are: we're committed to micro technology, and we're determined to march at the front of the pack.

That's quite a boast for a brand new computer company just completing its first year. But if you take a closer look, we think you'll soon agree that our claim is not so fanciful. Stride Micro is actually a new name for a company that's been producing leading super-microcomputers since 1981, Sage Computer.

While other manufacturers were just beginning to explore 16/8-bit processors, Sage was sparking a renaissance of returning microcomputers to leading edge technology. Instead of just following the pack of compatibles, Sage led the way using the 16/32-bit Motorola 68000 processor and a highly integrated board concept. The result was a superbly designed, high-speed environment with no electronic red tape to slow things down. Still leading the way, we've continued to produce some of the best benchmarks in the industry and generated the quotes you see throughout this catalog.

". . . a breath of fresh air to a microcomputer market in danger of suffocation from a seemingly endless infusion of IBM PC clones."

—*Electronic Products*, October 1984—

Already, the new Stride 400 Series is setting high standards, being named "1984 Product of the Year" by a leading industry publication.[1]

Clearly, our switch to Stride Micro represents more than just a new logo on the side of shipping boxes. It marks the maturation of a team committed to designing advanced microcomputers.

Stride built on the successful foundation of the Sage II and IV to produce a complete family of advanced microcomputers and peripherals, while retaining our roots of superior performance at sensible pricing.

Through attention to detail and careful planning, these new systems incorporate many more features than their predecessors, yet are

actually offered at a reduced cost. These are features that will dominate the industry in the future, but they are available today from Stride at a price that micro-users will appreciate.

The door is now open to the exciting worlds of floating point processing, high-speed graphics, memory management, hands-free NOD™ cursor control, battery backup, 10 or 12 MHz operation, huge storage, expanded multiuser capabilities and local area networking.

". . . an excellent system in every way."

—InfoWorld, June 20, 1983—

As proud as we are of our hardware, it takes more than a superb design and outstanding performance to survive in today's competitive market. Where others have failed, Sage Computer was one of the few manufacturers that could boast of a continuous record of profitability since its first month of production. The secret was an "open system" philosophy toward our machines and our customers.

We encourage a sharing of our technology; every user is provided with a comprehensive set of documentation covering a broad spectrum from unpacking to de-bugging. In addition, there's a wealth of technical information available, from complete schematics to program source codes, designed to nurture a "grass roots" support concept toward our customers.

As Stride Micro, we have continued the partnership with our users that resulted in Sage winning the industry's highest rating for "Vendor Technical Support and Hardware Maintenance."[2]

As further evidence of our commitment to work closely with the microcomputer community, only Stride Micro has forged ahead to meet the needs of users, today and tomorrow. Only Stride offers innovative hardware options at affordable prices aimed at encouraging and promoting their exploration. Likewise, the richness of software resources is unique. The Stride operating system library ranges from traditional works such as CP/M-68K™, RM/COS™, UNIX™ and p-System™ to the emerging worlds of MOSYS™, S1™, MBOS™ and TRI-POS™. Our language index is just as impressive with over 30 compilers available from BASIC to Modula-2; COBOL to LISP. With these tools on hand, developers quickly created or ported hundreds of application packages for Stride systems. Today, our Software Directory has over 500 listings covering a broad range of activites from accounting to graphics, CAD/CAM to chess, inventory to estimating.

In short, Stride Micro has brought together a rare combination of system design; design backed by performance.

". . . offers demanding business users more computing power than we've seen in any other personal computer."

—Popular Computing, August 1983—

As you'll soon discover in the following pages, Stride Micro means "Performance By Design™."

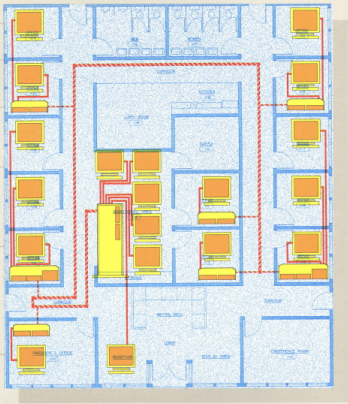
[1]Electronic Products, "Product of the Year", 01/15/85.

[2]DataPro Research Corporation, Microcomputer User Survey, 02/20/84.

Family of Products

"Stride Micro introduced a family of microcomputers capable of running loops around the IBM PC and its lookalikes."

—Electronic Products, January 15, 1985—



At the heart of every Stride 400 Series system is a common CPU board that typifies our philosophy of "Performance By Design." It is at least two years ahead of the industry in terms of features, speed and economy. It's truly tomorrow's product at an affordable price today.

The entire family is built around the powerful Motorola 68000 microprocessor. An innovative board design permits Stride Micro to run this 16/32-bit chip at its maximum frequency of 10 or 12 MHz to achieve unprecedented processing speed. But that's just the beginning.

Stride has carefully examined the direction of microcomputer evolution to incorporate those features demanded by the leaders in software use and development. Designs that will be standard on other systems tomorrow are available today from Stride.

From development tools that explore the threshold of technology, like our innovative NOD™ cursor control (see page 15), to practical features like the industry's largest RAM expansions and huge Winchester storage capacities, Stride Micro is setting new benchmarks.

Our exclusive Multiuser BIOS (Basic Input/Output System) software is provided with every machine. Unlike others in the growing crowd of multiuser boxes, the 400 Series is not tied to any single operating system. Not only can you choose from a dozen different OSs, but Stride's Multiuser BIOS permits you to run many of them simultaneously! Even traditional single-user systems like CP/M and p-System are at home in a multiuser mode on Stride machines. It's a feature you'll find nowhere else in the industry, and it's free on every Stride microcomputer.

If that isn't enough, this unique MU.BIOS also permits multiple users to reside on a single terminal, allowing the user to switch between different programs or even operating systems at the touch of a key. This foreground/background switching on one terminal provides flexible concurrent processing and, again, it is a Stride Micro exclusive.

". . . this flexibility frees users from the limitations of any one operating system and its applications software. At present, Stride's approach is unique, but eventually we can expect imitators."

—Computers & Electronics, February 1985—

Local Area Networking is also a key ingredient in the future of any leading microcomputer system. While others leave this important feature to the "add-on" market, Stride has provided the popular Omninet hardware directly on every CPU board. Combined with the multiuser capabilities, there is virtually unlimited configuration flexibility, opening the door to any future growth or expansion. Best of all, an Omninet network of over 60 stations can be installed at a fraction of the cost of competing networks. The hardware is a no-cost, standard feature, and the physical connections are accomplished with inexpensive twisted-pair copper wire (less than $0.25/foot).

"Liaison's designers decided to make it an 'open system': independent software companies and in-house development groups can freely develop distributed network applications and servers for it."

—*Electronics*, December 1984—

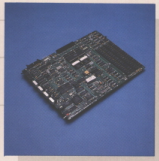
Hardware is only half the network story. All Stride microcomputers include the innovative Liaison Networking Operating System. Based on the latest version of the p-System, Liaison allows networks to take full advantage of distributed processing by use of complete file and device sharing. The entire network retains the p-System's virtue of portability across different chip architectures, and Liaison is upward compatible with all existing p-System applications.

"If your application calls for high performance...then you should consider using the VMEbus."

—*EDN*, January 1984—

Selection of the VMEbus for all Stride microcomputers is another bold step into tomorrow's technology. This bus is already widely accepted throughout the world with hundreds of vendors offering compatible products. By 1988, industry sources predict that VMEbus architecture will lead all other board standards. Every Stride system will accommodate options and the many add-on products through use of reliable pin-and-socket (96-pin DIN) connectors.

Speaking of connectors, the Stride-to-terminal hookups are made with small RJ-11C plugs meeting RS-232C communication standards. Often referred to as a modular phone jack, these special Stride connectors are completely sheilded to offer superb isolation from interference, while saving valuable board space. Due to this innovative design, four serial ports and a bi-directional parallel port can be accommodated on our most economical model; up to 22 ports are available on the larger systems.



The list of standard features also includes 4K bytes of user-allocated battery-backed CMOS RAM. That's a mouthful, but it is a no-cost feature that will be appreciated by those with innovative applications. The on-board battery is also put to use powering a new real-time clock. Telecommunication hardware and software, which open the door to the exciting world of electronic mail and on-line data bases, are also standard on Stride microcomputers. You'll need only a modem to tap into this resource.

Perhaps it is in the option list that the 400 Series really shines. With the addition of a floating point numerical processing unit and memory management unit, Stride systems can now meet the needs of virtually any 68000-based microcomputer application.

In summary, the Stride Micro 400 Series sets new standards in microcomputer technology. It is the ultimate in "Performance By Design" with features and options to meet the needs of any user from the office to the laboratory.

Eratosthenenes Sieve Prime Number Benchmark*

Machine (Chip)	p-Code Pascal	Native Pascal	C	Assembly
Stride (12 MHz 68000)	**26.3**	**2.73**	**1.78**	**0.93**
Stride (10 MHz 68000)	**31.5**	**3.28**	**2.13**	**1.12**
Sage (8 MHz 68000)	39.4	4.1	2.70	1.40
IBM PC (8088)	147.0	19.4	22.10	4.00
TRS-80 Mod II (Z-80)	274.0	n/a	n/a	n/a
Apple II (6502)	516.0	n/a	n/a	n/a
Macintosh (68000)	69.0	n/a	n/a	2.3
Wicat 150 (68000)	n/a	6.5	4.7	n/a
Charles River (68000)	n/a	n/a	6.3	n/a
PDP-11/60	n/a	4.5	n/a	n/a
VAX-11/750	n/a	n/a	3.1	n/a

*Source: *BYTE*, Sept. 81, Jan. 82.

While Stride Micro remains relatively unknown to the general public, those who depend on performance for a living have been quick to discover us. Top programming houses such as **Stoneware, Digital Research, SofTech Microsystems** and many others have made Stride their Number One choice.

State of the Art, for instance, produces the top-selling line of integrated accounting software for IBM and Apple, but the actual programs were written on Stride microcomputers.

Skyworks, an advanced cinematography group headed by Academy Award-winning inventor Garrett Brown, chose Stride microcomputers to power its revolutionary **Sky-Cam** project. Developers needed high-speed processing to keep their aerial camera moving smoothly and discovered that only Stride could deliver.

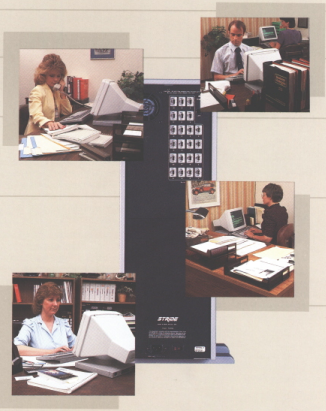
Honeywell, the computer giant, used Stride microcomputers to automate a laser-monitored inventory and manufacturing control system at its plant in Denver. The reason was totally practical: mainframe capability at micro pricing.

Here are a few others, of the many, who have come to that same conclusion:

Allergan Pharmaceuticals
Caterpillar
Pacific Telephone
Seahawk Seafoods
Chase Manhattan Bank
NASA
General Electric Space Center
EF Hutton
Harvard University
U.S. Army
Union Carbide Corporation
Quaker Oats
Beckman Instruments
Data Acquistion Service
U.S. Naval Academy
Ford Aerospace
Siemans Corporation
Oxford University
Westland Helicopter
British Leyland
British Steel
INMOS

An added bonus for these companies has been Stride/Sage's three-year reputation for reliability and prompt factory service. Stride Micro is dedicated to preserving and enhancing that record. All products are backed by a 90-day warranty with low cost extensions available for one, two or three years. It's our way of saying we stand behind the quality and design of all our systems.

Our computers are not for everyone. But once you've discovered the advantage of leading edge technology, unparalleled performance, reliability and sensible pricing, we think you'll agree that finding Stride Micro was worth the search.



". . . the best computer to buy is a development system after it has been around a couple of years. You get state of the art with the bugs out."

—Jerry Pournelle, *BYTE*, May 1984—

420

The Stride 420 may well be the most computer an average user will ever need. As a stand-alone workstation, it gives big system performance in a small package. With a footprint equivalent to an office in-basket, the Stride 420 offers up to 1.3M bytes of diskette storage and 2M bytes of RAM.

Incredibly, this machine, with an entry-level price below many of the so-called personal computers, has all the standard features of the advanced 400 Series supermicros.

The "420" is unique in the industry with compatibility to an entire family of products and the flexibility to be an individual workhorse or an integrated element in the distributed network of a larger, more complex system.

Your configuration possibilities are limited only by your imagination. Our unique multiuser, multi-tasking software permits true concurrent processing on multiple or single terminals. Regardless of your use, you'll find all the tools needed, from the advanced Liaison Networking Operating System to Stride's own utilities, that allow user configuration of every system component. For example, at the push of a button the floppies can emulate a 40-track or an 80-track IBM, or virtually any other popular or obscure diskette format.

There are still more features here: VMEbus interfacing, on-board Omninet hardware, telecommunications, a screen-orientated program editor, RAMDISK, a debugger, comprehensive documentation and much, much more.

With a rich option list that includes full floating point processing, a 12 MHz processor, high-speed graphics, NOD™ cursor control, a dozen operating systems, 30 compilers and hundreds of applications; the Stride 420 is today's solution to tomorrow's data processing problems.

Best of all, your "tuition" for this advanced course in "Performance By Design" begins at just $2,900.

Stride 420 microcomputer shipments contain the following standard equipment:

- One double-sided, double-density, 96 TPI, 5¼" drive. 640K bytes capacity.
- 256K bytes of parity RAM
- 4K bytes of battery backed-up CMOS RAM
- Omninet networking hardware
- VMEbus compatibility
- Battery backed-up real-time clock
- Four RS-232C serial ports
- Centronics compatible parallel port
- 5' terminal cable
- 90-day limited warranty
- Liaison Operating System (p-System IV.2 w/LAN software)
- Stride configuration utilities
- Stride Multiuser BIOS
- Teletalker communications software
- Liaison Operating System manual
- Stride Owner's manual Volumes I & II
- Stride Software Directory.

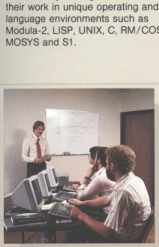
SC0120	**Stride 420 with one 640K byte floppy disk**	**$ 2,900**

440

A "developer's dream machine." That's how the programmers are describing the new Stride 440. End-users see it differently: "it's the first practical multiuser machine."

It's no accident that this machine is being well received; we planned it that way. We listened to those who were using today's microcomputers. We noted their likes and recorded their complaints. The result was the exceptional "440."

Those pioneering software development were looking for high processing speed, large RAM arrays, varying hard disk capacities and options like floating point processing and memory management to aid their work in unique operating and language environments such as Modula-2, LISP, UNIX, C, RM/COS, MOSYS and S1.



Those who put the systems to work in the office or shop wanted practical features such as on-board tape backup, networking, powerful multi-user capabilities, system flexibility, VMEbus interfacing and a rich application list.

It's all there with the "440." This machine is nearly identical in size to the IBM PC, but it has the performance characteristics of that company's mainframes. It can serve as a powerful desktop station for scientific/engineering calculations or blossom into a 16-port multiuser system networked to 63 other CPU's. With options to 8M bytes of RAM and 33M bytes of Winchester storage, few users will outgrow their Stride 440.

As with every Stride system, performance is the key. There is an all new high-speed disk controller that works in conjunction with large Winchesters to provide a transfer rate up to 400K bytes per second. The optional on-board streaming tape drive can backup more than 5M bytes a minute. And the already fast 68000 processor runs without wait states on the Stride at 10 MHz (12 MHz optional). Whether you're compiling source code or posting to the general ledger, you'll find the Stride 440 will await your commands, not the other way around.

Stride 440 microcomputer shipments contain the following standard equipment:

- One double-sided, double-density, 96 TPI, 5¼" drive. 640K bytes capacity, 10M bytes Winchester
- 256K bytes of parity RAM
- 4K bytes of battery backed-up CMOS RAM
- Omninet networking hardware
- VMEbus compatibility
- Battery backed-up real-time clock
- Ten RS-232C serial ports
- Centronics compatible parallel port
- 5' terminal cable
- 90-day limited warranty
- Liaison Operating System (p-System IV.2 w/LAN software)
- Stride configuration utilities
- Stride Multiuser BIOS
- Teletalker communications software
- Liaison Operating System manual
- Stride Owner's manual Volumes I & II
- Stride Software Directory.

SC0121	**Stride 440 with 10M byte Winchester**	**$ 5,900**
SC0136	**Stride 440 with 20M byte Winchester**	**6,900**
SC0123	**Stride 440 with 33M byte Winchester**	**8,800**

460

Microcomputers have been resting on the threshold of minicomputer performance for the last two years. Now, the all new Stride 460 just kicked in the door to a whole new world of power and flexibility.

Others who have tried to bridge this gap between the mini and micro have stumbled by dragging along the old concepts of big system pricing. With the "460," you'll find price/performance ratios that will make the trip completely painless.

Best of all, nothing has been left behind: multiple Winchester storage, abundant RAM (up to 12M bytes!), tape backup, multiuser (up to 22 ports), networking, floating point processor, memory management option, direct VMEbus card cage interfacing, NOD cursor control, high—speed graphics and vertical tower design.

The "460" will quickly become the standard for developers, OEMs, Value-Added Resellers and end-users seeking leading edge performance from a microcomputer environment.

All of the virtues of the 400 series are here in their richest form. This powerful system can still be used for development in a dozen operating systems or 30-plus languages. Yet, with upgradable hard disk storage to an incredible half gigabyte, the "460" can serve as the cornerstone of a networked or multiuser

system solution. Utilizing Stride's standard Liaison LAN software and the Omninet hardware, the "460" can share its power with a network of smaller, inexpensive terminals or workstations. This combination spreads the minicomputer power of the "460" to a cost-efficient network of less capable microcomputers.

With a built-in VMEbus backplane, up to four additional boards can be plugged directly into the "460." There are literally hundreds of VME add-on cards available, opening up endless possibilities from data acquisition to graphic devices to mainframe interfacing to industrial control.

All this flexibility is underwritten by performance. The optional 12M bytes of RAM offers unlimited opportunities in the use of RAMDISK for high speed program and data access. Whether using a single Winchester or a full complement of four (optional), hard-disk access is directed by an all new controller that achieves maximum throughput for faster data reads. When combined with the high performing 68000 CPU, the "460" achieves some of the best benchmarks in the industry.

We invite and encourage comparisons, because we're confident that in today's marketplace, there is no question that the Stride 460's "Performance By Design" concepts stand by themselves.

Stride 460 microcomputer shipments contain the following standard equipment:

- One double-sided, double-density, 96 TPI, 5¼" drive. 640K bytes capacity, 20M bytes Winchester
- 256K bytes of parity RAM
- 4K bytes of battery backed-up CMOS RAM
- Omninet networking hardware
- VMEbus compatibility
- Battery backed-up real-time clock
- Ten RS-232C serial ports
- Centronics compatible parallel port
- 5' terminal cable
- 90-day limited warranty
- Liaison Operating System (p-System IV.2 w/LAN software)
- Stride configuration utilities
- Stride Multiuser BIOS
- Teletalker communications software
- Liaison Operating System manual
- Stride Owner's manual Volumes I & II
- Stride Software Directory.

SC0135	**Stride 460 with 20M byte Winchester**	**$ 8,900**
SC0125	**Stride 460 with 33M byte Winchester**	**11,200**
SC0131	**Stride 460 with 67M byte Winchester**	**15,200**
SC0127	**Stride 460 with 112M byte Winchester**	**20,200**
SC0128	**Stride 460 with 224M byte Winchesters**	**33,000**
SC0129	**Stride 460 with 448M byte Winchesters**	**59,000**

O P T I O N S

FLOATING POINT

National Semiconductor's NS16081, a fast floating point processing unit, is available as an option on all 400 Series systems. This addition provides unparalleled speed in the handling of numerical calculations.

The 16081 has eight on-chip registers and supports standard (32-bit) and long (64-bit) operations. The combination of the 68000 and the 16081 is a pairing that significantly outperforms the 8088/8087 mix.

The FPU option may be ordered at the time of purchase or added as a dealer or factory upgrade at a later date. The software libraries required for FPU support are standard with every Stride system.

MEMORY MANAGEMENT

The Memory Management Unit is an option on all Stride 400 Series systems but is most practical on the 440 and 460 models. It will accommodate any memory management task but was specifically designed to support the UNIX operating system.

The MMU is a paged implementation using fast translation RAM, achieving zero wait states for memory located on the main CPU board (up to 2M bytes). It will address either a 2M byte task using 4K byte pages in one of four contexts or a 4M byte task in one of two contexts.

12 MHz OPTION

A 12 MHz clock is available to replace the standard 10 MHz unit on all Stride 400 Series machines resulting in a performance increase of approximately 20%. The option includes replacement of the CPU, RAM and clock chips. Please note that any RAM expansions ordered below must also be specified as 12 MHz parts.

STREAMING TAPE

An on-board tape backup system is available on the Stride 440 and 460 models. This 5¼" streaming tape unit utilizes a ¼" data cartridge capable of storing 45 or 60M bytes. The transfer rate is 5M bytes per minute.

Selection of this option precludes the addition of a second floppy.

SECOND FLOPPY

A second 5¼" floppy drive is available on all Stride 400 systems. Like the standard floppy, it is a double-sided, double-density, 640K byte unit. Addition of this option brings floppy storage to 1.3M bytes.

Selection of this option precludes addition of the streaming tape backup unit on the 440 and 460 models.

RAM EXPANSION

All Stride 400 Series microcomputers are equipped with 256K bytes of RAM. They may be upgraded as follows:

Stride 420 - 512K, 1M, 2M
Stride 440 - As above plus 3M, 4M, 6M, 8M.
Stride 460 - As above plus 12M.

All expansions above 4M bytes include a Port Board providing six additional serial ports. The 12M byte option includes two port boards.

(Note: The Stride multiuser system requires a minimum of 512K bytes, as does the support of the UNIX and Idris operating systems).

IP00xx	**Stride Port Board (6 serial ports; no RAM included)(440 and 460 only)**	**$ 800**
IP00xx	**Second 80-track Floppy Drive**	**500**
IP00xx	**Streaming Tape Drive (440 and 460 only)**	**2,800**
IP0002	**Floating Point Math Processor**	**600**
IP0007	**12 MHz Clock and RAM (10 MHz is standard)**	**500**
IP0008	**Memory Management Unit**	**500**
IP0005	**Expansion to 512K bytes RAM**	**$ 400**
IP0012	**Expansion to 1M byte RAM**	**1,200**
IP0013	**Expansion to 2M bytes RAM**	**2,800**
IP00xx	**Expansion to 3M bytes RAM (440 and 460 only)**	**4,400**
IP00xx	**Expansion to 4M bytes RAM (440 and 460 only)**	**6,000**
IP00xx	**Expansion to 6M bytes RAM (440 and 460 only)**	**10,000**
IP00xx	**Expansion to 8M bytes RAM (440 and 460 only)**	**13,200**
IP00xx	**Expansion to 12M bytes RAM (460 only)**	**20,400**

(NOTE:All RAM expansions offered above are 10 MHz parts. These are also available in 12 MHz. Please contact your local authorized Stride dealer for more information and exact pricing.)

FEATURE	STRIDE 420	STRIDE 440	STRIDE 460
STANDARD PROCESSOR	• 10 MHz 68000 microprocessor • 32-bit registers • 14 addressing modes		
OPTIONAL PROCESSOR	• 12 MHz 68000 microprocessor • Zero wait states for CPU memory only • Off-board memory requires one wait state for an effective yield of 10 MHz • 120 nanosecond CPU RAM is included with option		
BUS DEFINITION	• VMEbus compatible • True vectored interrupts • All I/O is optionally polled • Asynchronous bus operation • 16-bit data bus • 24-bit address bus (will address 16M bytes)		
EXTRA VME SLOTS	• 1	• 1	• 4 (2 Euro-Card)
STANDARD RAM	• 256K bytes of parity RAM is standard on all systems • No wait states for RAM access • 4K bytes of battery backed up CMOS-RAM • 16K bytes of boot-debugger ROM		
MAXIMUM RAM	• 2M bytes	• 8M bytes	12M bytes
WINCHESTER DISK CAPACITY	• N/A	10, 20 and 33M bytes	20, 33, 67 112, 224, and 448M bytes
WINCHESTER DISK PERFORMANCE	• N/A	• Full track addressable buffering • 160 to 400K bytes per second transfer rate	
FLOPPY DISK	• Double-sided, double-density, 96 TPI, 5-1/4" drives • No sector interleaving or track skewing required • 640K bytes capacity per drive • First drive is standard, second drive is optional		
OPTIONAL STREAMING TAPE	• N/A	• 45 or 60M byte tape capacity • Transfer rate of 11 seconds per megabyte • ANSI standard X3.55 • QIC-02 interface • QIC-24 tape format	
SERIAL PORT DEFINITION	• RS-232C with RJ-11C shielded modular phone jacks • 300 to 38.4K baud • RTS, CTS and CD supported • Uses Motorola MC68681		
NUMBER OF SERIAL PORTS	• 4	• 10 or 16	• 10, 16 or 22
PARALLEL PORT	• Centronics compatible parallel printer port • Bi-directional buffering • 8 data bits • 7 control bits		

FEATURE	STRIDE 420	STRIDE 440	STRIDE 460
LOCAL AREA NETWORK	• Standard Omninet hardware interface • 1M bps transfer rate • Requires only twisted pair cable • CSMA/CA protocol		
REAL-TIME CLOCK	• Battery backup • 0.01% accuracy • Second, minute, hour, day, month, year		
OPTIONAL FLOATING POINT UNIT	• Uses National 16081 and proprietary PAL • All operations on 32 and 64-bit numbers • Conforms to IEEE-754 standard • Will perform 7500 to 48,000 64-bit multiplies per second • 17,000 is typical		
OPTIONAL MEMORY MANAGEMENT UNIT	• MMU is based on single stage fast translation RAM • Will address a 2M byte task using 4K byte pages in one of four contexts • Zero wait states for CPU memory		
INCLUDED SOFTWARE	• Liaison operating system, p-System IV.21 w/LAN software, screen-oriented editor, filer and utilities, disk and print server • Stride configuration utilities • TeleTalker communications software		
MULTIUSER BIOS	• Up to 15 users (dependent on RAM capacity and ports) • Will run different operating systems concurrently • True concurrent processes • Inter-user communication through Liaison		
DOCUMENTATION	• Stride Owner's Manual-Volumes I and II • Liaison Operating System Manual • Stride Software Directory		
OPTIONAL O/S	• CP/M-68K• RM/COS • UNIX System V• Idris• FourByteForth • PDOS• BOS• Mirage• MOSYS • TRIPOS		
OPTIONAL LANGUAGES	• Pascal• Modula-2• 68000 Assembly• APL• BASIC• C• CBASIC • COBOL• FORTH• FORTRAN• Lisp• SNOBOL		
POWER SUPPLY	• 65-Watt switching	• 150-watt switching	• 150 or 300-watt switching
PHYSICAL PARAMETERS	• 4.4"H/12.6"W/ 16.9"D	• 5.7"H/18.9"W/ 16.9"D	• 27.3"H/9.1"W/ 18.2"D
HUMAN INTERFACE	• Optional hands-free NOD™ cursor control		
GRAPHICS	• High-speed, high-resolution monochrome graphics (784 x 325) • Up to 58 frames per second		

Graphics

TECHNOLOGY

Stride Micro prides itself in constantly exploring the outer limits of computer technology. The two products presented on these pages represent the best of tomorrow's concepts. While both are available for purchase by the public today, they are largely intended for the development market where they will be combined with innovative and creative software in the future to create unique and innovative solutions.

GRAPHICS

While graphics are common in the microcomputer marketplace, Stride has leaped ahead in providing unparalleled video speed at unbelievably low prices.

That's a boastful claim but backed solidly by fact. This new graphics card produces images up to 58 frames per second at a suggested retail price of only $400. Best of all, no expensive graphics terminal is required. The graphics option provides several easily-installed shunts that convert the standard Stride terminal into a superb 784 by 325 resolution display station.

Using the 32K bytes of on-board RAM, this VMEbus compatible card provides one bit per pixel in a unique scheme that uses the main 68000 processor to its maximum performance. When the processor is not directly addressing graphics RAM, it will operate at the full 10 or 12 MHz without wait states. Thus, there's no need for your graphics to slow program operation. Additionally, the high speed of video refresh guarantees that image flicker will never occur.

The Graphics Board Option is available for all three Stride 400 Series models and is provided with all the necessary hardware and some simple demonstration software to let you see what "Performance By Design" looks like in motion.

IP003x Stride Graphics Option . . . $ 400

NOD

THE NOD™

Human interface is the topic of the 80's as evidenced by the proliferation of mouse-type cursor control devices introduced in the last several years. Stride Micro sought a better solution, one that would maintain the user's connection with the keyboard and not consume critical desk space.

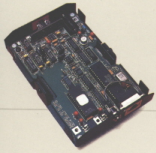
Our answer was the NOD. Now, with just the movement of your head, it is easy to position the cursor anywhere on a display screen. Utilizing a technology similar to that found in remote control television devices, the NOD tracks the movement of a small piece of reflective material that can be placed on a wand behind the ear, on glasses, etc.

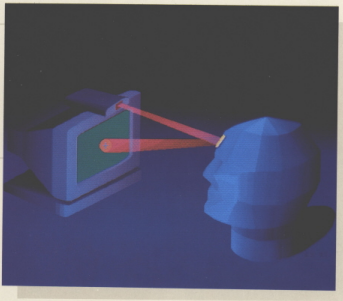
The applications of such a device are limited only by a developer's imagination. Some possible uses that have already been explored are menu selection, acarde games, handicap applications, process control and window movement. At a suggested retail price of only $400, it should soon gain acceptance in a variety of exciting and innovative uses.

The benefits of the NOD are not limited to Stride systems. It is available and adaptable to any computer system accepting RS-232C inputs. At just 4"W X 6"D X 1"H, the NOD is small enough to sit atop almost any terminal or monitor. It is supplied with an external wall plug power supply and basic documentation providing X,Y coordinate output information. Simple demo software for Stride systems is also included.

Licensing and OEM inquiries are included.

PH0066 Stride NOD with cable . . . $ 400





The flexibility offered by all Stride 400 Series microcomputers allows for a broad and varied selection of peripherals. Configuration utilities are standard, allowing you to match your system to dozens of different terminals, printers, modems, etc.

The peripherals listed on the following pages are marketed and supported directly by Stride Micro and require little or no setup to become part of your powerful microcomputer system.

Please check the Accessories section of this catalog to insure that the proper cables are ordered to match your choice of peripherals.

STRIDE TERMINAL

The Stride terminal is a full featured unit that is closely matched to take advantage of the high performance of all 400 Series computers. Not only is its ergonomic design one of the most stylish enclosures available, it is also one of the fastest terminals anywhere operating at the high 38.4K baud rate produced by all Stride's.

Excellent readability is provided by the 7 x 13 matrix characters set in 10 X 13 cells. This produces larger-than-normal figures on the easily adjustable 14" tilt and swivel screen. A non-glare green-phosphor monochrome screen is standard. Another unique feature is the ability to generate either 80 or 132 columns. This permits display of entire spreadsheets or wide documents that would otherwise be off the edge of conventional terminals.

A convenient Setup key allows complete user configuration of baud rate, parity, mode, compatibility, attributes, xon/xoff, editing, etc.

The low-profile keyboard is detached and adjustable to allow exact placement for ideal reach and hand position. It offers a full complement of keys including 16 programmable functions keys offering 32 combinations.

The unit's high technology styling is color coordinated to match the entire Stride 400 Series of microcomputers.

The features listed above make this terminal an exceptional performer in any application, but there is even more. As described in the Technology section of this catalog, the Stride terminal can easily be converted to a powerful graphics station at no additional cost! The terminal is modified by the addition of several easy-to-install shunts provided with Stride's Graphics Option. Unlike other video systems, there's no need to purchase a costly graphics monitor. This workstation has it all.

OKIDATA PRINTERS

The Microline Series from Okidata offers a full line of dot-matrix printers ranging from 80 to 200 characters per second. Most models are available with either RS-232C or Centronics-compatible parallel ports (parallel is standard). Additionally, all point addressable graphics up to 103 X 72 dots per inch are available.

OPTICAL MOUSE

For developers and experimenters interested in exploring alternate methods of data input, an optical mouse is offered from Mouse Systems Corporation. The "M1 FieldMouse" allows fast cursor movements in any directiion on a CRT. The M1 uses a long-wear scratch resistant deskpad which fetures .01 resolution. User selectable options include: 300/1200 baud, protocol to detect rotation as well as translation, RS-232C or TTL.

QUME PRINTERS

The Qume Sprint 11/40 Plus offers unsurpassed professional daisy-wheel print quality and durability. Operating at a steady 40 cps, the Sprint features a reliability rating of 5,500 hours before failure. That's equivalent to almost three years of continual use, eight hours a day, five days a week without a single repair.

In addition, the 11/40 features user-changable interfaces to switch between the Sage's serial or parallel ports. Qume provides a full line of printwheels in most of the popular typewriter faces with true proportional spacing.

MODEMS

Communications hardware and software are already part of the Stride system. It takes only a modem to join the world of on-line data bases, electronic billboards, users groups, reference sources, mail, etc. The standard by which other modems are judged in the microcomputer world is the Hayes Smartmodem™ 1200. Operating at either 300 or 1200 baud, this sleek, yet sturdy, device will send and receive data four times faster than most modems with savings of as much as 50% on telephone charges. Easy-to-use features include automatic dialing, redialing and answering.

PH0066	**Stride NOD with cable**	**$ 400**
PH0063	**Stride terminal**	**590**
PH0003	**Microline 80 dot-matrix printer, 80 cps**	**450**
PH0008	**Microline 92 dot-matrix printer, 160 cps**	**690**
PH0009	**Microline 93 dot-matrix printer, 160 cps**	**1,190**
PH0005	**Microline 84 dot-matrix printer, 220 cps**	**1,350**
PH0014	**Qume Sprint 11/40 printer, letter quality, 40 cps**	**2,095**
PH0015	**Qume Sprint 11/40 parallel interface, 5'**	**150**
PH0016	**Qume Sprint 11/40 serial interface, 5'**	**150**
PH0013	**Hayes Smart Modem 1200**	**695**
PH0012	**Optical Mouse with interface**	**290**

NOTE: The Qume 11/40 parallel interface requires cable CC0025. The serial interface requires a terminal cable and the universal adaptor kit. The correct pin-outs are shown in the Stride Owner's Manual.

Stride Micro not only has high performance hardware but also features high performance software. The proliferation of applications running on the Stride 400 Series helps transform a perfect developer's environment into an equally effective business or industry computer.

Because of Stride's overwhelming acceptance by the programming and software development community, literally hundreds of useful applications programs have been written on, and for, Stride microcomputers.

Best of all, many applications that seemed sluggish or cumbersome on other micros, suddenly have a new snap and utility when running on the powerful Stride systems.

The Stride Software Directory is a companion volume to this publication that lists over 500 applications which run successfully on our machines. These programs have been developed by outside developers but are screened by Stride to insure that they meet certain standards of performance including documentation and availability.

Some of these packages offer special merit, either in performance, features, price or utility. Stride has selected a number of these applications to market and support directly. These are described briefly on the following pages. Additionally, other recommend software is listed in the "Preferred Software Vendor" section of the catalog. For more information or ordering, contact Stride Micro, your nearest Stride dealer or the vendor listed.

p-System

Liaison™ Operating System — Liaison is p-System IV.2 with local area networking software built right in. Liaison is somewhat upward compatible, thus, existing p-System application programs can be used on networked computers with minor modifications. Features of Liaison include: screen-oriented editor, filer, utilities, disk and print servers, and portability. When you order the Liaison Operating System, you will also receive Stride configuration utilities, multiuser BIOS, teletalker communications and several more Stride programs that will make your system set up quick and easy. The Liaison Operating System and Stride extras come standard on all Stride 400 Series Microcomputers.

Minimum Requirements . . . . . Stride 420
SF0115 . . . . . $250

p-System BASIC — A structured BASIC that is fully integrated into the p-System. Features include: unnumbered statements; If, Then, Else constructs, On . . . GOSUB commands, print using capability, display and display using, arrays with unlimited dimensions and subroutines with unlimited number 86 parameters, sequential and direct file access. Virtual arrays are also supported.

Minimum Requirements . . . . . Stride 420
SF0050 . . . . . $225

p-System FORTRAN — Incorporates the features of the ANSI FORTRAN 77 subset. It contains most of the standard FORTRAN constructs as well as support for: If, Then, Else Constructions, Character data-types, numeric intrinsic functions, standardized random access files to facilitate portability, interactive input/output and support for program overlap.
Minimum Requirements . . . . . Stride 420
SF0049 . . . . . $375

Modula-2 — A new language concept designed by Niklaus Wirth, as a simple but powerful alternative to Assembly language, Pascal, C and Ada. The language features: modules, concurrent processes, separate compilation, dynamic array parameters and low-level machine access. Included with the purchase of Modula-2 are the ASE editor, Pascal Compiler, utilities for backup, file copy, disk-patching, communications, library modules and full documentation including Modula-2 introduction.
Minimum Requirements . . . . . Stride 420
SF0145 . . . . . $495

p-System Program Development Package — A collection of programming tools designed for use with the p-System. The package includes the Pascal compiler, symbolic debugger, native code generator, Assembler, linker, syntax, program analysis tools, applications service interfaces and Stride bootstrap sources. Four manuals are included: p-System Program Development, Assembler, Internal Architecture and Application Development manual. Also included is Liaison Tool Kit manual to simplify the development of Liaison packages.
Minimum Requirements . . . . . Stride 420
SF0124 . . . . . $375

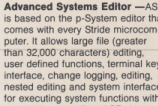
Word/7 — Is an easy to use menu-driven word processor. Its features include: full-screen editing and formatting of documents, keyword substitution to support mailing list generation as well as mass mailings and a filing system to store documents for retrieval. The full-function editor features "mode-less" operation and simple overtype updating for simplicity of use by even the new computer user. Word/7 is easily configurable to many popular terminals and printers.
Minimum Requirements . . . . . Stride 420
SF0051 . . . . . $275

Advanced Systems Editor —ASE is based on the p-System editor that comes with every Stride microcomputer. It allows large file (greater than 32,000 characters) editing, user defined functions, terminal key interface, change logging, editing, nested editing and system interface for executing system functions without leaving the editor. ASE also automatically creates a backup of the file being edited.
Minimum Requirements . . . . . Stride 420
SF0020 . . . . . $150

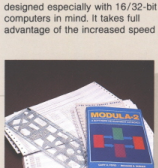
Advanced DB Master™ — This enhanced version of DB Master is designed especially with 16/32-bit computers in mind. It takes full advantage of the increased speed and memory available. It features: multiple diskette files, user-defined key-stroke macros, text editing and text merging, computed fields, custom reports, dynamic table values, array searches and audit trails, as well as many other useful tools. Advanced DB Master is available in both single and multiuser versions. The multiuser version features full file and record locking.

Single-User Version
Minimum Requirements . . . . . Stride 420
SF0130 . . . . . $490

Multiuser Version
Minimum Requirements . . . . . Stride 440
SF0131 . . . . . $1290



Timberline™ Spreadsheet — This spreadsheet is designed to be a flexible planning tool with hundreds of applications including "what-if" projections. It can handle a grid with up to 200 rows and 100 columns with subsidiary spreadsheet capabilities. More flexible than most, this package has over 40 functions and allows editing of fields individually, globally, or by row and column. Fields may be alphabetical or numeric. Calculations ranging from simple addition to linear regression may be performed on any numeric field. This package is well documented and user-friendly with online help.
Minimum Requirements . . . . . Stride 420
SF0022 . . . . . $390



CP/M-68K

CP/M-68K — The 68000 version of this popular OS features a high performance multiuser package with flexible application program interface and utilities to provide a complete development system. Features include: CP/M and CP/M-86 compatibility, RAM support from 64K bytes to 16M bytes, up to 16 logical disk drives, C compiler, development tools, utilities, full access to MC68000 hardware features and cross development tools. Multiple programs can co-exist in RAM. Stride has also included many of our own utilities that will further enhance the developmental nature of CP/M-68K.

Minimum Requirements ..... Stride 420
SF0119 .....$350
DK0091 - Stride Utility Sources $42

CBASIC — The popular CP/M compiler from Digital Research is a native code compiler. CBASIC's program structure allows separate modules to be written, tested and then combined to create a complete program. The record locking features of CBASIC's Compiler are designed to support multiuser operating systems. Features include: speed with 14 digit accuracy, mostly compatible with existing CBASIC programs, arrays, file statements, chaining, as well as many other BASIC statements are all supported to help make programming easy.

Minimum Requirements CP/M-68K
SF0103 .....$600

SVS Pascal Compiler — A complete optimizing native code compiling system for the Motorola 68000 family of processors. SVS Pascal allows you complete access to the 68000 address space. Features include: variable length strings and string operators; random access, block, and interactive I/O; integer-to-pointer conversion, 2- and 4-byte integer arithmetic, moveright, move-left and fillchar. Separate compilation of units is also supported.

Minimum Requirements
CP/M-68K,Stride 420
SF0048 .....$595

SVS FORTRAN 77 Compiler — A full ANSI standard FORTRAN 77 for CP/M-68K. The system includes a native code compiler, complex arithmetic support routines, character data types, If, Then, Else constructs, List directed and internal I/O and a more natural Do loop specification. The system exploits the full addressing potential of the 68000, allowing essentially unlimited size programs as well as data areas and structures.

Minimum Requirements
CP/M- 68K,Stride 420
SF0047 .....$595

Mince Word Editor — Designed as a programmer's text editor for CP/M-68K. It features key editor functions including document manipulation by word, sentence, paragraph or region. It has helpful additions such as nested edit, undelete and optional word-wrap. Two introductory lesson sets and an easy to use configuration program are included.

Minimum Requirements CP/M-68K
SF0046 .....$170

RM/COS

RM/COS-RM/COBOL — is an operating system designed expressly for serious desktop business computing. With small memory and disk requirements, RM/COS is a true multiuser operating system. Features include: ANSI 74 Level II sort/merge capabilities, record-locking, interactive batch JCL with parameter passing, print spooler, data compression with automatic recovery of unused space, multilevel hierarchical directories, automatic log-on procedures and a GSA certified COBOL compiler based on ANSI 74 standards. Compiler features include: portability across mainframes, minis and micros, supports all standard file access methods, multikeyed indexed files may have up to 14 alternate keys, powerful screen handling capabilities increase flexibility, compact object code as well as many other features are fully supported.

Minimum Requirements ..... Stride 420
SF0111 .....$950

UNIX V

UNIX System V — A powerful multi-tasking, multiuser operating system designed for use in virtually any computing environment. Its power, performance and portability have made it popular. Designed by AT&T's Bell Laboratories, UNIX is written almost exclusively in high-level C language. System V features include: hierarchical, tree-like file structure that provides for efficient data handling. The user interface, the Shell, acts as a command language interpreter and as a programming language. A powerful set of commands provides a variety of built-in utilities. A software generation system and a comprehensive array of software development tools, networking and communications capabilities are fully supported. A text editor and job control are included along with extensive documentation. Four compilers are included: C, FORTRAN, BS and SNOBOL. UNIX System V is distributed on a 45M byte streaming tape cartridge.

Minimum Requirements
Stride 440 w/512K bytes RAM and MMU
SF0112 .....$1175

SF0151 (same as above, but delivered on floppy disks) $1425

EMACS — An extensible screen editor for Idris and UNIX System V. EMACS is a full screen editor with extensive cursor navigation and powerful text manipulation. Multiple windows on the screen are user definable. This allows for several files to be edited simultaneously or different portions of the same file to be edited simultaneously. Any shell program can be executed from within EMACS. A help facility is built in by command name and subject area. Search and replace, justification autofill and spell checking are all supported. Several programming aids like checks for balanced parenthesis and braces, automatic indents and file maintenance are all fully supported.

Min. Requirements
Idris (UNIX), Stride 440 w/512K bytes RAM (MMU)
SF0110 .....$395

Idris

Idris — is a multiuser, multi-tasking operating system that is written specifically for microprocessors. Idris is closely modeled after Bell Lab's UNIX, however, Idris is one-half the size of UNIX and runs up to twice as fast on micros, yet contains all the important and powerful functionality of UNIX. Features include: complete application development environment, high degree of portability, small configuration requirements, hierarchical file systems, true device independence linking, ROM-table KERNEL, BIOS compatibility, utilizes RAM Disk; many utilities are also included to help make program development easier.

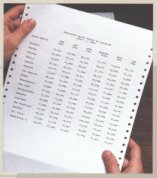
Run-Time Idris
Minimum Requirements
Stride 420 w/512K bytes RAM
SF0133 .....$550

Idris with C
Minimum Requirements
Stride 440 w/512K bytes RAM
SF0134 .....$975

Idris with C and Pascal Compilers
Minimum Requirements
Stride 440 w/512K bytes RAM
SF0135 .....$1250

Whitesmith's Pascal — A highly portable and compatible compiler for all of the UNIX systems. The Pascal compiler conforms to the ISO level standard. Features include: portability of both the Pascal language and the applications that are written with it. Interfaces directly with C and Assembler, reliable field-proven compiler, ease of application development, portable C runtime library with string manipulation functions and extensive I/O formatting support.

Minimum Requirements
Idris with C, Stride 440 w/512K bytes RAM
SF0101 .....$375



Other

MANTRI Chess — This is a world-class microcomputer chess program that was designed specifically for Stride/Sage machines. It takes full advantage of the speed of the 68000 processor since it is written in tight Assembly code. The game is entertaining and challenging to Novice and Master alike with ability to change playing levels, enter checkmate problems or even play itself. MANTRI boots directly to the BIOS or either Stride or Sage and thus runs on any machine regardless of operating system.

Minimum Requirements ..... Stride 420
SF0143 .....$50

Preferred Vendors

Literally hundreds of software applications are available for all models of the Stride 400 Series. However, the vendors listed below have worked closely with Stride Micro in developing packages that are especially well suited to our high performance hardware. They are highly recommended.

". . . Stride Micro is one such company that is developing products with vertical markets in mind."

—Computer Merchandising, November 1984—

p-System

Arisbe Communications (616) 947-0651

Passage — An advanced modem communications package featuring auto dialing, auto configuration and many other features.

Hyperception (214) 698-5538

Sagebrush — A powerful graphics system available for Stride or Sage computers under the p-System or CP/M-68K.

IOTC (307) 721-5818

PDBase — A multiuser relational database featuring an English-like query language.

Dispell — An interactive spelling checker with word look up.

Link Systems (213) 453-8921

Datafax — a unique "unstructured" dbms that is extremely easy to use.

Microfinancial (213) 961-0237

Flexware — full line of sophisticated accounting applications that are dbms-based and can therefore easily be customized for exact needs.

Micro Research and Development (303) 504-6727

Word/7 — an excellent full-featured word processor that is extremely easy to learn and use. Fully compatible with all /7 products.

Spell/7 — a powerful general purpose spell checker with standard and user dictionaries. Designed for easy integration with Word/7 word processor.

Mail/7 — A complete mail list dbms system which easily interfaces with the Word/7 word processor.

Menu/7 — A powerful utility that permits a user to create menu-driven front ends to a variety of different applications.

Microstar Laboratories (206) 453-0880

P.C. CAD — an interactive graphics system for printed circuit board artwork. Designed to assist the draftsman, not to replace him.

Micro Strategies (617) 376-4526

PROFITS — A strong point-of-sale vertical market business package designed to meet the needs of the retail garment and shoe industries.

EPA — Essential Pascal Aids is an extremely useful collection of p-System and Pascal programming tools and utilities. The "p-Backup" is particularly handy for backing a Winchester to floppies.

Northwest Computerworks (918) 495-6702

Moneyworks — Series of small business solutions including A/R, A/P, GL, Inventory and Payroll.

Scenic Computer Corp. (206) 885-5500

Sprinter-2 — a powerful text formatting program that works in conjunction with an editor to produce professional documents from letter to book size.

Sprinter-3 — similar to Sprinter-2 above, but is designed specifically for the new laser printers including those from Apple, H-P, QMS and others.

Spell — A general purpose spell checker for use with Sprinter or any other p-System text file.

Native Code Modula-2 — an extremely fast 32-bit Modula-2 compiler. As of May 1985, this was a Beta test product.

State of the Art (714) 850-0111

State of the Art — Leading supplier of general purpose accounting solutions for small to medium business.

Stoneware, Inc.
(415) 454-6500

Advanced DB Master — A popular and powerful general purpose database available in single or multiuser formats. Developed by Stoneware, Inc.

CP/M-68K

Emperical Research Group
(206) 874-4844

68K BASIC — A BASIC language compiler complete with extensions that are helpful in reducing development time while enhancing readability and maintenance.

Hyperception
(214) 698-5538

Sagebrush — powerful graphics system available for Stride or Sage computers under the p-System or CP/M-68K.

Software Architects
(415) 549-3185

FourByteForth — A 32-bit FORTH compiler available under CP/M-68K or its own FourByteForth environment.

Tenchstar, Inc.
(408) 375-2434

Edit-68K — a powerful programming editor for CP/M-68K.

PDOS

Eyring Research Institute
(810) 375-2434

PDOS BASIC — a BASIC intrepreter that combines compiler performance with the convenience of an intrepreter in a unique approach to program development.

PDOS Operating System — A real-time, multiuser, multi-tasking operating system for the 68000. Designed for scientific, educational, industrial and business applications.

PDOS Pascal — a multiple-pass, optimizing compiler that generates assembler text for the 68000.

RM/COS

COSPRO, Inc.
(214) 869-2268

MCBA — extremely rich line of accounting solutions including Purchase Order and Receiving, Order Entry and Job Costing.

qPLEX IV — A powerful applications generator/report writer.

R Word III — a complete multiuser office automation package encompassing word processing, dbms and office time management.

Real World — a full line of multiuser business accounting systems including Order Entry w/Inventory Control and Sales Analysis.

Unicalc — A full-featured multiuser spreadsheet from Lattice.

Idris

Absoft Corporation
(313) 549-7111

Absoft FORTRAN — a high performance FORTRAN 77 which compiles at 4,000 lines of code per minute.

BOS

BOS National, Inc.
(214) 956-7722

BOS/Business Software — Full line of accounting applications available in single or multiuser.

BOS/Micro COBOL — BOS implementation of this popular business programming language.

BOS/Office Software — Four packages are available from WP to Financial Planning in single or multiuser.

TRIPOS

Tenchstar, Inc.
(408) 375-5012

TRIPOS Operating System — A modern operating system designed for 32-bit micros. Although designed as a single user system, concurrency ability gives it a capability for multiuser use.

Cambridge LISP 68000 — A microcomputer version of this mainframe programming language that is widely used in the field of artificial language.

S1

Multi Solutions Inc.
(609) 695-1337

S1 — A general purpose multiuser microcomputer operating system. Developers claim it will soon be the "only truly authentic micro OS."

The final step in your hardware selection is to choose the accessories needed to make your system complete.

Stride has given special attention to insure that the items listed below meet strict standards of material and design. Extra care has been taken to insure the prevention of static damage or poor grounding, as well as to guarantee safety and compatibility.

OMNINET CABLING

Simple twisted pair cables are used to connect your Stride 400 Series network. Special care is required when setting up a network. If you are not sure of your needs, contact your nearest Stride dealer or Stride Micro directly. We will be happy to answer any additional questions for you.

CABLES

Stride Micro has taken extra care to make our cables both easy to use and comprehensive. The RJ-11C shielded modular phone jacks look the same as the typical telephone connector, the only difference is the wiring. Besides providing the most popular cables, Stride Micro has added a universal adaptor kit that will make cable connections easy. The universal adaptor kit is actually an interface between a standard Stride terminal and your peripheral device. This interface can easily be adapted to fit any six-wire configuration. Also included in the kit is an extraction tool to allow for simple modifications to the configuration you have chosen. The universal adaptor kit makes cabling quick and easy and helps you avoid costly special orders.

DK0002	Dysan double-sided, double-density, soft-sectored diskettes (Box of 10)	$ 45.00
PH0057	3M, 45M byte data cartridge	35.00
PH0056	3M, 60M byte data cartridge	45.00
DK0003	Datalife head cleaning kit, by Verbatim	19.00
DK0005	Datalife replacement cleaning diskettes	27.50
DK0007	80-Track Dysan diagnostic disk	65.00
DK0048	Catseye alignment disk	65.00
CC0130	5' Stride terminal cable	25.00
CC0131	10' Stride terminal cable	30.00
CC0132	25' Stride terminal cable	40.00
CC0133	50' Stride terminal cable	50.00
CC0134	100' Stride terminal cable	60.00
CC0135	200' Stride terminal cable	90.00
CC0136	5' Stride to Hayes modem cable	44.00
CC0137	10' Stride to Hayes modem cable	50.00
CC0138	6" Stride universal adaptor kit	30.00
CC0025	10' Parallel printer cable	44.00
CC0026	25' Parallel printer cable	52.00
CC0140	7' Stride-Omninet drop cable	10.00
CC0141	15' Stride-Omninet drop cable	15.00
CC0142	Omninet bus cable (cost per foot)	.20
PH0060	Network tap	10.00
PH0061	Active junction box	150.00
RS0029	5 Terminators (100 OHM Resistors)	2.00

D O C U M E N T A T I O N

Stride has always enjoyed a positive reputation for producing a wealth of documentation complete with full technical information. Recent updates have added additional elements of user friendliness to that mix, and now Stride documentation is not only drawing praise from engineers and developers but from the general public as well.

A complete set of documentation (including "Liaison Operating System Manual" and Volumes I and II of the "Stride Owner's Manual") is supplied with all Stride systems.

Two supplementary publications are worthy of notation: "In Stride" magazine, provided monthly for one year upon the return of a completed Registration Card and available thereafter by subscription; and "Personal Computing with the UCSD p-System", an excellent primer for those new to this popular operating system.

Additionally, Stride provides a number of excellent manuals as aids to other operating systems, languages and applications.

DC0054	**Stride Software Directory**	**$ 7.50**
ML0011	**In Stride magazine subscription (12 mos)**	**$ 24**
DC0085	**Liaison Operating System manual**	**$ 20**
DC0086	**Stride Owner's manual Volume I**	**$ 20**
DC0087	**Stride Owner's manual Volume II**	**$ 20**
DC0106	**p-System IV.2 Program Development manual**	**$ 20**
DC0103	**p-System IV.2 Internal Architecture manual**	**$ 20**
DC0117	**Liaison Tool Kit manual**	**$ 15**
DC0104	**p-System IV.2 Application Development manual**	**$ 15**
DC0105	**p-System IV.13 & IV.2 Assembler manual**	**$ 15**
DC0068	**p-System IV.13 Internal Architecture manual**	**$ 35**
DC0069	**p-System IV.13 Application Development manual**	**$ 52**
DC0112	**MANTRI Chess manual**	**$ 7.50**
DC0055	**Personal Computing with the UCSD p-System**	**$ 28**
DC0088	**UCSD Pascal Handbook**	**$ 32**
DC0003	**Motorola 68000 User's manual**	**$ 12**
DC0029	**Introduction to Pascal, Zaks**	**$ 32**
DC0030	**Pascal Handbook**	**$ 35**

QUALITY BY DESIGN

Stride Micro continues the innovative practice of using proven technologies to deliver performance and quality found only with much larger manufacturers. Every Stride system is fully inspected and tested for dependable operation before it leaves the factory.

The disk drives, logic boards, power supplies, PROMs, RAMs, fans and all of the electronics of our equipment are visually checked and electronically tested individually when they arrive at Stride to insure they work when they reach you.

At Stride, the real quality of our products begins with the design. Our goal is nothing short of 100% reliability.

In the highly competitive business world, the demand for reliability is paramount. If a multiuser system fails, the activities of a department or an entire company could be interrupted. We do everything we can to avoid this happening. It begins with a solid and reliable design. And it's backed by a company-wide philosophy of support.

Our quality control group has the ability to handle a complete range of critical disciplines: electronic systems to verify product performance; control systems for manufacturing consistency and continuous testing to validate long-range reliability.

Microcomputer systems generally enjoy an excellent reputation for reliability, because the components themselves are manufactured under strict standards of quality.

If service is ever required on your Stride Micro system, it is readily available either directly from Stride or from one of our Authorized Service Center Dealers, who have been trained by Stride Micro in Reno, Nevada.

WARRANTY

All Stride microcomputer hardware is covered by a limited 90-day Warranty. Extended warranties are available as listed below. (Extended warranties must be purchased within the initial 90-day warranty period.)

Extended warranty pricing is calculated by the percentage of the total suggested retail price of the system (including all options.) Additions to the system must be warranted separately. The chart below indicates the percentages that apply to each warranty period.

STRIDE 420/440/460

1-Year extension	**WR0014**	**8%**
2-Year extension	**WR0015**	**16%**
3-Year extension	**WR0016**	**24%**

SAMPLE SYSTEM CONFIGURATIONS

There are many different ways to configure a Stride Micro computer system. The following examples should be viewed as guidelines in your product planning only. Stride recommends that you consult your nearest Stride dealer or Stride directly to determine your final system configuration.

Single-User Stride System — This system is typically used as a dedicated industrial controller. It is the minimum configuration supported by Stride Micro.

Stride 420 with one 640K	
Floppy Disk Drive	**$ 2,900**
Stride Terminal	
(5' Cable Included)	**590**
Total	**$ 3,490**
Per User Cost	**$ 3,490**

Two-User Stride System - This system is a typical two-user system expanded to 512K bytes of RAM to allow for Stride's Multiuser which comes standard with every Stride system.

Stride 420 with one 640K	
Floppy Disk Drive	**$ 2,900**
2nd 640K Floppy Disk Drive	**500**
Expansion to 512K bytes	**400**
Two Stride Terminals	**1,390**
Okidata Microline Printer	
(80 CPS)	**450**
Cables	**55**
Total	**$ 5,695**
Per User Cost	**$ 2,848**

Single-User Stride Hard Drive System - This system is typically a single-user system used as a dedicated industrial controller or as a single-user workstation.

Stride 440 with one 640K	
Floppy Drive and a	
10M byte Hard Disk Drive	**$ 5,900**
Stride Terminal	
(5' Cable Included)	**590**
Total	**$ 6,490**
Per User Cost	**$ 6,490**

Seven-User Stride System - This system allows for seven different users to work in a multiuser environment. It has been expanded to 1M byte of RAM to allow for multiuser which is standard on every Stride microcomputer.

Stride 440 with one 640K	
Floppy Disk Drive and 1	
10M byte Hard Disk Drive	**$ 5,900**
Expansion to 1M byte RAM	**1,200**
Seven Stride Terminals	**4,130**
Okidata Microline Printer	
(200 CPS)	**1,350**
Cables	**290**
Total	**$ 12,870**
Per User Cost	**$ 1,839**

Fourteen-User Stride System - This system allows for as many as fourteen users to utilize the system simultaneously in a multiuser environment. It has been expanded to 2M bytes of RAM allowing for the multiuser capabilities which are standard on every Stride microcomputer.

Stride 440 with one 640K	
Floppy Disk Drive and a	
10M byte Hard Disk Drive	**$ 5,900**
Expansion to 2M bytes of RAM	**2,800**
Fourteen Stride Terminals	**8,280**
Okidata Microline Printer	
(200 CPS)	**1,350**
Cables	**570**
Total	**$ 18,880**
Per User Cost	**$ 1,348**

How to Order Stride Micro Products

It's easy to order your complete Stride Micro system or any of the other items listed in this catalog. Simply follow the steps listed below.

Step 1. Carefully examine the catalog to determine your exact needs.

Step 2. Contact the nearest Authorized Stride Micro Dealer in your area. A complete listing may be found on Page 28.

Step 3. If your local Stride dealer is unavailable, please feel free to call one of the Stride Regional Offices directly.

- In the Northeast, the number is 617-229-6868
- In the South, the number is 214-392-7070
- In the West, the number is 702-322-6868

Step 4. Enjoy your powerful Stride microcomputer!

All prices and policies listed in this catalog are RETAIL ONLY and are valid until superceded. Payment may be made by check, money order or VISA/MasterCard. Terms are prepaid, COD, or net 10 days on approved credit. All shipping charges will be Freight Collect from Reno, NV. Nevada residents must add 6% saled tax. Massachusetts residents must add 5% sales tax. Residents of Texas must add the appropriate local and state sales tax.

Prices are subject to change without notice. We reserve the right to correct typographical pricing errors.

Qualified educational institutions are eligible for a 20% discount on Suggested Retail prices on microcomputer systems and RAM memory (Part No. prefixes SC or IP only). Authorized purchase order is required.

A U T H O R I Z E D

Alabama

UNITED CONTROLS CORPORATION
200 Sparkman Drive
Huntsville, AL 35805
(205) 837-6144

Alaska

PROFLEX SOFTWARE
1601 E. 84th Ct. #103
Anchorage, AK 99507
(907) 344-5432

California

LAMAR INSTRUMENTS
2107 Artesia
Redondo Beach, CA 90278
(213) 374-1673

COMPUTERWORKS
1000 E. Walnut, Ste. 119
Pasadena, CA 91106
(818) 792-4044

BUSINESS COMPUTER SYSTEMS
3431-F Pomona Blvd.
Pomona, CA 91768
(714) 594-5776

GSI
8765 Aero Dr., #320
San Diego, CA 92123
(619) 565-1513

AJM DATA SYSTEMS
3111 E. Main Street
Ventura, CA 93003
(805) 654-0436

NETWORK NEXUS
3 Twin Dolphin Drive, Ste. #220
Redwood City, CA 94065
(415) 591-2101

SIERRA MICRO SYSTEMS
90 Mission Drive, Suite 9
Pleasanton, CA 94566
(415) 846-8557

ANGELWARE COMPUTERS
170 Rancheria
Kentfield, CA 94904
(415) 461-9500

ALBERTSON DATA MANAGEMENT
2333 Pacific Avenue
Stockton, CA 95204
(209) 941-0220

LEWIS & CLARK COMPUTER SYSTEMS
160 Franklin Street, Suite 205
Oakland, CA 94607
(415) 444-7441

MICRO STRATEGIES
1648 Francisco Street
Berkeley, CA 94703
(415) 540-0188

Colorado

HICOUNTRY DATA SYSTEMS, LTD.
148 Chase Stone Center/Antlers Plaza
Colorado Springs, CO 80903
(303) 634-8088

Connecticut

MULTI-BUSINESS COMPUTER SYSTEMS
28 Marlborough Street
Portland, CT 06480
(203) 342-2747

Florida

CHAD DATA SYSTEMS, INC.
1241 W. Tharpe Street, Suite 16
Tallahassee, FL 32303
(904) 562-3524

ELECTRONIC ASSOC. COMMUNICATION
4701 N.E. 36th Avenue
Ocala, FL 32670
(904) 732-7987

VRA COMPUTER SYSTEMS
12930 North A1A
Vero Beach, FL 32963
(305) 589-4664

CLM SYSTEMS, INC.
3654 Gandy Boulevard
Tampa, FL 33611
(813) 831-7090

Georgia

MECHANOSOFT
1132 W. Peachtree, Ste. 220
Atlanta, GA 30309
(404) 873-6175

Illinois

DEVAN COMPUTER SYSTEMS
8550 W. Bryn Mawr, #301
Chicago, IL 60631
(312) 399-9087

Iowa

MEMORY BANK OF BETTENDORF
1730 Grant Street
Bettendorf, IA 2722
(319) 242-2755

Maryland

BENNER DATA SERVICE, INC.
Route 2, Box 180
Centreville, MD 21617
(301) 758-0381

INSTITUTE FOR HUMAN DEV.
2403 Talbot Road
Baltimore, MD 21216
(301) 664-2454

M.A. SMITH & ASSOCIATES
5616 Park Heights Avenue
Baltimore, MD 21215
(301) 664-2890

Massachusetts

MICRO STRATEGIES, INC.
359 Village Street
Millis, MA 02054
(617) 376-4526

Michigan

OFFTEC
131-133 Caledonia NE
Grand Rapids, MI 49505
(616) 451-8561

Nevada

D & G COMPUTERS
969 W. Moana Lane
Reno, NV 89509
(702) 825-0220

D & G COMPUTERS
1987 N. Carson Street, Ste. 15
Carson City, NV 89701
(702) 885-0220

New Hampshire

MYRIAD COMPUTER SERVICES CORP.
222 State Street
Portsmouth, NH 03801
(603) 436-6769

New Mexico

COMPUTER LEARNING
540 Chama NE #11
Albuquerque, NM 87108
(505) 256-1631

New York

MASTERBYTE COMPUTERS
19 West 34th Street, Ste. 815
New York, NY 10001
(212) 570-0770

ELIACOMPUTER
1510 East 4th Street
Brooklyn, NY 11230
(212) 336-4109

SOFTWARE AND SUPERMICROS, INC.
366 North Broadway, Suite 328
Jericho, NY 11753
(516) 681-3168

MICRO CLINIC SERVICE NETWORK, INC.
640 New Loudon Road
Latham, NY 12110

North Carolina

DIGITZ
3015 Hillsborough Street
Raleigh, NC 27607
(919) 828-5227

BENTLEY, INC.
8100-H Arrowridge Blvd.
Charlotte, NC 28210
(704) 523-1677

Ohio

PSLI BUSINESS SYSTEMS, INC.
4462 Janine Court
Dayton, OH 45424
(513) 236-2277

D E A L E R L I S T

Oklahoma

MICRO BUSINESS ASSOC.
4101 Classen Blvd., Suite B
Oklahoma City, OK 73118
(405) 525-3292

Oregon

MARITIME INFOSYSTEMS, LTD.
6660 Reservoir Road
Corvallis, OR 97333
(503) 929-2552

THE COMPUTER PLACE
1634 Ashland Street
Ashland, OR 97520
(503) 488-2757

THE COMPUTER PLACE
2237 No. El Dorado
Klamath Falls, OR 97601
(503) 882-9603

Pennsylvania

MARKETLINE SYSTEMS, INC.
975 Jaymore Road
Southampton, PA 18966
(215) 355-5400

INTERGRATED ELECTRONIC TECH.
13 Bellvue Avenue
Penndel, PA 19047
(215) 752-4100

HALMAR ASSOCIATES
2465 N. 50th Street
Philadelphia, PA 19131
(215) 477-1177

INTERNATIONAL AUTOMATION, INC.
Suite 410 Mellon Bank Building
New Kensington, PA 15068
(412) 335-9815

SOLUTIONS COMPUTER CENTER
33 N. Main Street
Doylestown, PA 18901
(215) 345-4411

South Carolina

AESTHETIC DESIGN & INVENTION
1326 Ben Sawyer Boulevard
Mt. Pleasant, SC 29464
(803) 884-3330

Texas

CENTRAL SUPPLY
West Texas State University
Canyon, TX 79016

MICRO MART
3415 Westminister, #100
Dallas, TX 75205
(214) 361-7831

PLUS COMPUTERS
508 Expressway 83
McAllen, TX 78501
(512) 687-8080

Utah

MENTOR
847 South 650 East
Bountiful, UT 84010
(801) 969-7041/298-8518

Virginia

SOFTHINK, INC.
400 N. Washington Street, #208
Falls Church, VA 22046
(703) 241-7761

MEC SYSTEMS CORPORATION
10629 Crestwood Drive
Manassas, VA 22110
(703) 368-8100

Washington

NORTHWEST COMPUTERWORKS, INC.
9725 S.E. 36th, #312
Mercer Island, WA 98040
(206) 232-6343

Wisconsin

MICROSERVE
438 Westgate Mall
Madison, WI 53711
(608) 271-8685/273-4030

Wyoming

IOTC, INC.
910 Sully
Laramie, WY 82070
(307) 721-5818

MOUNTAIN STATES MICROSYSTEMS
2526 Park Avenue
Laramie, WY 82070
(307) 742-3178

Stride Micro products are also distributed in the following countries:

CANADA
ARGENTINA
CHILI
COLUMBIA
PERU
PUERTO RICO
URUGUAY
BENELUX
ENGLAND
FINLAND
FRANCE
ICELAND
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PORTUGAL
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WEST GERMANY
EGYPT
GREECE
ISRAEL
SAUDI ARABIA
TURKEY
NIGERIA
SOUTH AFRICA
AUSTRALIA
NEW ZEALAND
HONG KONG
MALAYSIA
PEOPLE'S REPUBLIC OF CHINA
SINGAPORE
TAIWAN
PAKISTAN
JAPAN
SOUTH KOREA
INDONESIA

Stride Micro is seeking dealers that are looking to the future. We're looking for companies with real potential, those with a solid foundation for growth. We want companies with top-notch sales people and technical support.

For more information contact Stride Micro at:

Reno— (702) 322-6868
Boston— (617) 229-6868
Dallas— (214) 392-7070

Stride Micro
Corporate Offices
4905 Energy Way
Reno, Nevada 89502
702-322-6868
TWX 910-395-6073

Eastern Division
15 New England Executive Park, Suite 120
Burlington, MA 01803
(617) 229-6868

Southern Division
14755 Preston Road, Suite 600
Dallas, TX 75240
(214) 392-7076