# STRIDE 680MP

The multiprocessing, multiuser Stride 680MP is the top of the line in the Stride 600 Series of supermicros. It is the practical choice for the business that needs high performance today and a maximum reserve of power to sustain future growth. The versatile Stride 680MP fills a unique niche among multiprocessors. Like some others, the 680MP has ample processing power for a class of budding programmers as they grind through compiler projects. It doesn't strain when everyone is working in a busy office.

But it doesn't cost a fortune. With its low price and incremental approach to expansion, the Stride 680MP is cost-effective for any environment that plans to grow.

With one CPU, the Stride 680MP is a fast, powerful uniprocessor system with up to 48 serial ports. As demands increase, the Stride 680MP out-paces other multiprocessing systems by running additional low-cost CPU boards in parallel. With no loss of your investments in training, software, or hardware, the Stride 680MP doubles or triples in power and capacity.

The 680MP adheres to industry standards like TCP/IP, NFS, and both VMEbus and SCSI bus architectures for exceptional configuration flexibility. Mass storage, custom hardware, and extra peripheral support is no problem. Network options range from inexpensive serial connections to high-speed VMEbus cards. Resources are exchanged with other systems transparently.

For flexibility in applications, the Stride 680MP is NCR Tower® compatible. No changes are required to install and run one of the world's widest application software bases. Application programs developed for NCR run on Stride, but with a significant difference: Stride runs them faster.

UniStride™, MicroSage's own advanced UNIX® System V.2 port, contributes to Stride's superior I/O handling and multiuser response. It includes all standard System V features, demand paging, many enhancements from Berkeley 4.3BSD, and dozens of utilities and packages from users and the public domain.

We back each Stride 680MP with years of software and hardware expertise. Since 1982, MicroSage products have excelled in higher performance at lower prices. We have over 10,000 installations serving a wide range of industries around the world today.

We offer an attractive upgrade path to the 600 Series for Stride 400 Series users. Call your Stride dealer for complete details



STRIDE *A product group of*
*MicroSage Computer Systems, Inc.*
*680 So. Rock Blvd., Reno, NV 89502*
*702 / 322-6868*

*Building on the strength of 80,000 users!*

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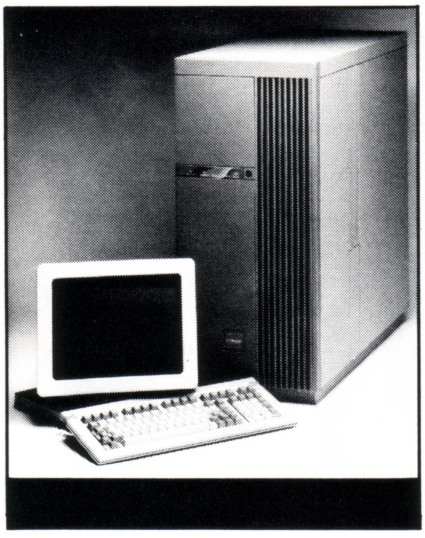

The Stride 680MP is the top of the line in high-performance 600 Series. A multiprocessing, multiuser supermicro, the 680MP is the practical solution for planning tomorrow's growth on today's budget. Its low cost and incremental approach to expansion place the 680MP in a uniquely accessible niche among the multiprocessors.

## The mSBC CPU

The mSBC (multi-function Single Board Computer) is a fast, cost-effective 68020 CPU. In the Stride 680MP, it supports up to 32M bytes of fast DRAM, 48 serial ports, a 60M or 150M byte SCSI high-speed tape drive and up to 1244M bytes of SCSI internal hard disk storage.

A Stride 680MP equipped with a single mBSC is an extremely efficient high-power uniprocessor. Its fast overall response rate delivers superior multiuser and I/O handling. It is also an untapped reserve for future expansion.

## Multiprocessing Power

The Stride 680MP out-paces increasing demands for power and capacity by running additional mSBC CPUs in parallel. Programs and data are distributed among the CPUs, which communicate at high speed over an industry standard VMEbus. The system operates on multiple tasks concurrently, boosting power and throughput substantially.

The Stride 680MP protects prior hardware and software investments as it expands in increments to match growing demands. Each additional CPU contributes its full complement of processing power, plus up to 48 more serial ports. Up to three mSBC CPUs can be installed in each Stride 680MP.

## NCR Compatibility

The entire Stride 600 Series is NCR Tower® compatible. No changes are required to install and run one of the world's widest application software bases, including word processing, spreadsheets, office automation packages, communication programs, business graphics packages, and many others. Almost all applications developed for NCR run on Stride, but with one significant difference: Stride runs them faster.

## Advanced UNIX®

Each 600 Series system includes UniStride™, MicroSage's own UNIX® system V.2 port.. UniStride™ includes all standard System V features, many enhancements from Berkeley 4.3BSD, demand paging, and dozens of utilities and packages from users and the public domain. Optimized for superior I/O handling and multiuser response, UniStride™ is well equipped for both business and technical applications.

## Open System with Standard Bus Architectures

For flexibility in peripherals and special hardware, the Stride 680MP supports both VMEbus and SCSI bus architectures. The full 32-bit VMEbus has all seven interrupt levels, all signals, and all connectors for easy integration of third-party VMEbus boards, including double-sized Eurocard VME boards. External SCSI I/O devices plug directly into the back panel. Multiple SCSI drives can operate in parallel, enhancing throughput and file server performance.

## Network Versatility

Network options for the Stride 680MP span the full range from inexpensive low-speed serial connections to high-speed VMEbus cards. The preferred local area network for UNIX® systems is Ethernet, with a transfer rate of 10M bytes per second. Standard TCP/IP protocol promotes high-speed communications with a wide variety of installations. The Stride 680MP exchanges resources with other systems transparently through NFS, regardless of differences in hardware and operating systems.

## Mass Storage Options

A 60M or 150M byte high-speed ¼" cartridge tape drive is available on each 600 Series supermicro. There is also ample room in the Stride 680MP for a 3.5" microfloppy drive and a 5.25" floppy drive. Since each mSBC CPU can support seven SCSI devices, systems can include a variety of external storage devices as well.

## Reliability

Built-in safeguards reinforce Stride's inherently dependable design. Individual surge protection circuits shield each serial line from damage from static discharges. Built-in sensors monitor the +5v, +12v, −12v supplies, the battery back-up voltage, the optional standby battery voltage, the temperature and air flow. The operating system periodically reads the sensors, and reports potential problems before major repairs become necessary.

## Established Industry Expertise

Since their inception in 1982, MicroSage products have maintained a solid reputation for higher performance at lower prices. We have over 10,000 installations world-wide today.

## Upgrade Path

MicroSage offers an attractive 680MP upgrade path for Stride 400 Series computers. Call your Stride dealer for complete information.



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## CPU/RAM FEATURES

- 16Mhz 68030 CPU standard (MMU included in 68030)
- 4M-32M bytes of 100ns parity RAM (1 wait state)
- 128K bytes zero wait state static RAM
- Battery backed-up real-time CMOS clock. Second 1Mhz clock readable to 1us resolution
- 32K bytes of battery backed-up CMOS RAM
- 68881 hardware floating point unit (opt.)

## SERIAL PORT FEATURES

- 16-48 RS-232C serial ports
- 38.4K baud max. rate on all ports
- CTS, RTS, CD, DSR, RI signals supported
- 8-pos DuPont Latch-N-Lok shielded connectors
- Integrated serial port protection hybrid circuit for all ports

## VMEbus INTERFACE

- P1, P2, and P3 connectors
- Single, Double, or Triple width Eurocards
- Many third-party products

## SCSI INTERFACE

- 91M to 1244M bytes SCSI internal hard disk storage, external SCSI connector allows 2-3 additional storage devices
- ½" mag tape supported
- 150M byte SCSI high-speed ¼" tape drive available

## SCSI FLOPPY ADAPTOR

- Reads/writes/formats a variety of configurations for three media sizes
- 3.5" microfloppy drives supported DSHD 2.0M unformatted, 1.66M formatted
- 5.25" DSDD floppy drives supported DSDD 320/640K formatted
- Intelligent—on-board CPU & software

## SERIAL TO PARALLEL PORT

- Centronics compatible, output only

## MECHANICS & ENVIRONMENT

- 400W switching power supply
- 70A +5v capacity
- 90-132 VAC or 180-264 VAC, 47-63Hz
- Temperature and voltage monitoring
- Relative Humidity: 20 to 80% noncondensing
- Ambient Temperature 10/40 C (or 50/104 F)
- Complies with Part 15 of FCC rules for a Class A computing device