STRIDE 420

STRIDE™
680 SOUTH ROCK BLVD., P.O. BOX 30016, RENO, NV 89520-0016
(702) 322-6868, TWX 910-395-6073

One Board One Family

The Stride 420 is the entry-level system of the Stride 400 Series product line. It is a true high-performance microcomputer offering exceptional value with attractive pricing. Utilizing a proven single-board, highly-integrated approach, the 420 provides affordable yet powerful processing for business, scientific and process control computing applications.

Designed around the popular VMEbus architecture, the Stride CPU board in the 420 achieves maximum performance and flexibility from the Motorola 68000 microprocessor, running at 12 MHz with zero wait states on all RAM (1M byte is standard). This basic board provides numerous features that are either options, or simply not available on competing systems.

INTEGRATED DESIGN

With Stride's advanced integrated design, system options or their interfaces are engineered directly on the main system board to reduce overhead and increase performance.

The single CPU board of the 420 supports multiple users (four RS-232C serial ports and one Centronics bi-directional parallel port are standard) making the 420 an excellent low-cost multiuser system. While the 420 does not support a hard disk option, it does allow the addition of a second double-density floppy diskette drive for a total of 1.2M bytes of storage.

FLEXIBILITY

Flexibility is the true key to the entire Stride 400 Series, and the 420 is one more example. Representing the base of the product family, it is 100% compatible with all other Stride systems. It truly represents a perfect balance between low cost and supermicro power. Options include memory expansion to 2M bytes of RAM, a floating point processor (NS 32081), a second 640K byte floppy, an on-board Local Area Network (LAN) providing communication with up to 63 computers and, most importantly, access to the growing line of hundreds of VME add-on products.

Using the advanced VMEbus design, the 420 can also support high-performance plug-in options such as an IEEE-488 interface with DMA. This permits the 420 to serve as an excellent system for scientific and process control applications.

With LAN capability easily added, the 420 becomes one of the most powerful workstations available, but remains priced like a personal computer.

SIZE

Considering its many capabilities, the 420 is further enhanced by its small physical size. Just slightly taller than a standard half-height disk drive, the entire 420 fits under most terminals. It is an excellent system for controller applications with minimal space requirements.

All this power and flexibility from such a small desktop system make the Stride 420 an excellent selection in numerous operating environments from PDOS to p-System, Pascal to FORTRAN.

EXCLUSIVE FEATURES

Stride Micro exclusives include 38.4K baud rates for all serial ports to provide unmatched response times. This is two or four times the rates supported by comparable systems. This high-speed communication capability will be particularly appreciated in multi-terminal arrangements and with applications stressing responsive screen I/O.

There's also an extended ROM area ideal for OEM and technical computing applications. This ROM can be configured to store up to 128K bytes of program or data. For real-time applications, a user-accessible battery-backed CMOS RAM area is also provided.

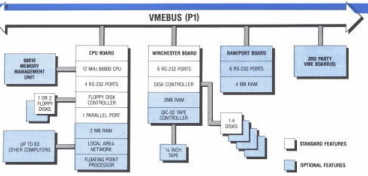
PRODUCT ACCEPTANCE

With an installed base of more than 7,000 microcomputers since 1982, Stride Micro has established a reputation, backed by satisfied customers and editorial endorsements, for providing exceptional price/performance. It is a reputation that was built around superior microcomputers like the Stride 420.

VMEBUS VS. MULTIBUS II

Released in 1981, the VMEbus has become the 32-bit bus standard throughout the world for high-performance architectures. It supports transfer rates as high as 57M bytes per second using its asynchronous approach (no multiplexing is required).

The VMEbus is excellently matched to today's high-speed, high-performance microprocessors and is not limited to just a 10 MHz clock rate, as is Multibus II. Overall, the VMEbus permits significantly higher total system throughput than Multibus, yet it comes in a smaller package. Hundreds of VMEbus cards are already on the market, each nearly 40% smaller than equivalent Multibus add-ons.



STRIDE 420 FEATURES AND SPECIFICATIONS

CPU FEATURES

- 12 MHz 68000 CPU standard
- 1or 2M byte of no wait-state 120ns parity RAM.
- Battery backed-up real-time clock
- 4K bytes of battery backed-up CMOS RAM
- 5¼" 640K byte floppy disk controller for DSDD floppies, 2nd drive (opt.)
- Centronics compatible bi-directional parallel printer port
- Local Area Network (LAN) supported by on-board Omninet chip set, low-cost connectors and twisted pair cable (opt.)
- NS32081 Floating Point Unit (FPU math chip) (opt.)

SERIAL PORT FEATURES

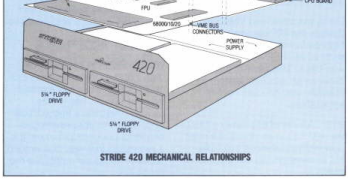
- 4 RS-232C serial ports standard.
- All serial ports support up to 38.4K baud
- CTS, RTS and CD signals supported
- Secure snap-lock RJ11-C "phone" connectors.

VME BUS INTERFACE

- One slot for optional Stride card or single or double-width Eurocard
- High-speed low-cost monochrome graphics board (784 x 325 resolution)
- IEEE-488 (GPIB) controller

MECHANICS & ENVIRONMENT

- 65W switching power supply
- Size: height = 10.0cm (4.3")
  width = 31.5cm (12.6")
  depth = 42.5cm (16.7")
- Weight = 6Kg to 7.5Kg (or 13 to 16 lbs.)
- Ambient Temperature: 10/40 C (or 50/104 F)
- Complies with Part 15 of FCC rules for a Class A computing device.



STRIDE 420 MECHANICAL RELATIONSHIPS

Utilizing the flexible VMEbus and highly-integrated system boards, the Stride 420 is a model of design efficiency. All major components and most interfaces for optional features are provided on one major board.

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