DS90-10

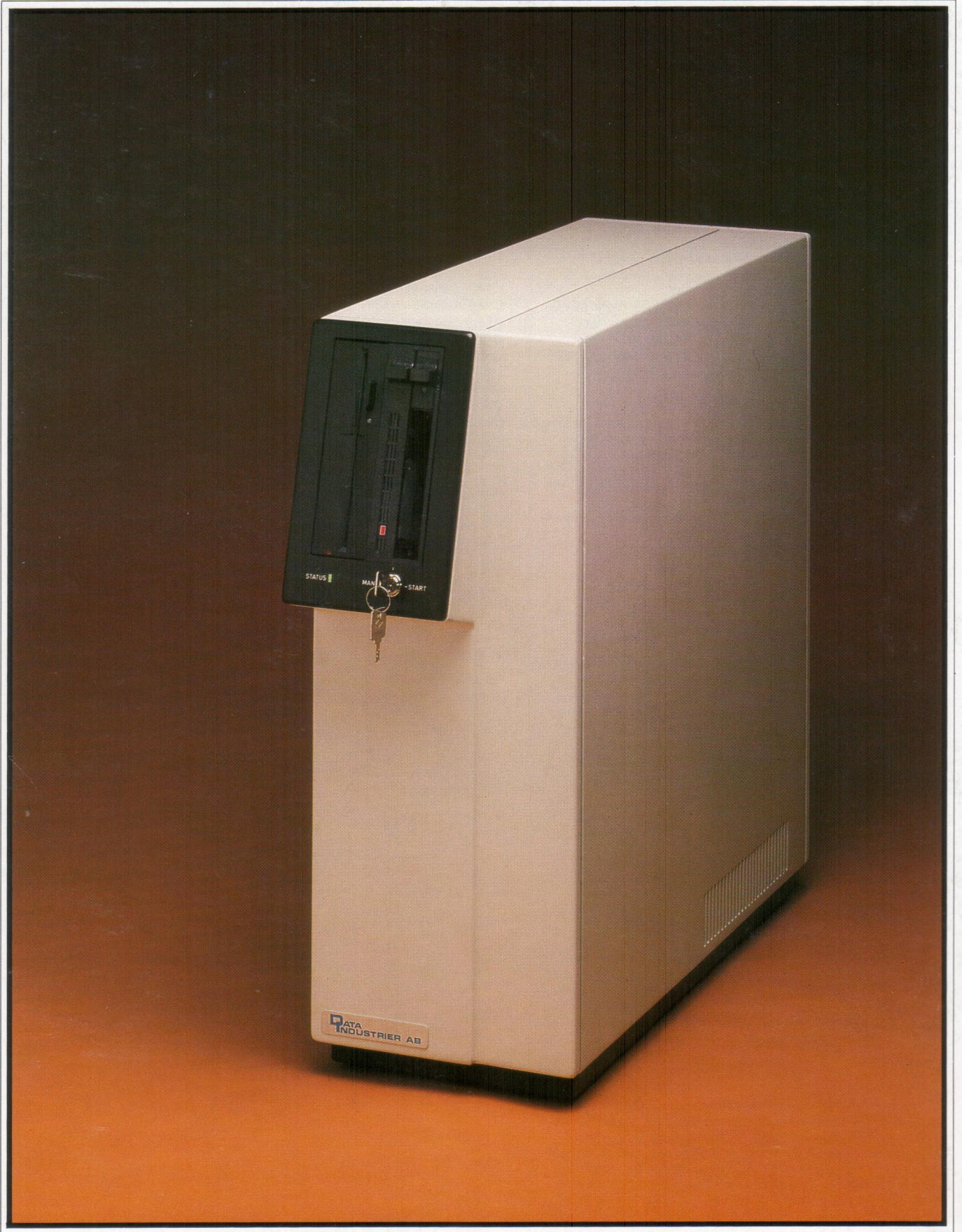**HIGH PERFORMANCE UNIX SUPERMICRO FOR COMMUNICATION AND GENERAL BUSINESS APPLICATIONS**

A NEW APPROACH TO POWER AND SPEED ...

DS90-10 is a new 16/32 bit UNIX/D-NIX multi-user, multi-tasking supermicro from the drawing boards of DIAB, the Swedish innovation company that produces the top-ranked DS90-00. The new DS90-10 is the result of a new design approach which leads to smaller dimensions and higher speed.

... AT A HARD-TO-BEAT PRICE

The DS90-10 is designed for general business and communication applications and comes in a neat package which fits under an ordinary desk.

Combining high performance with economy, the DS90-10 is a true state-of-the-art machine featuring the powerful Motorola 68010 16/32 bit processor operating at 10 MHz. The standard 2 MByte ECC memory can easily be expanded to 4 MByte. The system supports virtual memory. The DS90-11 has four RS232 ports and expansion to eight or twelve ports is easily done. In fact, a special expansion boards allow for even further ports. The standard configuration also offers four DMA channels, two SCSI channels and a VME bus interface.

The option list covers further RS232 ports, a floating point processor, interfaces to intelligent I/O systems and further mass storage handling.

The memory of the DS90-10 comprises a 20 - 120 MByte Winchester and an optional 1/4″ back-up streamer tape station. Included here is also a 5 1/4″ 640 kbyte floppy disk. Other memories, such as larger disks (SMD) and 1/2″ magnetic tapes will also be handled by the system.

D-NIX IS PART OF THE CONCEPT

The D-NIX real time operating system is an in-house DIAB product which is fully compatible with UNIX system V. D-NIX has, however, a number of improvements over the standard UNIX version, for instance better real time performance thanks to a much smaller kernel. The real time performance of the D-NIX operating system will certainly be appreciated when running the system in the multi-user mode.

The D-NIX and the DS90-10 make a perfect system for any application involving real time processing. The DS90-10/D-NIX combination will also prove to be a development system with almost unlimited potential.

PROVEN DATA COMMUNICATION CAPABILITY

With DIAB's 10 year background in the data communication field, the DS90-10 is the right system in a wide range of communication applications. Of course, the DS90-10 can communicate with other computers. And the DS90-10 can be employed to form the link between other computers, e.g. a gateway from a Univac to an IBM.

Furthermore, communication over LANs and WANs is supported. As are a number of communication protocols such as those given in the specification.

SOFTWARE OFF THE SHELF — TODAY

The DS90-10 comes with the ingenious D-NIX real time operating system (including more than 80 utilities) as standard.

The DS90-10 is a multi-lingual machine and program development may be performed in a vast range of languages.

Software packages available off the shelf are the multi-module MIMER RDBMS, the 4th generation application tool box NECTAR, spreadsheet programs and advanced word processing packages. CP/M and MS-DOS file handlers can also be supplied. Further business programs are rapidly being implemented on the DS90-10.

A COMPUTER FOR THE INDUSTRY AS WELL

In fact, the integration capability versus industrial applications have been built into the DS90-10 from the very beginning. The VME interface makes it easy to use the computer in a process control or a data acquisition system. The technology of the DS90-10 is also available in the 19″ two unit DS 90-11, a computer designed for heavy duty industry applications.

GENERAL SPECIFICATIONS

Unit dimensions: $540 \times 200 \times 600$ mm ($H \times W \times D$)
Operating environment: 10—35 °C
Line voltage: 220 VAC, 47—440 Hz /115 VAC, 47—440 Hz
Disk storage: 20—120 MByte
Floppy disk drive: 5 1/4″, 640 kbyte
Memory back-up: 1/4″ tape streamer (optional)

STANDARD SOFTWARE

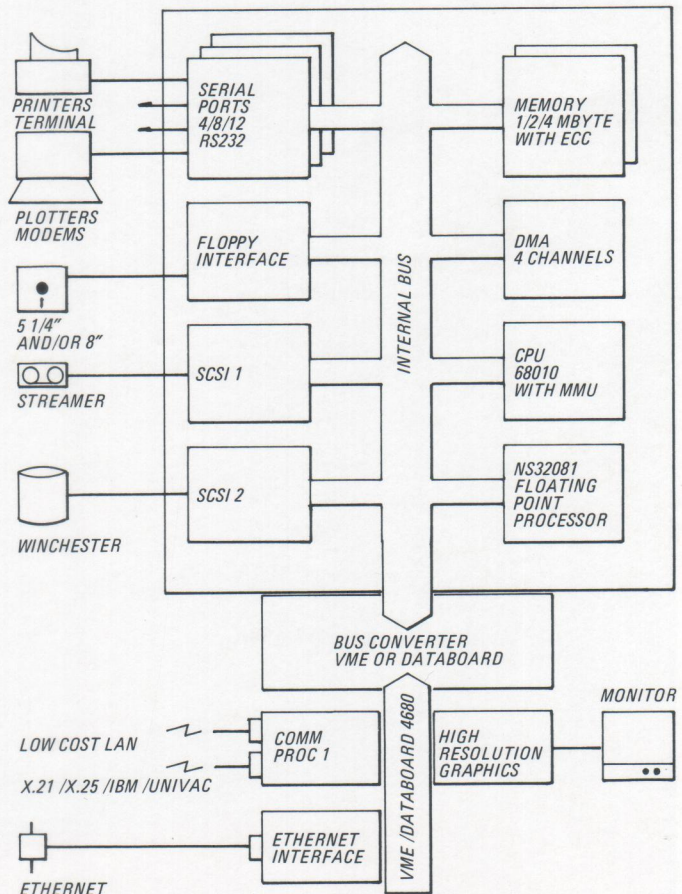D-NIX operating system

OPTIONAL SOFTWARE

Development packake: XENIX/UNIX system V.
Programming languages: D-Basic V, Validated Fortran 77, C, 68000 Assembler, Cobol, Pascal, Simula, APL, Cross Assembler Z80-8748, Z80 Emulator.
Application software packages: Multi-module MIMER relational database, 4th generation application tool box NECTAR, Q-CALC Spreadsheet, LEX68 Word processing. (CP/M and MS-DOS File handlers)

SUPPORTED COMMUNICATION PROTOCOLS

LANs: D-NET, Ethernet with TCP/IP and others. WANs: X25, X21 and others.
IBM3270SNA/BSC, IBM2780/3780 BSC, IBM3770 SNA, Univac UTS4000 and others.

STANDARD HARDWARE

CPU: Motorola 68010
Main memory: 2 MBytes (4 MByte optional)
MMU: No waitstate. Virtual memory (demand paging) supported.
I/O: 4 RS232/V24 ports (8, 12 or more optional). 2 separate buffered SCSI channels. 4 DMA channels (10 Mbits/sec). VME interface.

DATA INDUSTRIER AB