Nixdorf 8890 Series

New Product Announcement

Known primarily for its line of small business computers, Nixdorf Computer AG has entered the competitive IBM-compatible mainframe market with the introduction of their 8890 Series. Comprising two models differing in relative performance, memory capacity, and peripheral support, the 8890 Models 30 and 50 compete against the IBM 4331 and 4331-2.

Main memory can be expanded from 1024K to 2048K bytes in 512K byte increments on the Model 30, and from 1024K to 4096K bytes on the Model 50.

System architecture consists of a microprogrammed processor with independent processors handling I/O control and diagnostics. Internal communications over a central bus are at a rate of 9 megabytes per second; each I/O bus transfers up to five megabytes per second.

Like the CPU and main memory, the I/O system is modular, comprising six independent microprogram-controlled I/O processors handling fast and slow peripherals. The peripheral line includes floppy disk drives and card readers, magnetic tape units (800, 1600 and 6250 bpi), disk storage capacity of up to 4,560 megabytes, and a range of printers offering speeds up to 1200 lines per minute.

For teleprocessing, 16 lines are available supporting BSC and SDLC procedures, and 32 local VDU terminals can be connected.

Unlike the 8890/30, the 8890/50 operates with an instruction pre-processing unit, which overlaps instructions. Microprogramming supports the IBM/370 and, optionally, the Nixdorf 8870 instruction sets as well as the following operating systems: EDOS/VSE (Nixdorf's version of DOS/VS), EDOS/VSE, DOS/VS, DOS/VSE, VM/370, OS/VS1, and NIDOS/VSE.

In addition to offering virtual storage administration, the NIDOS/VSE operating system provides: expanded console support, partitioned data set libraries, data capture generators, a documentation system, I/O management, and a transient monitor. A TP monitor, TCP, is used for control of teleprocessing and multitasking. Also available is the Nixdorf DNB database system.

Applications software available includes packages for financial bookkeeping, wage and salary administration, purchase ledger, materials handling, order processing, and sales control, as well as a personal information system. Programming languages available are COBOL 68, COBOL 74, PL/1, FORTRAN, CPG, RPG, and Assembler/370.

An 8890/30 entry-level configuration with 1024K bytes of memory, 300-lpm printer, 70-megabyte disk drive, 160K-byte magnetic tape unit, and four VDU workstations costs about 364,300 DM— about 57,000 DM less than a comparable IBM 4331 system. Monthly rental on a one-year contract basis is 11,401 DM, and system software rental would add an additional 2500 DM.

Initially the 8890 will be marketed out of 60 offices in Germany by a new Compatible Information Services Division, and in time, Nixdorf will be selling the systems in all its world-wide markets. There are presently a few test-site installations in the U.S., and Nixdorf hopes to eventually build the systems there, if the American market provides enough volume.□

CHARACTERISTICS	IBM 4331-1	Nixdorf 8890/30	IBM 4331-2	Nixdorf 8890/50
Relative performance[1]	11	13	22	26
CPU purchase price (DM)	171,000 (1 MB)	174,300[2] (1 MB)	340,000 (1 MB)	344,000[3] (2 MB)
CPU monthly rental (DM)	4,500 (2 years)	4,861 (3 years)	10,000 (2 years)	9,328 (3 years)
Main memory (megabytes)	0.5-1.0	1-2	1-4	1-4
Cycle time (nanoseconds)	1300/4 bytes	500/4 bytes	N/A	500/4 bytes
Number of channels	1-2	3-6	1-2	3-6

[1] Based on a relative performance value of 45 for IBM 370/158-3.
[2] Including 3 I/O processors.
[3] Including I/O processors and instuction pre-processing unit.