

THE MEMOREX PRESS

A newspaper for Memorex employees

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Special Issue

Huge New Product Offering Launched



Memorex introduced the 2180-C 14-inch color display station (right) and the 2124-2E multifunction printer (left) for 3270 users during the largest product introduction in its history.

Memorex made the largest single new product announcement in its 25-year history in October. Key additions were unveiled to both IBM plug-compatible storage and communications product lines.

These new products represent the commitment of a vast amount of work by Memorex employees.

This special issue of the MEMOREX PRESS and NOG EXTRA are devoted to

these important product introductions. There are articles and photos of each new product and explanations of their features and market significance.

"We've now strengthened both storage and communications lines even further with state-of-the-art products shipping between now and first quarter," said Jack Scott, vice president of North American Operations. "This leaves no doubt that Memorex is a very serious contender for 1987 and beyond in all our competitive arenas."

Included in the announcement was the 3682 double capacity disk storage subsystem, scheduled for first quarter 1987 shipment, and an extended storage option (up to 2 gigabytes) for the 6880 solid state storage unit.

The announcement also includes a family of integrated, micro-to-mainframe workstation products, based on Sperry Corporation's AT-compatible microcomputers, along with the first offerings in a projected series of modular terminal products and a supporting printer.

The present announcement follows closely on the late September introduction of two storage and three communications products for the IBM System 34/36/38 marketplace. These small system products positioned the company as the only plug-compatible alternative supplying both storage and terminal/printer products to the fast growing System 3X market.

"Memorex is now the only plug-compatible vendor supplying peripherals to work with most IBM mainframes in the general business world," added Scott. "That's consistent with our stated purpose to supply everything in the computer room but the CPU."

"Many of these new products, in both the storage and communications areas, have been tested in the field, mainly through early ship programs. Comprehensive as this announcement is, it's still only a step in an ongoing process and the market can expect a continuing series of Memorex introductions."

Double Capacity Disk Drive Subsystem Formally Unveiled

The Memorex 3682 double capacity disk storage subsystem, a plug-compatible replacement for the IBM 3380-E series, has been formally announced.

The 3682 incorporates several significant performance-enhancing features and will first ship in limited quantities in mid-December, with volume shipments following in the first quarter of 1987.

"The 3682 rounds out Memorex's comprehensive line of direct access storage products, while setting the technological standards for our future generation drives," said Bill Etheredge, vice president of marketing. "We're taking orders now for our early 1987 shipment, placing us firmly in the availability ballpark with our competition."

3682 Configurations

A full string 3682 holds 20.16 gigabytes of data. It occupies slightly less floor space than a full string of Memorex 3680 (or IBM 3380) single-density drives holding half that amount. The minimum 3682 configuration consists of a Memorex 3685 string controller and one 5.04-gigabyte 3682 storage module. A full string combines one 3685 and four 3682 storage modules.

Each dual-ported 3682 module contains two 2.52-gigabyte head disk assemblies (third generation thin film head design) and four independently addressable actuators accessing 1.26 gigabytes apiece. Average access time is 17 milliseconds with a data

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NEW STORAGE PRODUCTS

3682 Debuts

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transfer rate of 3 megabytes per second, making the 3682 compatible with any current IBM or plug-compatible mainframe using a 3-megabyte channel.

The 3682 can also be used in conjunction with the Memorex 3888-23 disk cache storage control unit to achieve significant increases in performance for frequently used data.

Further Performance Features

The 3682 subsystem also incorporates Memorex's Maximum Availability Path Selection (MAPS) feature. With MAPS, while one actuator is busy, any one of the remaining 15 actuators in a string may be freely accessed to allow two simultaneous read/writes per string at the actuator level.

The 3682 is 34 inches wide, 32 inches deep, and 70 inches tall. The 3685 string controller is 14 inches wide, 32 inches deep, and 70 inches tall.



The Memorex 3682 double capacity disk storage device is expected to be shipped first quarter of next year.

6880 Solid State Product Capacity Expanded to 2 GB

A new Expanded Capacity Feature (ECF) for its 6880 Solid State DASD subsystem that increases the product's maximum storage capacity from 512 megabytes (MB) to 2.048 gigabytes (GB) has been announced.

The new 6880 ECF is a high-performance subsystem designed to increase the performance of IBM and plug-compatible CPU computer operations. State-of-the-art LSI technology is combined with 256Kb DRAM semiconductor storage to give users from 128 MB to 512 MB nonvolatile 3330, 3350 or 3380 DASD-equivalent storage in each 6880 ECF cabinet.

Shipments of the 6880 ECF began in early October with delivery of units to a major San Francisco-based bank and to a major national telecommunications company.

ECF now gives users an additional flexible range of solid state storage capacity for upgrading. With this additional subsystem "granularity," MIS directors can choose 6880 configurations in 32 MB and 128 MB storage increments depending on their needs, up to the maximum 2 GB capacity in a four-cabinet configuration.

"This increased granularity satisfies the requirement certain large users have for a higher capacity SSD subsystem," said Bill Etheredge, vice president of marketing at Memorex. "Plus, it increases Memorex's ability to configure the 6880 to precisely suit particular computer operations' high performance demands."

Like the Memorex 6880, the 6880 ECF automatically backs up data during a power loss or fluctuation using a built-in Winchester disk drive, an uninterruptible power supply (UPS), or optional Memorex 6889 Backup Power Unit.

The new 6880 ECF is especially suited for large utility, manufacturing, petroleum, insurance, banking, service, and scientific companies that have ultra high performance requirements for a mainstream data processing application.

Some of the applications typically used on a 6880 SSD include data bases (tables, indices, and body records), CAD/CAM files, user and system catalogs, on-line program load libraries, critical batch files, system

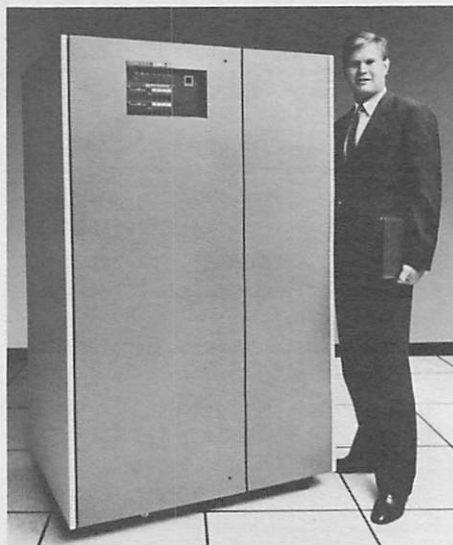
3888-23 Cache Controllers Shipped

Regular customer shipments of the 3888-23 disk cache storage control unit that was introduced in April have begun. The 3888-23 attaches to Memorex's 3680 and 6240 High Density Package (HDP) disk drive families, as well as with the newly announced 3682 double density subsystem.

The cache storage control unit provides quicker access to data stored on disk drives by retaining most recently used data from disk in high-speed electronic memory. The result is a significant increase in system throughput, particularly where double capacity drives are concerned.

"Our early ship program has reinforced that caching can provide a two- to five-fold improvement in access times over non-cached data, thus clearing a major information flow bottleneck," said Bill Etheredge. "We also believe that we have designed in several competitive advantages over other cache systems on the market."

Although a plug-compatible equivalent for IBM's 3880 Model 23, the Memorex 3888-23 is unique in that it utilizes an independent processor for cache management. This removes much of the caching overhead (management of cache algorithms, etc.) from the two main processors (storage directors), thus freeing them for other tasks.



The Memorex 3888-23 disk cache storage control unit helps clear information flow bottlenecks.

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NEW COMMUNICATIONS PRODUCTS

Family Of Intelligent Workstations Unveiled

Memorex entered the IBM-compatible 3270 intelligent workstation market this month by introducing the 6273 series, a line of micro-to-mainframe workstations for coaxial environments.

The Memorex workstations are based on the Sperry PC/IT, which has been successfully marketed by Sperry for two years, and the new Sperry PC/microIT personal computers. The Memorex units provide 3270 network users with IBM and compatible mainframe access as well as extensive IBM PC/AT-compatible stand-alone processing capabilities.

"The Memorex workstations complement and complete our strategy of supplying a full line of 3270 controllers, printers, and displays, both dumb and intelligent," said Bill Etheredge, vice president of marketing. "Memorex is now well-positioned to aggressively pursue marketshare with workstations and other 3270 products that are very competitive in terms of price and performance."

According to International Data Corporation, a market research firm, 30 to 40 percent of 3270-compatible terminal buyers will purchase 3270-class PCs by the end of the decade.

"Intelligent workstations are the fastest growing product line in the 3270 environment and one of the fastest growing in the data processing industry," Etheredge said.

The 6273 workstations join Memorex's 6000 Series of high performance products, which includes the 6880 Solid State Storage Subsystem, the 6520 Tape Cache, and the 6240 High Density Package disk drive. The new units offer far more capabilities than traditional terminal devices by fulfilling a

variety of high performance, local processing needs.

The workstation series includes two compact versions, models 6273-A and 6273-B, and two larger models with increased expansion capabilities, models 6273-1 and 6273-2.

The Memorex Compact Workstation

The two compact workstations offer users a smaller footprint and a more cost effective choice for their processing needs than most larger AT-compatible or 3270-compatible AT units. The 6273-A workstation uses a color video adapter and monitor supporting IBM EGA color graphics. The 6273-B uses a Hercules-compatible monochrome video adapter. Both units weigh only 22 pounds and are 15 inches wide by 15 inches deep, making the units ideal for users in small office environments.

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Memorex introduced a family of six intelligent workstations that are based on the IBM PC AT's 8/16 bit open architecture standard.

New Color And Monochrome Display Stations Take A Bow

A modular-design display station for the 3270-compatible market—the 2180-C 14-inch color display—was introduced this month as part of a massive October product introduction.

The 2291 compact monochrome display, an enhanced replacement for the popular 2178 terminal, was also announced.

The modular design of these units lets

users customize their terminals by interchanging logic modules and keyboards. The removable logic packs also provide a simple method for maintenance and for installing enhancements.

"These units complement our 2179 modular color display that was introduced in April 1986," said Bill Etheredge, vice president of marketing. "Current 2179 users can purchase the new logic packs to upgrade their units. These terminals are the most ergonomically designed displays available to 3270 users. The units offer several features to improve operator productivity, including antiglare filters, palm rests, adjustable alarms, and green, amber, or color screens."

By simply changing the logic packs, customers can move the logic functions to the monitor that best suits their needs. The modularity enables users to upgrade their units by attaching more enhanced logic packs in the future. The units also can be changed from 3270 to System 34/36/38 terminals.

"Memorex is the only PCM to offer this flexibility," added Etheredge. "Users can now maintain their original hardware investment yet remain state-of-the-art."

New Printer Introduced

A new printer—the 2124-2E multifunction printer has been introduced as part of October's massive product unveiling.

The new product fills out Memorex's printer offering to 3270 users with light to very heavy duty cycles and expands the 3270-compatible printer line.

The 2124-2E is a plug-compatible alternative for the IBM 4224-202. It can be used for draft or letter quality printing in office

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The 2180-C has a smaller footprint, less weight, and offers productivity features.



The crew responsible for the 3888-23 disk cache storage control unit's timely first customer shipment stands by their accomplishment.

Smart Terminal Family

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The compact units have basic expansion options. There are two IBM-compatible expansion slots available for additional boards as well as one parallel and one serial port. Users also have an option of adding up to 3 MB of extended memory.

The Memorex Full-sized Workstations

The full-sized workstations have been successfully field-tested in an IBM mainframe environment at Rich Corporation in Chicago. The 6273-1 is a color version (EGA color graphics support) and the 6273-2 is a monochrome station (Hercules-compatible) and is available in amber or green phosphor.

The larger units offer several expansion capabilities:

- Five IBM-compatible expansion slots available for option boards
- Two half-height peripheral cavities for peripheral devices
- Two available serial ports and one parallel port
- Option of adding up to 4 MB of extended memory

Common Features

All four units utilize the Intel 80286 microprocessor, allowing users to switch between 67, 7.16, and 8 MHz modes. Other features include:

- 640 kilobytes of memory
- 40 megabytes of hard disk storage
- 1.2 MB floppy disk drive
- MS DOS version 3.1, single-user, single-task operating system
- Choice of 84-key AT-compatible or

optional 122-key 3270-compatible keyboards

- Ability to switch between dual 3270 sessions if connected to a Memorex 2274 cluster controller

New Printer

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environments or in production areas, printing any of 10 resident bar codes or optical character readers (OCR A&B). Users can switch back and forth between the multifunction features without making hardware or host software changes.

Bill Etheredge, Memorex vice president of marketing said, "With the addition of the 2124-2E we now offer a growing family of 3270 printers with features that address the widest range of user requirements. The latest printer gives users a fast, reliable printer as well as the option of bar code printing. The 2124-2E performs very well as a shared resource in communications clusters."

The 2124-2E operates at 350 cps for draft quality and 80 cps for near-letter quality. Users have a choice of four fonts and 21 international character sets. Additional features include:

- Multiple character settings
- Elongated, boldface, and italic character fonts
- Fanfold or single sheet paper capability
- Printing of forms up to six parts thick
- Five different paper feed paths

The 2124-2E will be available late fourth quarter, 1986.

ECF Expands SSD Capacity

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control data sets (such as JES2 checkpoint, MSX, SDSI, and RACF), credit files, demand deposit files, and geoseismic and scientific processing files.

"To a company with a mainstream revenue generating application of \$12 million a year, improving the performance of that application by 10 percent with the 6880 can mean millions of dollars in additional revenues," Etheredge added.

This improved performance is the result of the 6880's very fast data access rate, two to four data paths, and nonvolatile storage characteristics. With a quad-port capability, four concurrent data accesses and data transfers can be made simultaneously, resulting in an aggregate data transfer rate of 12 MB/sec.

"No other IBM-compatible DASD subsystem on the market today is faster," said Etheredge.

Press Box

Editor: Kerry Swanson
Graphics: April Bishop
Typesetting: Publications Services

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