# IBM AS/400

# Product Enhancement

## Analysis

In yet another overhaul of the Application System/400 (AS/400), IBM has enhanced the 9404 System Unit with the Models C10, C20, and C25. The new models offer increased minimum and maximum main storage, DASD capacity, and system performance. Each model uses IBM's new, compact, 3.5-inch DASD units for better performance and reliability.

The C10, C20, and C25 models provide greater system performance and 8M bytes of main memory at a lower price than comparably configured B10/B20 models. The new models, available in the same compact, quiet office package as other 9404 models, support all optional features currently supported by existing 9404 models.

The C10, C20, and C25 contain two (or optionally three or four) new IBM 3.5-inch disk units. The disk units use thin-film disk technology and provide reliability and performance in a compact design. Improvements in access time, latency, and data transfer rate also contribute to better performance. Advanced engineering concepts enhance reliability and reduce power consumption.

### Growth Capabilities

Increases in processor power, maximum main memory, and maximum DASD capacity will allow customers to grow by adding more users and applications. The increase in DASD capacity is made possible by the new compact, 3.5-inch, high-performance disk unit that allows two drives to be packaged in the first DASD position. A dual drive is a standard feature of the system unit. With the addition of optional single disk units, the maximum capacity of a Model C10, C20, or C25 System Unit can grow to 1280M bytes. The DASD capacity of a Model C20 or C25 with the Expansion Unit can grow to 2560M bytes.

The customer's investment is protected because existing Model B10 and B20 systems can be upgraded to the new C10/C20/C25 models. This upgrade does not include replacing the base DASD in the old model. The new single disk unit can be installed in the B10/B20 models, and the base DASD in a Model C10/C20/C25, field upgraded from a B10 or B20, can be replaced with the new Dual Disk Unit feature.

### New Optional Features

The 9404 Models C10, C20, and C25 support all current optional features

| Model | C10 | C20 | C25 |
|---|---|---|---|
| **System Characteristics** | | | |
| Date of introduction | February 1990 | February 1990 | February 1990 |
| Date of first delivery | February 1990 | February 1990 | 2nd-Qtr. 1990 |
| Operating system | OS/400 | OS/400 | OS/400 |
| Upgradable from | P10 | P10/P20 | P10/P20 |
| Upgradable to | C20/C25 | C25 | Does not apply |
| Relative Performance (based on a rating of the Model B10 at 1.0) | 1.3 | 1.8 | 2.2 |
| System I/O bus | 1 | 2 | 2 |
| Available card slots | 4 | 9 | 9 |
| **Memory** | | | |
| Minimum capacity (bytes) | 8M | 8M | 8M |
| Maximum capacity (bytes) | 20M | 32M | 40M |
| **Disk Storage** | | | |
| Minimum capacity (bytes) | 640M | 640M | 640M |
| Maximum capacity (bytes) | 1280M | 2560M | 2560M |
| **Communications Lines (max.)** | 8 | 14 | 14 |
| **IBM Token-Ring Adapters** | 1 | 2 | 2 |

available for the 9404 Models B10 and B20 in addition to the following new optional features.

**8M-Byte Main Storage (3108)**
The 8M-byte main storage feature card plugs directly into a card slot on the 9404 System Unit and is available for use only on the Model C25. A maximum of two feature 4104 and/or 3108 cards may be used with up to four feature 4114 cards to provide main storage of up to 40M bytes on the Model C25. The main storage maximum can also be achieved by installing 8M-byte Main Storage cards in the available main storage card slots. To accomplish this, however, existing 4M-byte cards would have to be removed from the slots.

**Single Disk Unit (6105)**
The Single Disk Unit contains one 3.5-inch 320M-byte disk drive. One or two optional single disk units may be added to the 9404 Models C10, C20, and C25 System Unit for up to 1,280M bytes of disk storage capacity. Adding the second optional single disk requires the Feature Power Supply (5133) as a prerequisite. One optional single disk unit may also be added to the Model B10 or B20 System Unit. This addition also requires the Feature Power Supply. Up to four optional single disk

units may be added to a B20 or C20/C25 Expansion Unit. Adding the third optional disk unit to an Expansion Unit requires the Feature Power Supply. This feature is always required when the third DASD position in the base System Unit or Expansion Unit is used.

**Dual Disk Unit (6106)**
The Dual Disk Unit contains two 320M-byte, 3.5-inch DASD drives and can be installed only in the first DASD position in Model C10, C20, or C25. This feature is only available for field installation and is used for upgrading the base DASD in a Model C10/C20/C25 previously upgraded, or concurrently upgrading from a Model B10 or B20 with a single 315M-byte disk unit in the first slot. The 315M-byte disk unit, which must be removed from the first slot, can be installed in the third slot, in any position in a C20 or C25 Expansion Unit, or in any open position in another system.

**New Entry Level Models**
IBM, in an earlier announcement, introduced the AS/Entry System Models S10, S20, and S22. These multiuser systems are based on the IBM 5363 system unit, support up to eight workstations, and feature one or two megabytes of memory and up to four 314M byte disk drives. Prices range from $11,000for the S10 to $17,700 for the S22.

# Equipment Prices

| | Purchase Price ($) |
|---|---:|
| **IBM 9404 System Unit** | |
| Model C10 | 20,250 |
| Model C20 | 36,470 |
| C25 | 63,000 |
| **Features for 9404** | |
| 8MB main storage | 12,000 |
| Single disk unit—320MB | 5,500 |
| Dual disk unit—640MB | 11,000 |

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