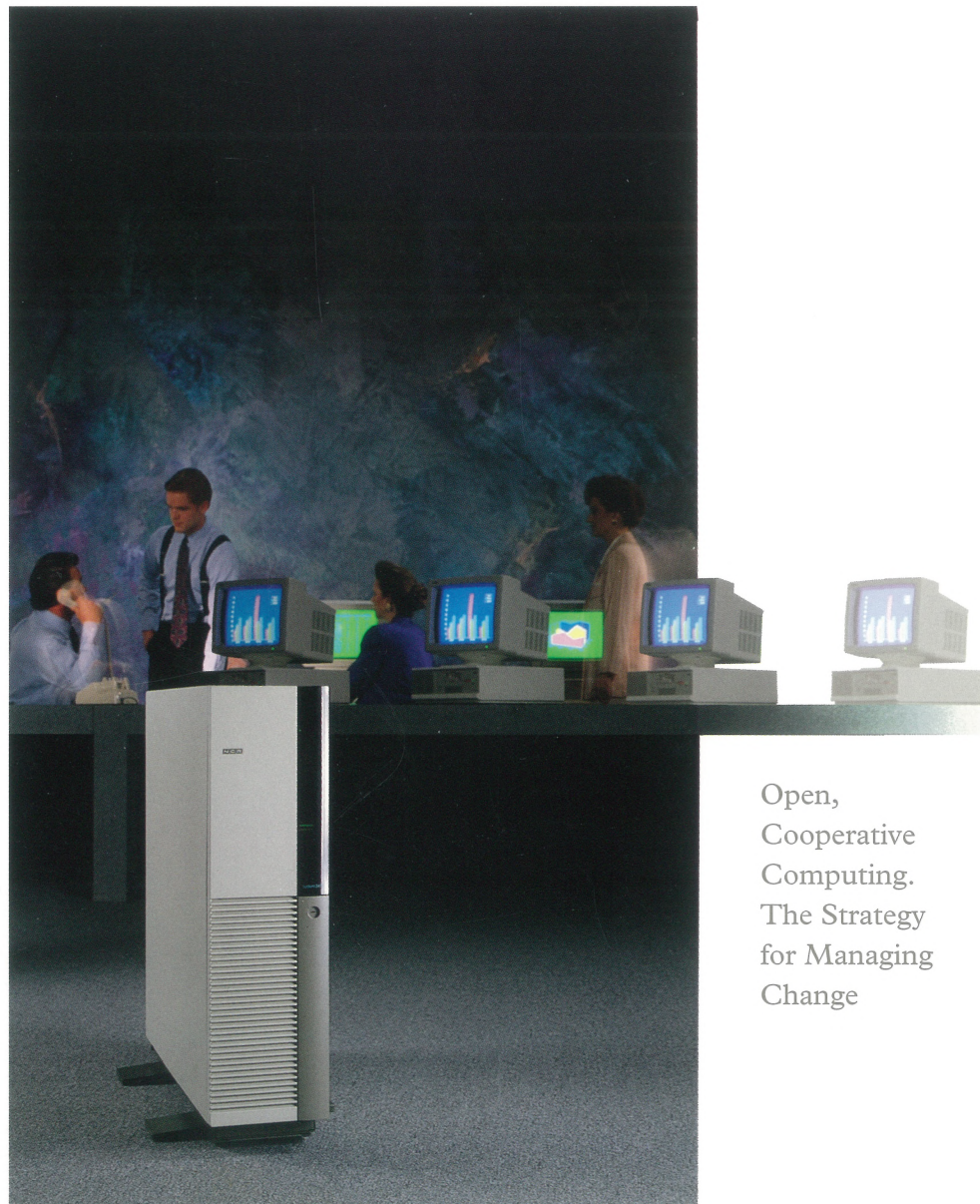


SMP Server Series
Models 3450, 3455



NCR
System
3000



Open,
Cooperative
Computing.
The Strategy
for Managing
Change



Beyond Power

As increasing amounts of business information are stored in computers, businesses are relying on their computing solutions to provide them with continuous data access. However, highly reliable and powerful systems are not enough to help businesses stay competitive today. Other considerations, such as price/performance, flexibility, connectivity, and investment protection are also key.

Raw power is only part of what

Growing enterprises look to the NCR 345X servers for flexible

a business requires to handle

solutions to the problems presented by today's ever changing business

its information demands. A

computing solution must offer

flexibility and an economical

growth path, as well as high

reliability.

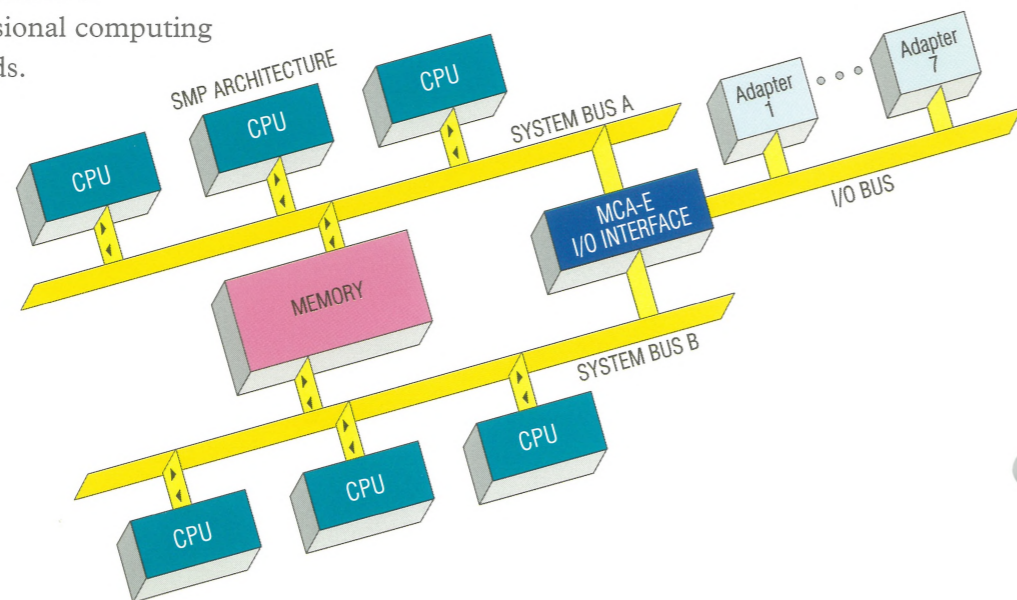
all at a competitive price.

i486 Pentium

The systems that power today's businesses must be able to meet information demands from all levels of an organization.

The NCR 3450 and NCR 3455 servers are desktop systems designed to help you manage change and growth. Multiple i486 or Pentium processors provide mainframe computing power that supports your existing applications while offering ample room for future growth.

Targeted at the client/server environment, the NCR 345X line is perfectly suited for departmental, multiuser or divisional computing needs.



Balanced Growth

While superior processor performance is required for a high-performance system, the I/O subsystem must be equally outstanding. The NCR 345X servers use the Micro Channel-Enhanced bus for maximum I/O performance. With an I/O throughput of 80MB/sec, the Micro Channel-Enhanced bus supports new, high-speed devices as well as current I/O devices - including SCSI peripherals, LANs, WANs, and terminal servers. The host adapters handle interactions among peripheral devices and free the main processors for other tasks. An innovative dual SCSI bus board eliminates the need for cumbersome cabling to internal

SCSI devices and increases system reliability. It provides the ease of plug-and-play peripherals.

Classic Mainframe Memory

Memory design in the NCR 345X is based on classic mainframe technology: dual-ported memory, two-way interleaving, and cache coherency. NCR enhances this technology to handle workloads faster, more efficiently, and more cost-effectively than mainframes. Dual-ported memory and interleaving make memory faster. Cache coherency provides the data integrity essential in a multiprocessor system.

Reliability

Dependability is crucial; the NCR 345X servers offer Reliability, Availability and Serviceability (RAS) features that allow for minimal downtime:

- An optional disk array minimizes the chance of critical data loss and gives you the flexibility to choose the level of RAID implementation that best meets your needs.
- Error detecting and correcting (EDAC) memory finds and fixes single-bit errors. It also detects two-bit errors and reports them to the system.
- A recommended optional uninterruptible power supply permits a graceful shutdown in the event of a power failure, as well as automatic recovery when power is restored.
- A dedicated Configuration and Test (CAT) bus improves diagnostic capabilities by removing configuration and testing functions from the system bus.

NCR 3450

The NCR 3450 offers from one to four i486 50 MHz processors. Consistently since its release, the NCR 3450 has ranked at the top of its class in both raw performance and price/performance as measured in TPC-A audited benchmarks. More importantly, it has proven to be a world-class database server in real-world computing environments.

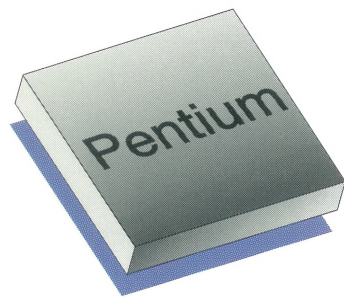
A uniprocessor model of the NCR 3450 is designed to offer superior investment protection and provide a lower entry price into the multiprocessing arena. This system is ideal for fast growing businesses that don't need immediate multiprocessing capabilities.

Investment Protection

Several versions of the NCR 345X servers are available to meet a variety of business needs. The ability to upgrade in-cabinet from the lowest to the highest-level system means that your investment is safe for years to come.

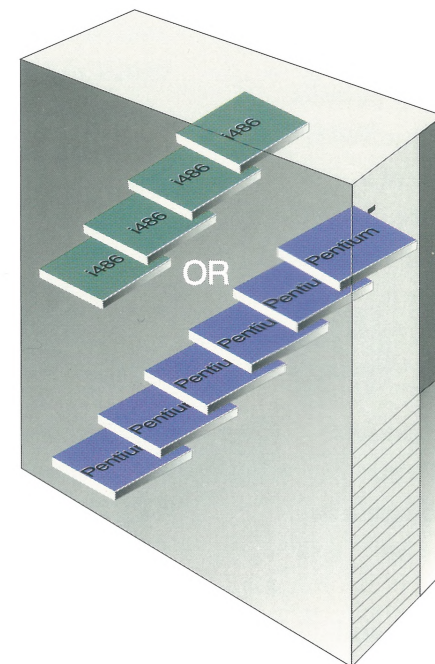
The NCR 3450 offers two roads to symmetric multiprocessing. The NCR 3450-UP path is ideal for growing businesses who do not immediately need multiprocessing, but want in-box upgrades to meet future demands for more power.





As the business grows and computing needs increase, the number of CPUs, as well as the amount of memory and disk, can be upgraded. In addition, all features can be upgraded in-cabinet to the maximum capabilities provided by the multiprocessor models of the NCR 345X line.

The NCR 3450 provides excellent performance and flexibility for dynamic computing environments. This is an ideal platform for "upsizing" from multiple servers in LAN environments, offering superb reliability, as well as upgradability in both capacity and emerging technologies. The NCR 3450 is in-cabinet upgradable to four i486 or six Pentium processors.



NCR 3455

The NCR 3455 offers from one to six Pentium processors which provide additional performance and RAS features over the i486 processors. The Pentium processors have larger on-chip caches, a larger data bus, plus greater error detection and reporting capabilities and greater mean time between failure. These strengths mean that you can confidently depend on the NCR 3455's ability to handle your future growth requirements.

For optimal investment protection, the NCR 3455 offers a uniprocessor model with a lower entry price into the multiprocessing arena. As in the NCR 3450, the number of CPUs, as well as the amount of memory and disk, can be upgraded. In fact, all features can be upgraded in-cabinet to the maximum capabilities provided by the multiprocessor models of the NCR 345X line.

Fault Resilient Systems

For computing environments that require system-level redundancy for maximum uptime, the NCR 345X offers a solution that is more cost-effective than full fault tolerant systems. By combining multiple servers in conjunction with NCR LifeKeeper™ Fault Resilient System (FRS) software, NCR offers automatic switchover in the event of a failure on any server. LifeKeeper FRS provides recovery from system, application, and peripheral errors, and even handles planned switchover for software installation or maintenance. This solution is ideal for mission critical processing environments.

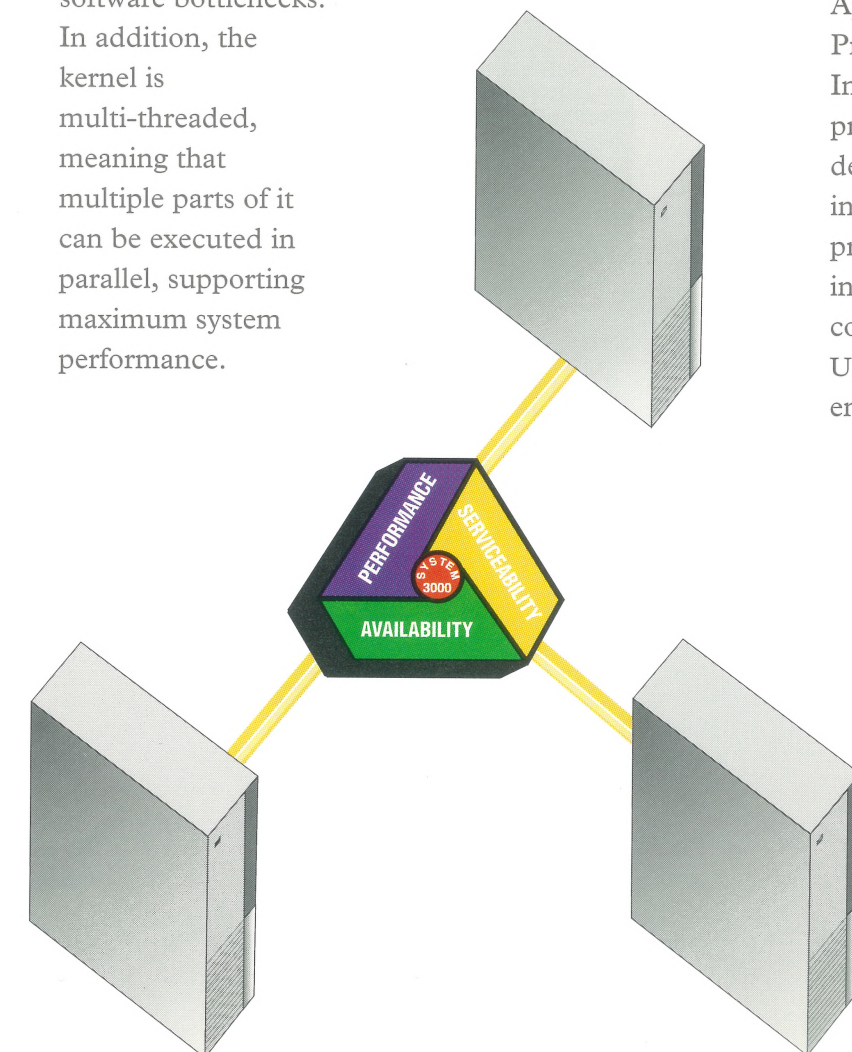
NCR UNIX SVR4 MP-RAS

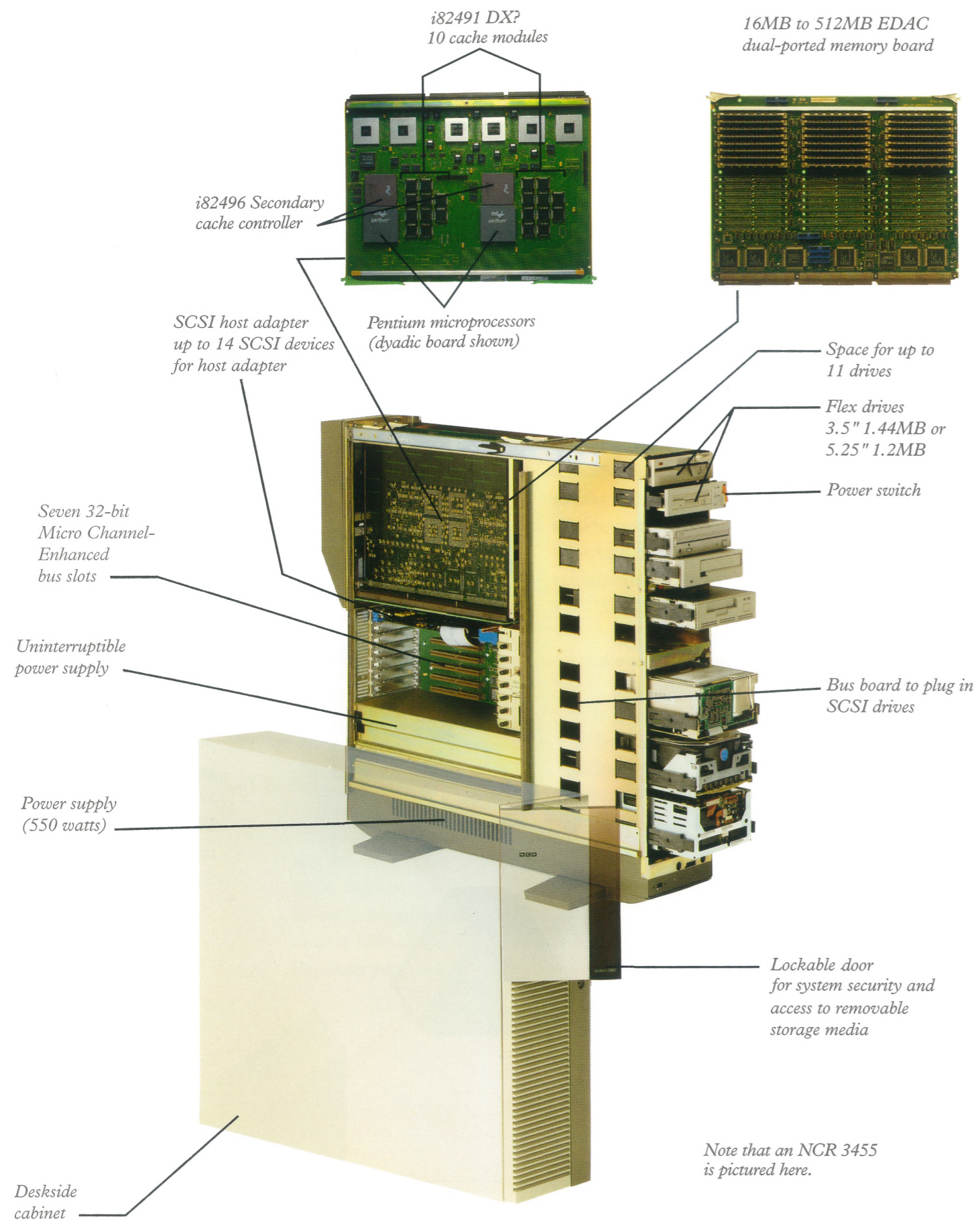
The NCR 345X servers utilize the NCR UNIX SVR4 MP-RAS operating system, which is a fully symmetrical implementation for multiprocessing systems. This operating system takes full advantage of both uniprocessor and multiprocessor hardware designs across the System 3000 family. It allows any processor to execute any combination of kernel and user processes or I/O requests, virtually eliminating potential software bottlenecks. In addition, the kernel is multi-threaded, meaning that multiple parts of it can be executed in parallel, supporting maximum system performance.

Open Systems

NCR strives to meet all Open System standards, both in hardware and software. Industry standard hardware technology means you have maximum choices for I/O devices, adapters and controllers. As for software, compatibility across multivendor operating environments enhances your ability to move applications to different platforms.

Based on requirements defined by UNIX International, NCR UNIX SVR4 MP-RAS combines the functionality of UNIX System V, BSD and XENIX and complies with major standards, including POSIX, XPG3, FIPS 151-1, ANSI C, iABI and iBCS-2 to ensure interoperability. In addition, internal interfaces, such as device drivers and STREAMS modules, which support multiprocessing capabilities, and user-visible Application Programming Interfaces (APIs) help protect your software development investments by providing a stable interface that is consistent across all UNIX SVR4 environments.





Formula for Success

NCR System 3000 offers the broadest range of enterprise systems in the industry. Interfaces to the outside world - software, networks and peripherals - are standard. Your investments in training and software - both time and money - are protected.



With world-class price/performance, system reliability and investment protection, the NCR 345X servers are designed to meet your needs today and in the future.

NCR Corporation continually improves products as new technologies and components become available. NCR Corporation, therefore, reserves the right to change specifications without prior notice.

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