

Toshiba provides various solutions in response to customers' needs, including knowledge management support for multiple media and EC procurement based on communication infrastructures such as the Internet and digital broadcasting. At the same time Toshiba is devoting full consideration to information security and aiming at further improvements in network reliability/expandability.

## EC Procurement/Sales ASP e-ingBiz.com™

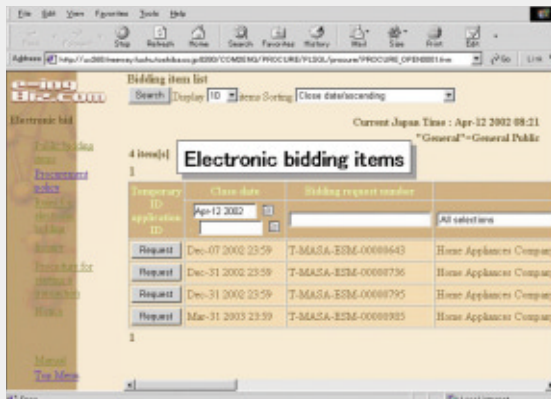
Toshiba provides the Internet-based B to B EC (Business to Business Electronic Commerce) services named e-ingBiz.com™. e-ingBiz.com™, supporting various kinds of EC procurement and sales functions as an ASP (Application Service Provider), i.e. an electronic bidding system and Web type EDI (Electronic Data Interchange) system, which realizes cost reduction, labor-saving, lead time shortening, and an electronic sales system achieving efficient engineering collaboration accompanied by the exchange of specification documents.

e-ingBiz.com™ incorporates the technologies and know-how gathered through the procurement innovation that Toshiba itself has promoted.

Over 30 buyer companies and over 2,000 seller companies have already joined e-ingBiz.com™.

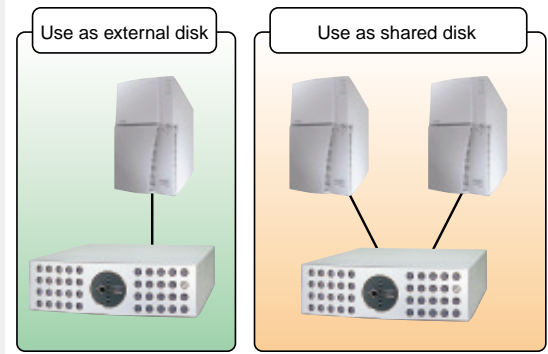
Using this electronic bidding function, Toshiba Fuchu complex was able to realize reductions of 17 % in costs and 30 % in lead-time, in 2000.

With the release of the English version electronic bidding service in Dec. 2001, these services for material procurement from overseas sellers are now not only available to domestic companies, but also to overseas affiliated companies as well.



Overview of e-ingBiz.com™

## ArrayFort™ AF550R Disk Array System



ArrayFort™ AF550R disk array unit

ArrayFort™ AF550R is the entry model in the ArrayFort™ disk array system series which contains up to 11 HDDs (Hard Disk Drives) (max. 364 Gbyte) within a height of 3U (approximately 13.35 cm) and delivers high price-performance.

It offers quick access via Ultra160/m SCSI (Small Computer System Interface) from the host computer. Using a multi-port interface, which is connectable with two computers individually, it is possible to integrate a reliable cluster system.

The AF550R is suitable for use as an external disk or shared disk on a UNIX server and IA (Intel® Architecture) server to realize the high scalability and reliability, which is a requirement for Net-business and Enterprise systems, within a slim cabinet.

"UNIX" is a trademark.

"Intel" is a trademark or registered trademark of Intel Corporation or its subsidiaries.

## Strata™ CTX670 Business Telephone System

Toshiba has developed the Strata™ CTX670 business telephone system to meet the market demand in information technology (IT) which is progressing rapidly.

The Strata™ CTX670 maintains hardware compatibility with the current model, and delivers strengthened Computer Telephony Integration functions (Desktop OAI (Open Architecture Interface), System OAI), Networking functions (StrataNet™) to connect branch offices through private networks, and VoIP (Voice over Internet Protocol) function.

Moreover, a RISC (Reduced Instruction Set Computers) -CPU was adopted for heightened throughput and object-oriented technology was adopted for the software development to be able to respond quickly to the addition of new features.

Furthermore, this system can be maintained via the Internet, and it can respond to addition of functions after system installation on-line.

First the CTX670 and then the CTX100, which is a small capacity version of the CTX670, will be released on the North America market, and sales promotion and global expansion will then advance to Europe, Asia, etc.



Strata™ CTX670 business telephone system

## Face Recognition Security System "FacePass™"

Toshiba has developed a high-performance face recognition security system "FacePass™" for facility access control. It is widely accepted that face recognition is susceptible to problems associated with variations such as face angle and standing positions.

"FacePass™" has adopted a new recognition algorithm, which has the unique features listed below capable of solving these problems.

- Robust with regard to the many kinds of variations mentioned above
  - High performance face detection
  - Pattern matching algorithm using image sequencing
- Easy registration
  - A person's face can be registered just by them looking into the camera.
  - Adaptable for changes due to aging by daily updates

Specification is as follows:

- Recognition accuracy:
  - False Rejection Rate (FRR)<1.0 %
  - False Acceptance Rate (FAR)<0.1 %
- Recognition time: 1 second
- Maximum registration number: 1,000 people
- Maximum loggable face images: 60,000

The hardware system consists of two units; a user interface unit and a control unit. An overview of the user interface unit is shown in the figure.



User interface unit of "FacePass™"

The unit consists of a camera, a monitor, a ten key pad, a loudspeaker, and auxiliary lighting.

"FacePass" is a trademark in Japan of Toshiba Corporation.