

Personal information equipment continues to change to meet requirements for diversification of information handled, higher performance and smaller size. Leading-edge technology is particularly crucial in developing products for multimedia-related equipment. Toshiba incorporates such technology in its new wide-screen televisions, which offer improved picture quality and a double window function. In consumer electronics, Toshiba has introduced products such as a combination oven with an innovative auto-cooking system and an energy-saving air conditioner.

Tecra 720CDT Notebook Computer

The Tecra 720CDT, a high-end notebook computer introduced in March 1996, incorporates seven state-of-the-art technologies, and offers unprecedented performance, with an expanded range of mobile applications such as advanced multimedia functions and desktop replacement.

New technologies include:

- Intel 133MHz Pentium® processor (P54CSLM) combined with 256Kbyte second level cache memory;
- 12.1 inch, 1024 by 768 high-resolution TFT-LCD, driven by the world's first low power differential signaling (LVDS) interface;
- Toshiba's proprietary PCI 2.1 based core logic, achieving 133Mbyte/s bus transfer rate at 33MHz bus clock and Windows®95 hot-docking capabilities;
- CardBus slots, PCMCIA 32 bit PC card standard, enabling high-speed applications such as 100Mbps Ethernet;
- The world's first zoomed video (ZV)
 port-ready PC-card slots, supporting full
 motion video on capturing or MPEG
 playback;
- Chips and Technology (C&T) 65550 graphics controller, offering 64-bit graphics acceleration, YUV-RGB conversion and ZV port; and



FY-1300 Ultra-Thin IC Card Reader/Writer

With a thickness of only 5mm, this ultrathin IC card reader/writer can be inserted into a PC card slot (Type II). It is also the first such product with a card-ejecting mechanism. The compact mounting technique and mechanism design allow a reduction in size to approximately 1/20 of Toshiba's previous desktop card reader/writer.

IC cards are attracting attention from the public as a means of accessing e-mail on the Internet and as devices for storing information such as personal, financial and medical records. This IC card reader/writer enables notebook computers to function as IC card terminals, allowing the creation of a broad range of applications from personal use to large-scale systems.



Smart Reader FY-1300 IC card reader/writer



FY-1300 IC card reader/writer in PC card slot (Type II)

XM-1302B and XM-3701B **CD-ROM Drives**

The use of multimedia programs on personal computers has increased the need for high-speed CD-ROM drives. For the notebook PC market, the CD-ROM drives must also be slim and small. XM-1302B is a slim CD-ROM drive that offers high speed and takes up a minimal amount of space. Principal specifications include dimensions of 17mm (H) x 128mm (W) x 136.4mm (D); drawer-type manual load electrical release; a sustained data transfer rate of 600KB/s (4X); PI0 mode 3 compatibility; random access time of 200ms; average power consumption of 3.0W and 0.085W during sleep; 5V single voltage source; multimedia PC-3 spec. compliance; photo-CD multisession disc spec. compliance; CD-EXTRA disc spec. compliance; and MTBF 45,000h.

Toshiba has also developed the XM-3701B, a 6.7X speed CD-ROM drive. It is 41.5mm high, with a random access time of 135ms, and uses high-quality



PDR-100 Digital **Communication Camera**

This digital communication camera has a 16Mbit flash memory for digital recording and playback of still images and sound. Inserting a modem card enables the camera to send images and sound to or receive them from a remote location using a regular telephone line or cellular phone.

Built-in flash and an auto-focus lens make the PDR-100 as easy to use as a compact camera. With 1/3 inch, 410k pixel CCD and Joint Photographic Experts Group (JPEG) compression, the camera offers highresolution still images in a small format. The PDR-100 is expected to be widely used because of its ability to



Three Screen Sizes for New Double Window™ TV

Toshiba's New Double WindowTM television is now available in 32", 28" and 24" screen sizes. The televisions incorporate the Super BrightronTM tube, the first in the world to do so, for clearer, higher-quality pictures. In addition to featuring the Double WindowTM function, which Toshiba introduced in the Japanese market, the televisions can receive teletext programs through a built-in decoder as well as normal television programs. The newly developed decoder IC chip provides highquality teletext images. Unique functions such as a headline service that allows quick skimming of news, weather forecasts and stock market quotes make teletext programs more enjoyable, adding to the popularity of New Double WindowTM.



32DW3ME New Double Window™ TV

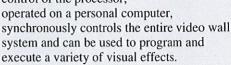
Video Wall Multiprojection System



The need to display computer images on large screens has given rise to demand for new video wall systems. To meet this

demand, Toshiba has developed the P4130VJ video wall projection unit and the TMP101J video wall processor as a new video wall system capable of displaying video graphics array (VGA) pictures as well as NTSC and PAL pictures with progressive scan technology.

This video wall system is a large-screen display system composed of multiple projectors arranged horizontally and vertically, and displays magnified pictures through the processor. The newly developed software for control of the processor, operated on a personal comp





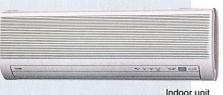
P4130VJ video wall projection unit



TMP101J video wall processor

RAS-251GD Energy-Saving Air Conditioner

Toshiba's new energy-saving air conditioner RAS-251GD provides significant saving



significant savings
on running costs and offers a new
function for dehumidification
without room temperature

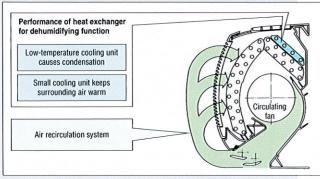
decrease. Annual electric consumption is 1,090kWh, approximately 15 percent less than for conventional models, because of the adoption of a circular arc-shaped heat exchanger, DC fan motors, and a new DC compressor.

The RAS-251GD offers an

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GD series energy-saving air conditioner (outdoor unit)

improved coefficient of performance (COP) for both heating and cooling, at 4.65 and 4.39, respectively, at rated operation. Heating performance at an outdoor temperature of 2°C is 4.0kW, comparable to a kerosene fan heater. The use of a dehumidifying supplemental heat exchanger achieves high performance equivalent to that of a separate dehumidifier: 170ml/hour at a room temperature of 24°C and 60 percent relative humidity, without temperature decrease.



Indoor unit cross-section and dehumidifying system

ER-CS8 Combination Oven with Sensor

The new model ER-CS8 combination microwave/convection oven features a unique, innovative auto-cooking system, called *Sonomanma Kanetsu* ("just heat as is"). Whereas conventional sensor systems require certain types of food to be wrapped and other types of food not to be wrapped, the new system will cook any kind of food perfectly, whether it is wrapped or not.

This new system uses an absolute humidity sensor to monitor the variation in moisture between wrapped and unwrapped food during cooking. The sensor consists of a concealed thermistor and a humidity-sensing thermistor that monitor the food in its initial and cooked conditions. In addition, a weight sensor monitors the quantity of food.

Other useful and innovative features include 2-way defrosting, which allows the user to select either full- or half-defrost, and a fried food re-heating function, *Karatto* ("crispy") *Gourmet*, which gives food a fresh-fried finish. For delicate or precise cooking, the oven offers variable fan revolution control for a convection cooking function. The ER-CS8 combines convenience with improved multi-function cooking.



ER-CS8 combination oven with sensor