

Digital Products and Services

Portégé™ Z830 Series Ultimate Mobile Notebook PCs



Portégé Z830 mobile notebook PC

Toshiba has developed the Portégé Z830 series ultralight and ultraslim notebook PCs, our first devices in the Ultrabook™ category, which deliver an extremely responsive experience, increased durability, and greater energy efficiency.

The Portégé Z830 series are the world's lightest(*) 13.3-inch platform, and feature a sophisticated design, excellent portability, and enhanced functionality. To realize a thinner and lighter product, we employed a thin magnesium alloy chassis with a honeycomb rib structure to improve torsional rigidity, and optimized the thin and thick elements of the structure to strengthen shock resistance. Furthermore, to improve usability, we employed a full-size keyboard and located high-heat-generating parts at the back as a countermeasure against heat.

Thanks to improved power management ensuring a long battery life, the Portégé Z830 series provide the performance needed for work and entertainment. With our new exclusive Hi-Speed Start technology, these machines can be running in mere seconds after being powered on.

The Portégé Z830 series sets a new standard for thin and light systems for both mobile business professionals and general users, not only in terms of portability but affordability as well.

(*) As of May 2012 (as researched by Toshiba)

Ultrabook is a trademark of Intel Corporation in the United States and other countries.

AT200 Thinnest and Lightest 10-inch Tablet



AT200 tablet

The AT200 is the world's thinnest and lightest(*) 10-inch tablet, realized by utilizing all of Toshiba's accumulated thin and light product design technologies for tablets. It is 7.7 mm in thickness and 535 g in weight, achieved by the use of a magnesium alloy chassis, a thin liquid crystal display (LCD), a direct bonding technology that reduces the thickness by making it possible to paste the touch panel on the LCD, and a thin battery. Despite its thickness of only 7.7 mm from front to back, the AT200 provides users with an array of connectivity interfaces and ports, including a micro universal serial bus (USB) port, a micro HDMI® port, and a micro secure digital (SD) card slot.

In addition, we applied Resolution+™, our proprietary high-quality image technology cultivated through our experience in the development of TV systems, to improve the quality of low-resolution images, and our adaptive display technology to make the LCD more visible in a sunlit environment.

We also utilized the high-quality sound technologies developed for our notebook PCs over the years, comprising an audio enhancer to deliver high-quality sound maximizing the capabilities of the compact speaker, and a noise equalizer that allows users to listen to music and speech on voice over Internet Protocol (VoIP) calls clearly even in noisy situations.

(*) As of October 2011 (as researched by Toshiba)

HDMI is a trademark or a registered trademark of HDMI Licensing, LLC in the United States and other countries.

dynabook™ Qosmio™ T851 Glasses-Free 3D AV Notebook PC



dynabook Qosmio T851 glasses-free 3D AV notebook PC

The dynabook Qosmio T851 is the world's first(*) glasses-free three-dimensional (3D) audiovisual (AV) notebook PC that can display 3D and 2D content at the same time on one display.

The T851 allows users to enjoy a high-level 3D experience without the need for dedicated glasses, thanks to both a face tracking technology that continually detects the position of the viewer's face and a switchable active lens that separates the two parallax images and guides them into the left and right eyes. The switchable active lens also makes it possible for the display to show 3D and 2D content simultaneously. Users can, for example, view a 3D movie while reading background information on a website in 2D.

The SpursEngine™, a high-performance stream processor, realizes a 2D to 3D real-time conversion technology that allows users to enjoy high-quality 3D images generated from 2D terrestrial, broadcast satellite (BS), and 110 degrees east longitude communication satellite (CS) digital broadcasts.

(*) As of May 2011 (as researched by Toshiba)

TECRA™ R840/R850 notebook PCs for Enterprise Use Offering High Mobility without Compromising Reliability



TECRA R840 notebook PC for enterprise use



TECRA R850 notebook PC for enterprise use

Toshiba has launched the TECRA R840/R850 as its new lineup of high-performance notebook PCs for enterprise use. Powered by 2nd-generation Intel® Core™ processors, these models redefine mobility for business professionals by offering full performance and excellent connectivity within a thin, light, and durable chassis.

The R840/R850 provide the performance needed to handle demanding business tasks in a lightweight and durable design by applying chassis technologies for high stiffness using high-stiffness resin, high-density mounting technologies for the printed circuit boards, input/output ports for enterprise use such as LAN and RGB (red, green, blue) connectors, and enhanced battery life.

Intel and Intel Core are trademarks of Intel Corporation in the United States and other countries.

DX 730 All-in-One PC



DX 730 all-in-one PC

The newly developed DX730 is a home-based entertainment all-in-one PC. As Toshiba supplies both PC and TV products, we have developed a technology to enhance the displays of PCs to a level approaching the high quality of a TV display based on our ability to enrich and optimize the tones of colors and brightness of LCDs cultivated through our experience in the development of TV systems.

The DX730 is equipped with all premium entertainment features such as a 23.0-inch diagonal full high-definition (HD) LCD with a touch screen, Onkyo stereo speakers with a subwoofer for bass sound, Resolution+™ technology for upscaling lower picture quality to higher resolution, and a Blu-ray Disc™ drive, in a stylish and slim minimalist design.

This all-in-one PC also has expandability, such as HDMI® input for using as a gaming console and HDMI® output for enhanced productivity as a PC.

HDMI is a trademark or a registered trademark of HDMI Licensing, LLC in the United States and other countries.

Blu-ray Disc™ and Blu-ray™ are trademarks of Blu-ray Disc Association.

Satellite C600 Notebook PC for Emerging Markets



Satellite C600 notebook PC for emerging markets

In response to the needs of emerging markets such as the remarkably growing market in India, Toshiba has developed and released the Satellite C600 notebook PC for emerging markets.

We have achieved a low cost that is affordable to customers who have never purchased a notebook PC by using a case with common parts and inexpensive components that utilize the design of existing models. Furthermore, in response to the local demand for enjoying movies at high volume, the sound quality and volume have been enhanced by applying our unique sound-effects software and improving the speakers.

This model is also differentiated by its keyboard, which features a wipeable keyboard skin incorporating dustproofing measures.

The Satellite C600 has contributed to the enlargement of our share of the Indian market as one of our main products.

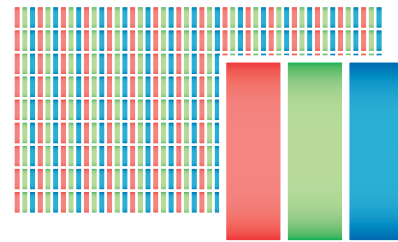
Large-Screen Glasses-Free 3D TV with Quad Full HD Panel



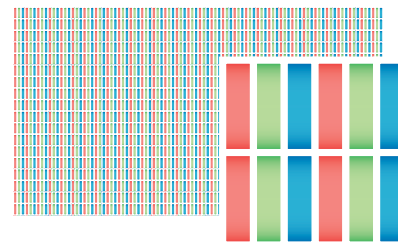
REGZA 55X3 glasses-free 3D LCD TV

Toshiba has developed and commercialized the 55X3, a flagship model of the REGZA glasses-free 3D series, equipped with a 55-inch LCD. The 55X3 is the world's first TV equipped with a quad full high-definition (QFHD) LCD that offers both 3D TV experience and viewing of 2D contents with a resolution of 3840×2160 pixels, four times that of full HD.

The integral imaging technology applied to the 55X3 generates nine parallax images in 3D mode that create multiple wide-angle viewing zones in front of the glasses-free 3D TV, while automatically making adjustments by applying a face tracking technology using a camera to



(a) Full HD panel



(b) QFHD panel

Comparison of pixel structures of full HD and QFHD panels

ensure suitable 3D viewing positions. This allows several viewers to enjoy the 3D experience at the same time without wearing glasses. Switching between QFHD 2D mode and glasses-free 3D mode can be easily performed using the dedicated button on the remote controller.

REGZA "Power TV" PS20/PB20 Series LCD TVs for Emerging Markets



46PS20 REGZA "Power TV"

Toshiba has released the PS20/PB20 series LCD TVs as a new addition to the REGZA "Power TV" lineup designed for emerging markets. The PS20/PB20 series consists of six models with 46V-, 40V-, and 32V-inch displays, which also incorporate the "Auto Clean" function.

The Auto Clean function in the PS20/PB20 series is a new noise-reduction technology that enhances the quality of the image compared with conventional "Power TV" models using a radio frequency (RF) booster, even in areas where the electric field strength is approximately 50 dB μ .

We have newly developed the 46V-inch model for the PS20/PB20 series to strengthening its lineup of models with larger displays. In the PS20 series, models have been added with a more stylish design featuring a narrow bezel of 17 mm.

REGZA ZG2 Series 3D LCD TVs with "Time-Shift Machine"



REGZA 55ZG2 3D LCD TV

Toshiba has commercialized the REGZA ZG2 series 3D LCD TVs featuring the "time-shift machine," a dedicated recording function that can simultaneously record up to six channels, allowing a maximum recording time of approximately 30 hours of digital terrestrial broadcasts.

The REGZA ZG2 series are equipped with six dedicated terrestrial digital tuners and the "REGZA Engine CEVO Duo" a new system for high-quality image processing. As a result, these models realize high-quality 3D functionality as well as the time-shift machine, which is a temporary storage function for the recording of multiple channels in the same time zone.

Recorded programs are displayed in the form of a table of past programs (EPG). Users can easily search for missed TV programs and can select and watch the recorded programs at any time.

EPG: electronic program guide

DBR-M190 REGZA Server Blu-ray Disc™ Recorder



DBR-M190 REGZA Server Blu-ray Disc™ recorder

Toshiba has developed the DBR-M190 REGZA Server that can simultaneously record up to eight channels of digital terrestrial broadcasts by integrating the "time-shift machine" and double recording functions.

The DBR-M190 is equipped with hard disk drives (HDDs) with a total storage capacity of 5 Tbytes. A 4 Tbyte HDD is dedicated to the time-shift machine, which is a recording function that allows up to 15 days of programming to be simultaneously recorded from up to six terrestrial digital broadcast channels using MPEG4-AVC (Moving Picture Experts Group-Phase 4 Advanced Video Coding) technology. The remaining 1 Tbyte HDD supports standard recording incorporating a double recording function, which allows simultaneous recording of two channels of terrestrial, BS, and 110 degrees east longitude CS digital broadcasts.

The DBR-M190 offers users a new AV experience, transforming the mere receiving of previously missed programs into the new discovery of programs without regard to recording.

Blu-ray Disc™ and Blu-ray™ are trademarks of Blu-ray Disc Association.

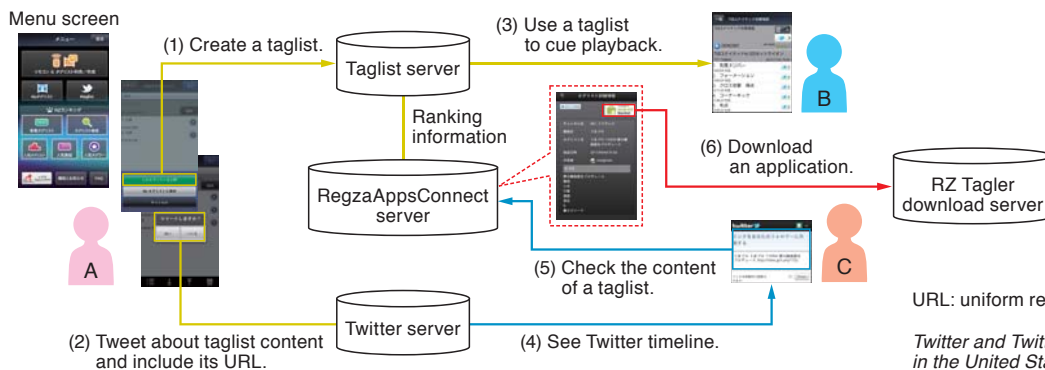
“RZ Tagler” Application for RegzaAppsConnect

Toshiba is engaged in the development of a new system called “RegzaAppsConnect” using applications (apps) for mobile terminals such as smartphones and tablets equipped with a touch panel allowing easy operation for users, which make it possible to organically link AV appliances such as Toshiba TVs, recorders, and cloud services with large amounts of data.

We have now developed “RZ Tagler,” an app for RegzaAppsConnect, which makes it possible for our recorders to be controlled from smartphones and tablets. RZ Tagler offers a touch-based remote control function,

and allows users to search for information on the scene being played and reproduce the selected scene using information cues called “taglists” uploaded to the Internet by other users during playback of recorded programs.

RZ Tagler offers a new style of television viewing, and can create a community of viewers linking the “taglist share” service for the sharing of information among users regarding favorite scenes in recorded contents, a social network service (SNS), and the “RZ ranking service” taglist popularity ranking function.



RZ Tagler app for RegzaAppsConnect offering a new television viewing style

“Toshiba Places” Cloud-Based Content Delivery Platform

“Toshiba Places” is a content delivery platform where consumers can access and enjoy web-based contents from various Toshiba products such as TVs, PCs, and tablets. Depending on the services that users wish to receive, they can easily access different Places such as Music Place, Video Place, Book Place, and more across the various devices.

Toshiba Places offers three core services: (1) personal online storage, where users can store and access digital contents that they have purchased as well as their own private videos and photos; (2) single sign on, which allows users to access different Places with a single Toshiba identification (ID) from different products; and (3) social network integration, where users can share digital contents with their friends and family via Facebook and Twitter. With these core offerings, Toshiba Places provides a superior cloud service to customers across our products.



Top screen of Toshiba Places portal site

Twitter is a trademark of Twitter Inc. in the United States and other countries.

Facebook is a trademark of Facebook, Inc.

IS-890T Image Recognition Barcode Scanner

Toshiba TEC Corporation has developed the IS-890T vertical barcode scanner, which is equipped with an image-processing engine for the first time in the world^(*1). By changing the core of the scanner from the conventional laser method to the image-processing method, characters printed on discount labels used at supermarkets, such as “50% off” and “Save 20%,” can be recognized.

The IS-890T scanner offers the following new features that were unavailable with conventional laser scanners: (1) reading of coupons (bar symbols) displayed on a cellular phone, (2) simultaneous scanning of the price information of two different articles, and (3) automated discount operation that was previously manually performed by a cashier. Due to its ease of operation, even an inexperienced operator can immediately master the use of this scanner.

The IS-890T scanner has greatly improved usability compared with our world-first^(*2) vertical point of sale (POS) scanner that was launched on the market in 1984 and became the de facto standard. This new scanner is expected to establish a new industry standard.

(*1) As of January 2011 (as researched by Toshiba TEC Corporation)

(*2) As of April 1984 (as researched by Toshiba TEC Corporation)



IS-890T vertical barcode scanner

ECO-MFP System to Achieve Efficient Reuse of Paper

Toshiba TEC Corporation has developed the ECO-MFP system that can reduce carbon dioxide emissions by approximately 57% compared with conventional multifunctional peripherals (MFPs) by erasing the print from a sheet of paper to allow reuse of the paper up to four times.

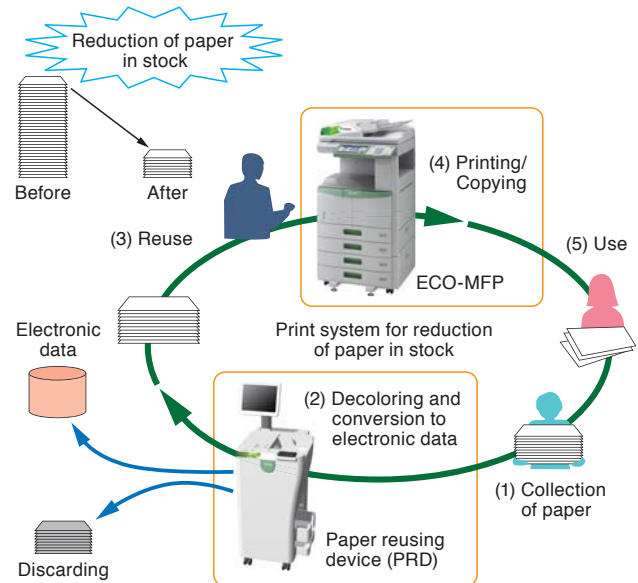
Incorporating a quickly erasable color material technology, a function-separable toner technology that realizes the lowest^(*1) temperature fusing in the industry, wide-nip fuser technology, and a reusable paper detection system that detects the degree of damage to paper such as from dirt and breakage, the ECO-MFP is the world’s first^(*2) MFP on the market that can instantly erase print and reuse paper.

The ECO-MFP also offers document management capability in addition to its eco-friendliness. A double-sided scanner built into the erasing unit allows scanning of the images on papers before they are erased, and the scanned data can be stored in a server or a folder managed with a personal authentication feature.

The ECO-MFP won the 2011 Environment Minister’s Award for Global Warming Prevention Activities.

(*1) As of March 2012, in the MFP industry (as researched by Toshiba TEC Corporation)

(*2) As of December 2011, in the MFP industry (as researched by Toshiba TEC Corporation)



Life cycles of information and paper using ECO-MFP