

# Toshiba: 20 Years in the Portable PC Market; Two New 'Ultra' Notebook PCs

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Toshiba Corporation today announced that it would mark 20 years of innovation and leadership in portable personal computing with the launch of two series of 20th anniversary notebook PCs - "dynabook SS" series and the "libretto U100" series. The "dynabook SS" series will offer ultra-slim profiles -- only 19.8mm at their highest -- and an extended battery life of approximately 5.4 hours. The "libretto U100", a fully-featured mini-notebook PC that can be held on the palm of one hand, will offer enhanced image quality derived from Toshiba's "Qosmio" AV-PCs.

The three models in the "dynabook SS" series will come to market in Japan on April 22. The first model in the "libretto U100" series will follow on April 29, with the three others scheduled to follow at the start

of May. The computers will also soon be launched in the global market, the "dynabook" models under the "portege" marque.

## **dynabook SS**

Toshiba brings its latest advances in high density mounting technologies to the "dynabook SS". Both the "dynabook SS SX," developed for the consumer market, and the "dynabook SS S20," which targets the corporate market, integrate a low-loss printed-wiring board (PWB) that deploys a new material to reduce current and voltage losses during high speed signal transmission. Toshiba has used this low-loss PWB to cut wiring width by 25%, from 100 $\mu$ m to 75 $\mu$ m, and to reduce wiring intervals by approximately 20%, from 120 $\mu$ m to 100 $\mu$ m.

Further miniaturization was achieved by employment of stack via technology, a high density interconnect PWB technology that allows components to be mounted on the back of the board after it has been wired.

These advances in high density mounting resulted in an overall reduction in PWB size of approximately 30%, and the 19.8mm thickness at the highest point for the new "dynabook SS" series. Another plus was that this innovation also left room for a battery with double the volume of the company's conventional PCs\*1, extending the time between recharges to approximately 5.4 hours.

Advances in size reduction are just the beginning of the differentiated features of the new "dynabook SS." Sudden shock is the enemy of any PC. Toshiba now offers two-way protection. The risk of damage to the HDD and loss of data is minimized by a 3D acceleration sensor that instantly detects any vibration from side to side, or front to back, and any sudden movement up or down, and immediately park the HDD pickup heads. PCs are also protected from drops by highly efficient

rubber shock absorbers that isolate and protect such key components as the LCD, HDD and FL inverter.

Security is also further strengthened by providing finger authentication system and other protection functions. The latest advances in biometrics provide a finger authentication system that can recognize patterns in the dermis, below the surface of the skin. This can replace passwords for individual recognition, and is as simple to use as sliding the finger across the sensor. The latest TPM security chip is also integrated, allowing storage of encryption keys in a secure environment isolated from the HDD and CPU, further enhancing security.

All these advanced features are delivered in sophisticated magnesium alloy body finished with a clear coating that adds texture to sophisticated design. Toshiba is all set to deliver design-conscious PCs that offer greater capabilities.

## **libretto U100**

The "libretto U100" series also utilizes a low-loss PWB, stack via technology and other high density mounting technologies to achieve an ultra small profile and a weight of only 999g., all in a package small enough to sit on the palm of the hand. However, even with this small form factor, Toshiba delivers a full keyboard with the same key arrangement as an A4-size notebook PC. With a battery life of approximately 5.3 hours, "libretto U100" achieves both miniaturization and enhanced usability.

Another contributor to usability is the "libretto's" bright 7.2-inch LCD, the first in its class with an LED backlight. Toshiba's proprietary control system manipulates the backlight's 32 LEDs as a group, achieving meticulous control of luminance while minimizing power consumption.

Users can enjoy DVD movies or CD music by connecting the detachable "libretto DVD dock" with DVD super multi drive, and can playback both without booting the PC. The "libretto U100" series adopts the advanced image enhancing technologies, such as digital sharpness, interlace to progressive converter, color correction, de-blocking and de-ringing, that Toshiba first brought to market in its "Qosmio" lineup, and delivers bright, detailed, natural images. Superb image quality is accompanied by enhanced sound quality; "auto gain control" function prevents sound from breaking up, even at the maximum volume, while integrated SRS surround sound adds depth and resonance.

The new "libretto U100" series also comes with HDD protection and finger-based ID authentication.

## **Defining portable computing since 1985**

Toshiba launched the "T1100," the world's first clamshell-type, fully-functional laptop PC in 1985. Since then, the company has stayed in the vanguard of the market by consistently promoting technology standardization and adopting state-of-the-art technologies ahead of others. Toshiba created the notebook PC market and drove its expansion with breakthroughs, including 2.5-inch HDDs, nickel-metal-hydride batteries and color TFT LCDs. Today, these are all standard on notebook PCs. Through advances that demonstrated the power and potential of portable computing, Toshiba has led and promoted the dramatic expansion of the overall laptop market and today's notebook PC market.

The last 20 years has seen applications of portable PC grow in range and diversity, especially with the emergence of the Internet. Today's advanced capabilities and diverse potential inspired Toshiba to launch its category-destroying AV-PC, "Qosmio," in August 2004.

Alongside the AV-PC, Toshiba is also strategically promoting "thin &

light" PCs. Both "dynabook SS" and "libretto U100" are positioned as premium PCs in the "thin & light" category. Toshiba has brought its diverse technologies, such as stack via technology and high density mounting technologies, to the pursuit of slimmer, lighter PCs and the delivery of enhanced security in sophisticated designs. "dynabook SS SX" series is the company's flagship models for the slim-type PC with extended battery life, while "libretto U100" series offer AV capabilities in a small form factor.

This year, Toshiba marks 130 years of operation. As the company celebrates an enviable record of technological innovations that have contributed to a better quality of life, it also looks forward to a future of continued advances and superb products that will captivate people around the world. The Company's new series of "thin & light" PCs are positioned as strategic products on this special occasion.

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