

# Toshiba unveils first next-generation HD DVD drive for laptops

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Japanese electronics giant Toshiba said Tuesday it has developed the first laptop computer with a next-generation HD DVD drive despite a looming format war with a rival group led by Sony.

Toshiba plans to commercialize the new PC by the beginning of 2006, initially in Japan, giving computer users access to high definition video images recorded in the HD DVD format.

The duelling HD DVD and Blu-ray formats parallel the battle a generation ago between VHS and Betamax video cassette tapes. Betamax eventually became extinct when customers opted for its rival.

Toshiba last month said it was in talks with Sony to find a common format but in the absence of an agreement it was going ahead with production of its own format.

The slim-type HD DVD-ROM drive, with a height of only 12.7 millimeters, takes full advantage of the physical structure of HD DVD discs to realize a pick-up head with a single optical lens that can read HD DVD discs and read and write to standard DVD and CD. This size advantage also supported Toshiba in bringing high definition capabilities to the go-anywhere small form factor of the notebook PC.

Toshiba has assured that users can enjoy a mobile, high definition environment to the full by equipping the new PC with a high resolution LCD display.

The new PC will be exhibited at CEATEC JAPAN 2005, at Makuhari Messe, Chiba Prefecture, from October 4 to 8, 2005.

## **HD DVD**

1) The same disc structure as DVD, two 0.6mm-thick polycarbonate discs bonded back-to-back, makes it much easier for HD DVD to achieve backward compatibility with DVD. It also assures easier manufacturing of discs and hardware devices, resulting in lower manufacturing costs.

2) Robust playability, with no need for a disc cartridge to protect against surface blemishes and fingerprints.

3) The DVD Forum has approved HD DVD-ROM discs with a data capacity of 30GB, enough capacity for more than eight hours of high definition video images(a). Higher capacities are also anticipated; Toshiba has already developed a disc with a 45GB capacity. High data capacity is achieved by adopting a shorter wavelength blue-violet laser and advanced data processing technologies, assuring the ability to store large capacity data sources including high-definition images.

(a) MPEG4-AVC or VC1 compressed video and audio data at a data transfer rate of 8 to 9Mbps

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