

Toshiba's New Super-slim CD-ROM Drive is Ideal for Notebook Personal Computers

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TOKYO -- Toshiba Corporation today announced the worldwide introduction of a super slim CD-ROM drive specially designed for portable personal computers. The company is responding to strongly felt market needs with a drive that combines small size, low weight and low power consumption with a very thin optical pick-up and a newly developed drive mechanism: the result is a CD-ROM drive ideally suited to incorporation in notebook PCs.

The company today starts marketing the new product, XM-1102B, at a sample price of 5,000 yen in Japan. Sales of 500,000 units in the first year are expected.

The new drive offers impressive vital statistics: at only 17mm in height and weighing in at a mere 340g, the new drive is 30% thinner and 40% of the volume of the slimmest CD-ROM Toshiba currently markets (25.4mm). These measurements reflect high density packing of components and the use of a thinner optical pick up head. By size and weight, the new drive sets world records for a front-loading drawer (or tray) type CD-ROM drive. Of equal importance in a drive designed for battery-powered equipment is power consumption, and here too the XM-1102B sets exacting new standards. The drive's improved playback system cuts power consumption to an average of 2.0W, dramatically lower than the industry norm of 10 to 20W.

The new product, XM-1102B, enjoys the performance-enhancing features of Toshiba's recently developed variable speed playback system and digital servo control. As a result, it offers a random seek time of only 210 milliseconds.

The variable speed playback system allows the drive to read data before the disc rotational speed reaches any of 1 or 2 times standard rotational speed. More particularly, the CD-ROM drive can read data once the disc rotational speed reaches a range of + or -50% of each speed, while other drives can read data only when the disc speed is at 1 or 2 times rotation. The system also puts less strain on the motor, as it does not require the high torque other drives use to spin-up or spin-down to their data read speed. The lower torque significantly cuts power consumption -- to an average of 2.0W -- generates less heat during operation and offers greater overall reliability.

These operating advantages are further enhanced by replacement of analog servo control with a digital servo control that offers greater precision in tracking and head positioning.

Another plus for the XM-1102B is its use of a drawer in its disc loading system. The drawer holds an inserted disc firmly and securely without a caddy, allowing discs to be left in a PC when it is being carried, or even if the PC is stood on end.

The new XM-1102B is designed for incorporation in IBM PC- AT compatible computers. It supports the ATAPI interface that eases integration of CD-ROM drives and can be installed without the need of additional interface boards, such as a SCSI board, so supporting space-saving design and avoiding additional costs.

The market for CD-ROM drive is thriving, and is expected to grow by a factor of two this fiscal year to 13 million units. Toshiba is an established leader in the market, supplying high quality drives to the world market.

Specifications

Model:	XM-1102B Built-in 17mm height Super Slim Drive
Format:	Internal 12cm/8cm CD-ROM Disc Drive Internal 12cm/8cm CD-ROM Disc Drive
Applicable Disc format:	CD-DA, CD-ROM, CD-ROM XA PhotoCD Multisession, CD-Bridge CD-I, CD-I Ready, CD-G, Video CD
MPC-2 Spec:	Compliant
Interface:	Embedded ATAPI Controller
Access time (2x mode):	Random access: 265ms Random seek: 210ms Full stroke access: 450ms
Data transfer rates:	Sustained mode: 300KB/s Burst mode: 3.33MB/s
Transfer mode:	PIO MODE 0 CA-DA, Subcode P, Q, R-W transfer through ATAPI
Error correction:	Mode-1 EDC/ECC built-in MODE-2 built-in (CD-ROM XA Form-1 EDC/ECC, Form-2 EDC)
Buffer memory:	128KB
Anti-contamination structure:	Sealed enclosure

Mounting orientation: Right-Left: + or -90 degree
Front-Rear: + or -90 degree

Power consumption: 2.0W (Average), 3.3W (Maximum)/
0.1W (Sleep)

Disc loading: Drawer type manual load/eject

Audio output: Line out

MTBF: 45,000POH

Power supply: DC 5V only

Dimensions: 17(H) x 128.8(W) x 140.6 (D)mm

Weight: 340g

Information in the press releases, including product prices and specifications, content of services and contact information, is current on the date of the press announcement, but is subject to change without prior notice.

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