

# Press Release

Faster and in colour: Toshiba's Dynapad T200 Series sharpens up the pen PC market.

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**Neuss,  
8th March 1994**

Toshiba's latest innovation for mobile computer users is the Dynapad T200 Series. Based around fast 486 processors, they are the first pen PCs to offer a full colour display. Hand-held computing now has the speed and screen quality associated with conventional PCs.

Rather than competing with notebooks, the Dynapad T200 Series excels at the range applications in which pen-based systems are uniquely effective. The real replacement target for the Dynapad T200 Series isn't keyboard-based mobile computers, but paper – providing those involved in data collection with a direct electronic interface to their database.

"No-one doubts the huge pent-up demand for pen-based PCs," says Fumio Yamashita, Toshiba Europa's Vice President for the IPS Business Group. "There are simply hundreds of activities, as yet unsupported by computer technology, that could be transformed with the arrival of this truly versatile pen PC. With the Dynapad T200 Series, customers now have real computing power, a full colour display, PCMCIA expandability and local-bus video and graphics accelerator, all in one hand-held system that works well in a mechanics garage, on a building site or in a hospital ward."

*The fastest pen PC so far*

The first test of any computer is its processing power. The new Dynapad T200 Series is powered by Intel's SL Enhanced 486 DX2 chip, running at 40 MHz, making it the fastest pen PC on the market. Furthermore, the T200 Series comes with an 80 MB hard disk drive and the processor has a 8 KB cache. This power and processing speed is backed-up by 4 MB standard RAM that can be expanded up to 20 MB through the range of handy credit-card-sized memory cards.

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## Toshiba's new colour pen PC

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*A breakthrough in colour* Another important technology on the new Dynapad Series is the colour display on the T200CS. This is the first pen PC to offer users colour. Internally, it can show SVGA resolution 256 colours with 640 by 480 dot graphics. The monochrome T200 has 64 grey scales. Externally, graphics with up to 1024 x 768 with 256 colours are possible. Both models have 9.5" transreflective Advanced (double-scan) STN displays. Users can operate the screen in either portrait or landscape modes. Both screens are driven via a VESA local-bus connection and a Windows-oriented graphics accelerator which includes BitBIT and line-draw technology. The displays themselves have been designed with a hardened, textured surface that provides an excellent writing feel. Data is entered using a cordless, passive pen that needs no batteries.

*Full expansion capability* The T200 Series is equipped with two PCMCIA 2.0 slots, Types II and III, for expansion and upgradability. PCMCIA brings users the world of instant communications through fax, modem or network cards, so downloading information, even remotely, could not be simpler. It can also be used for exchangeable storage media, such as flash cards or an additional hard disk. PCMCIA hard disks up to 130 MB are available on the market. For the office, the T200 Series has a PS/2 keyboard port and an SVGA RGB port for high resolution monitors making office work as easy as on a desktop PC.

As one would expect from Toshiba, design has been a key feature in the development of the T200 Series. Its lightweight, smooth round styling ensures the T200 is comfortable enough to hold in a writing position for long periods. The T200 weighs just 1.8 kg and the colour version, the T200CS, is only 2.0 kg. Both models are smaller than A4 in size.

*The latest battery technology*

The Dynapad T200 also offers improved battery life. Thanks to its lithium-ion technology, the battery has a life of up to 3.5 hours (monochrome) and 3 hours (colour). The advanced power management systems that Toshiba has developed ensure that mobile computer users get the most

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out of the energy available. MaxTime allows the hard disk and screen lighting to be switched off and the digitiser has a low power-mode when not in use. Well-known Toshiba features such as AutoResume and AutoSave are also included along with BIOS-level security password protection.

The T200 Series comes with MS-DOS 6.2, Windows for Pen Computing and PCMCIA Socket and Card Services software bundled. The external diskette drive is also included. Options include a full 84-key mobile keyboard, a carrying case (that doubles up as a stand for PC and keyboard), quick battery charger, and car adaptor.

*Reaching areas other  
PCs can't*

All this technology makes the T200 Series an extremely powerful productivity tool for those involved in fieldwork and on-site data collection. Entering data directly into a computer cuts out time-consuming and frequently error-ridden paper-to-PC data recording which is prevalent in many areas. One dynamic interface brings power to those in the field and puts them in direct contact with the host network or database.

"The Dynapad T200 Series is Toshiba's only pen PC. So customers can feel confident that we have put all our very considerable resources and expertise into making this the leading pen PC on the market," says Fumio Yamashita. "There are a whole range of users who have not yet had the benefit of mobile computers, because the nature of their work demanded the flexibility of pen and paper. Now the Dynapad T200 Series fulfils these demands and at the same time provides a single, seamless electronic interface with host networks or databases. It is a unique product that will carve out a strong identity for pen PCs in the overall mobile computer market."

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### T200 specifications

#### Processor

- 3.3 V, SL Enhanced Intel486 DX2,
- 40 MHz (int.), 20 MHz (ext.)
- 8 KB cache on chip

#### Memory

- 4 MB RAM standard
- Up to 20 MB max.

#### Disk drives

- 80 MB hard disk, with 18 msec. average access time
- External 1.44 MB, 3.5" diskette drive

#### Display

- Advanced (double-scan) STN
- Transreflective
- 9.5" diagonal
- Selectable landscape or portrait modes
- Hardened, textured surface for excellent writing feel

#### Graphics system

- VESA local bus connection
- Graphics accelerator (BitBIT and Linedraw)

#### Internal video

- 640 x 480 dots
- 16 grey scales

#### External video modes

- 640 x 480 dots
- 800 x 600 dots

- 1024 x 768 dots
- All up to 256 colours

#### Digitiser system

- Electro-magnetic conductive
- 200 pt./sec. digitiser
- 0.1 mm resolution
- Low-power mode

#### Stylus pen

- Cordless, passive pen
- No batteries required
- Mouse button usage
- Size: 140 x 10 mm
- Weight: 10 g

#### Expansion and interfaces

- Two PCMCIA 2.0 slots (1 Type II, 1 Type III)
- Parallel printer
- 9-pin RS-232-C serial port
- Diskette drive port
- PS/2 keyboard port
- SVGA RGB port

#### Power system

- Lithium-ion removable, rechargeable battery
- MaxTime power management with CPU and hard disk drive "sleep" modes
- Battery "gas gauge"
- Universal AC adaptor 100-240 V AC, 50-60 Hz input, 12 V DC output
- System reset button
- Up to 3.5 hours battery life

#### Special Features

- BIOS level password security
- AutoResume "electronic bookmark"
- Hot spots for contrast and brightness

#### Software bundle

- MS-DOS 6.2
- Windows® for Pen Computing
- PCMCIA Socket and Card Services

#### Dimensions

- 1.8 kg (under 4 lb) with battery
- 270 x 210 x 41 mm (11 x 8.3 x 1.6")

#### Options

- 4, 8 or 16 MB memory cards
- 84-key "notebook type" keyboard
- Carrying case
- Desktop stand
- Replacement stylus
- Extra lithium-ion battery packs
- Extra AC adaptors
- Quick, battery charger
- Car adaptor
- Security cable and lock (third party)

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### T200CS variations

#### Battery life

- Up to 3.0 hours

#### Weight with battery

- 2.0 kg (4.4 lb)

#### Internal video

- 640 x 480 dots, up to 256 colours

#### Special features

- Hot spots: contrast only