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Portégé 7xxx series

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Choose freedom.

TOSHIBA

Technical specification

Processor

Model	Portégé 7140CT
Processor	Intel® Mobile Pentium® III at 500 MHz
Model	Portégé 7200CT
Processor	Intel® Mobile Pentium® III at 600 MHz featuring Intel® SpeedStep™ technology
Model	Portégé 7220Cte
Processor	Intel® Mobile Pentium® III at 650 MHz featuring Intel® SpeedStep™ technology
Products not available in all countries. Please ask your dealer.	
Both models	
Front Side Bus	100 MHz
Cache memory	32Kb internal cache
Level 2 cache	256KB 2 nd level cache
System bus	PCI
Co Processor	Integrated into CPU

BIOS

Plug and Play support	Yes
Advanced Power Management	Yes
ACPI support	Yes
DMI support	Yes (SM BIOS 2.3)
Vesa Support	Yes

System memory

Memory type	Amount	Access speed	Data bus width
Main memory (SDRAM)	64 MB	9 ns	64 Bit
Maximum memory expansion (SDRAM)	320 MB	9 ns	64 Bit
Memory slots	1 free slot to configure		
BIOS Flash EPROM	512 KB	100 ns	16 Bit
Video RAM (SGRAM)	8 Mb		64 Bit

Main Memory

Technology	Synchronous DRAM (3.3volt)
No. Of memory expansion slots	1 free slot to configure
Expansion module sizes	32, 64, 128, or 256 MB

External diskette drive

Specification	High setting	Low setting
Media supported	3.5 inch 2HD	3.5 inch 2DD
Storage capacity	1.44 MB	720 KB
Rotation	300 1/min	300 1/min
Transfer rate	500 Kbit per second	250 Kbit per second
Bytes per sector	512	512
Sectors per track	18	9
Dimensions	96 x 130 x 12.7 mm	

Hard disk

Portégé 7140CT	
Formatted capacity (billion byte)	6.0
Max. data transfer to media	Up to 153 Mbps
Average seek time	12 ms/13 ms read
Track-to-track seek time	3 ms
Drive rotation	4200 1/min
No. Of disks	1 (physical)
No. Of read/write heads	2 (logical)
Bytes per sector	512
Interleave	1:1
Interface	Ultra ATA (Enhanced IDE)
Height	9.5 mm

Hard disk, cont'd

Portégé 7200CT, 7200CTe	
Formatted capacity (billion byte)	12.07
Max. data transfer to media	Up to 153 Mbps
Average seek time	13 ms/14 ms read
Track-to-track seek time	3 ms
Drive rotation	4200 1/min
No. of disks	2 (physical)
No. of read/write heads	4 (logical)
Bytes per sector	512
Interleave	1:1
Interface	Ultra ATA (Enhanced IDE)
Height	9.5 mm

Communication

Modem	Integrated International
Support Protocol	V.90, (56 Kbps data, 14,4 Kbps fax)
Ring Wake-up Resume	Yes
Ports	RJ-11 jack

DVD ROM (integrated in optional)

Manufacturer	Toshiba
Drive type	DVD-ROM
Speed	Max. 6x DVD ROM,
Sizes supported	12 cm
Applicable disc formats	DVD-ROM, CD-ROM, CD-R, CD-RW
Buffer size	128 KB
Rotation speed (1/min)	1148-1388 (DVD-5)
Burst Data Transfer Rate	PIO Mode 4 (16.6 MB/sec)
Average random access	120 ms
Average full stroke access	250 ms
Interface	EIDE
DVD player software	DVD Express (no Windows® NT support)

Screen

Screen size	13.3"
Screen type	TFT
Number of dots	1024 x 768
Dot pitch	0.264 x 0.264 mm
Display area	246(H) x 184.5(V) mm
Contrast ratio	150 : 1 (typ)
Simultaneous colours*	Up to 16.7 million
Colour palette*	Up to 262,144 colors without dithering
Response rise/fall	30 ms / 50 ms
LCD brightness (AC)	70 NIT (Bright), 120 NIT (Super-Bright)
LCD brightness (battery)	70 NIT (Bright), 120 NIT (Super-Bright)

* Maximum colours with dithering

Graphics adaptors

Portégé 7140CT, 7200CT

Trident Cyber e4 Blade	
Memory size	4 MB
Memory Data Bus Width	128 bit
BitBlit Engine	64 bit
Connected bus	AGP bus (w/side band)
Bus clock speed	66MHz
3 D graphics accelerator	Yes
Open GL support	Yes

Portégé 7220Cte

S3 Savage IX	
Memory size	8 MB VRAM
BitBIT	128-bit
Connected bus	AGP x2 bus
Bus clock speed	66 MHz
2 D graphics accelerator	Yes
3 D graphics accelerator	3D assist for Z-Buffer
Open GL support	Yes
Direct 3D support	Yes
Motion compensation	Yes
Integrated TV Encoder	NTSC/PAL
Reduce TV out Flicker	3Tap
Multiple display support	Yes

Graphics adaptor

Video display	Resolution	No. of colours	Maximum
Internal display SVGA			
	640 x 480	16.7 million	
	800 x 600	16.7 million	
	1024 x 768	16.7 million	
Virtual display	1280 x 1024	16.7 million	
Virtual display	1600 x 1200	65.536	
External SVGA			
	640 x 480	16.7 million	85 Hz
	800 x 600	16.7 million	85 Hz
	1024 x 768	16.7 million	85 Hz
	1280 x 1024	16.7 million	85 Hz
	1600 x 1200	65.536	85 Hz

Expansion

PC

PC Card, PC Card slot for 2 Type II cards or 1 Type III card, CardBus
1 free memory slot

Connectivity

PC

External FDD
Headphone
DVD Network Dock II connector
External microphone
FIR (Fast Infrared port)
External monitor
USB port
V.90 (K56) modem

Port Replicator

Parallel (ECP)
PS/2 mouse/ keyboard
Serial

Docking stations (optional)

DVD Network Dock II

Integrated DVD ROM drive
Integrated FDD
Serial
Parallel (ECP)
(S)VGA monitor
Two USB
PS/2 mouse
PS/2 keyboard
Line-in
Line-out
Headphone
Volume Control Button

Docking stations (optional), cont'd.	Video-out (NTSC/PAL)		
	Stereo Speakers		
	10/100 Mbits Ethernet connectivity		
	Hot docking support		
	ACPI capable		
	Wake on LAN support		
Service Boot support			
Battery types	Main	RTC	High Capacity Battery
	Lithium-ion	NiH ₂	Lithium-ion
	10.8 V x 4500 mAh,	2.4V x 40 mAh	10.8 V x 6000 mAh,
Resume battery	4 days (typical)	1 month (typical)	10 days (typical)
Battery life	Maximum life		
	Up to 2.3 hrs with standard battery		
	Up to 4.6 hrs with optional high capacity battery		
Recharging time	Power off	3 hrs	
	Power on	4-10 hrs	
Battery saver	CPU sleep		
	HDD Auto off		
	Display Auto off		
	CPU Speed change		
	Auto resume		
	Toshiba Power Extensions		
AC adapter	Input voltage	100-240V AC, self adjusting	
	Frequency	50-60 Hz	
	Output voltage	15 V	
	Output current	3.0 A	
	Power dissipation	45 W	
	Weight	300 g	
	Manageability features	LANDesk Client Manager*	
ACPI support			
DMI 2.0 compliant			
Service boot			
Remote Wake up*			
Wake-on-LAN*			
DVD Network Dock II with built in Ethernet connector			
*supported only with DVD Network Dock II			
Multiple security system		Slot for Kensington Cable Lock	
	Screws for main battery pack, modem and memory		
	Power on Password		
	Supervisor Password		
	HDD Password		
	Secure Sleep (locking keyboard and blanking screen)		
Keyboard	Full size keyboard		
	No. of Keys	86	
	Keyboard specification	IBM PS/2 102 key	
	Windows `95 keys	2	
	No. of Hotkeys	8	
	Dimensions	286.8 x 12.3 x 7.5 mm	
	Key pitch	19.05 mm	
	Key stroke	3 mm	

Sound system	Sound chip	ESS ES1978 (PCI audio Controller)
	Compatibility	Sound Blaster Pro V3.01 Windows Sound System V2.0
	Full duplex sound	Yes
	Sound volume	Yes by dial
	Built in speaker	Yes
	Built in microphone	Yes
	Sound Audio Format	16bit, stereo
	Max. Sampling Rate	48 KHz
	Direct Sound	Yes (by software)
	Direct 3 D sound	Yes (by software)

Special mobility features	Portégé weighs only 1.96 kg , and around 3 kg with DVD Network Dock II	
	Case is only 25 mm high in average	
	Up to 5 hours battery life with high capacity battery (optional)	
	Metal (magnesium) casework for more robustness	
	Full size display with 13.3" TFT display	

Bundled software	Double password protection and optional Kensington cable	
	Preinstalled operating system	Windows 95® or Windows 98® selectable pre-installation. Windows® NT 4.0 or Windows® 2000 selectable pre-installation on request for an additional charge
	Other software	Intel's LAN Desk Client Manager Toshiba Service utilities Toshiba Power Extensions

Physical dimensions	Weight	1.96 kg
	Size (W x L x H)	297 x 241 x 25 mm (23-28 mm)
	Type of Material	Magnesium Casework

Environmental conditions	Operating		Non-operating
	Temperature	5 °C to 35 °C	-20 °C to 65 °C
Max. Thermal gradient	20 °C/h		
Relative humidity	20 % to 80 % non-condensing	10% to 90% non-condensing	
Altitude (relative to sea level)	-60 to 3000 m	-60 to 10000 m	
Shock	10 G	60 G	
Vibration	0.5 G	1 G	

* Aeroplane cabin pressures simulate low altitudes, so flying higher causes no restrictions.

Warranty	3-year International Warranty
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Certificates	The manufacturer declares that this product and/or related equipment and options complies with the following directives or regulations regarding the CE mark:	
	93/68/EEC	CE marking directive
	89/336/EEC	EMC directive
	73/23/EEC	Low voltage directive
	EN 60950, A1, A2, A3	Electrical safety
	EN 55022 B	EMC/Radio disturbances
	EN 50082-1	EMC Immunity
	EN 61000, 3-2-, EN 61000 3-3	Disturbances in supply systems

Features & Benefits

Processor

Feature	Benefit
Intel® Mobile Pentium III 650 featuring SpeedStep™ technology with Portégé 7220CTe	The most advanced mobile Pentium III® processor enables your PC to handle multiple tasks simultaneously and offers enough power for advanced business and graphics applications. Intel® SpeedStep™ technology provides two performance modes near desktop performance and all benefits of mobility
Intel® Mobile Pentium III 600 featuring SpeedStep™ technology with Portégé 7200CT	Maximum performance mode for near desktop equivalent performance while connected to external power Battery optimised performance mode for the best balance between performance and battery life
Intel® Mobile Pentium III 500 with Portégé 7140CT	Battery optimised mode provides a 40-60% reduction in CPU power while maintaining 80% of the maximum performance Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.
Integrated 256 Kb Level 2 cache	Ensures optimal memory access speeds due to on die placement, giving highest performance possible.

Memory

Feature	Benefit
One memory slot to configure	Offers enough expansion for memory extensive applications.
Expandable up to 320 MB SDRAM	Business applications become more and more mobile. The need for memory intensive applications can be fulfilled.
512 KB Flash EPROM	Flash EPROM's allow system administrator to quickly update BIOS if necessary without returning machine to supplier - just by an update via software. Saves time and upgrade cost for IS department.
32, 64, 128, or 256 MB SDRAM memory expansion modules (optional)	Faster manipulation of software and data stored in memory. User can easily upgrade memory when need arises.

Hard disk drive

Feature	Benefit
6 GB* (7140CT, 7200CT) 12GB*(7220CTe)	Large storage capacity for every user.
Low-power modes	Maximise battery operating life.
Hard disk protection	Password protection for hard disk possible.

*one GB means one billion byte

DVD-ROM drive (integrated in optional DVD Network Dock II)

Feature	Benefit
6 speed DVD-ROM drive (17 mm)	Reads both standard CDs and next-generation DVD-ROMs. Access up to 650 MB on a CD-ROM or 17 GB on a DVD-ROM . High quality medium for Multimedia presentations, electronic catalogues or other disk space consuming applications.
CD-ROM compatibility	Reads CD-ROMs, CD-R and CD-RW at up to 20x speed.
Software DVD decoder	Full frame rate DVDs

DVDEpress software

Feature	Benefit
Software decoding	Full frame-rate DVD and MPEG-2.
AC-3 and MPEG-2 audio decoding	Professional quality videos with all the features DVD offers. Support for the two industry-standard sound encoding systems available for DVDs.
	Digital audio out for professional audio.
No Windows® NT support	

Display

Feature	Benefit
TFT colour screen	Most modern colour flat screen technology available.
	Ergonomic display, more comfortable working for the eyes.
13.3" display size	Full size display screen in an ultra lightweight notebook.
	No compromise in working with lightweight notebook.
Super-bright display	Enhances working condition and reduces eye strain.

Graphics sub-system

Feature	Benefit
S3 Savage IX	Offers the highest performance and boasts superior graphics with a 128-bit architecture
Advanced video controller with SVGA resolutions	Ideal for presentations on large monitors or data projectors or for work with design or DTP programs in the office or on the road.
Resolutions	1024 x 768 x 16.7 million colours internal resolution
	1600 x 1200 x 65.536 colours external resolution
8 MB video RAM	Provides leading edge performance along with the highest image quality
AGP-2X	Full Accelerated Graphics Port 2X support features a peak bandwidth of 2x the PCI bus
	Improves 3D performance
	Improves overall system performance. The CPU can perform other activities while the graphics chip is accessing data in system memory.
Video graphics accelerator	Ensures that graphics are generated quickly on screens to take advantage of Graphical User Interfaces such as Windows
Integrated TV encoder	Sets new quality standards for flicker reduction, filtered overscan compensation and NTSC/PAL encoding
	Ensures excellent TV output quality
Dual display mode	Allows user to show data and presentations to colleagues or customers on an external monitor or beamer while controlling the procedure from the internal screen and keyboard
Multiple monitor mode	Work with different resolutions on different devices – allows high resolution internally and lower resolution on external devices unable to support higher resolutions (depending on OS support - may require extra hardware)

Communication

Feature	Benefit
Integrated international V.90 modem	Allows user to access the internet or the companies' network while he's not in the office. Modem is integrated into the casing of the notebook. No extra hardware has to be used.
56K flex Data	Most modern modem standard guarantees fast internet connection rates and saves money through higher data throughput. Receive data with up to 56 kbps.
14.4K fax	Send and receive faxes with 14.4kbps

Manageability

Feature	Benefit
LAN Desk Client manager	The LAN Desk Client manager software runs on the client machine and monitors the system performance. If critical events occur the Client manager sends out a warning and report to the LAN administrator. The administrator doesn't have to be physically at the client computer to monitor it.
ACPI compatible	ACPI is active support for efficient power management and is supported by the latest operating systems such as Windows 98. ACPI capable motherboards can switch off devices, which are not needed at a certain time.
DMI 2.0 compliant	DMI provides an improved network management for client PCs.
Service boot	The Service Boot function allows an IT person to boot a system without any image on the hard disk, or with a damaged image, and attach to a server based configuration tool.
Optional DVD Network Dock II	The optional DVD Network Dock II has integrated 10T/100 Base T network cards.
(with built in Ethernet connector)	The integrated network card support advanced manageability features such as Wake on LAN and Service Boot. Easier manageability for the LAN administrator, as notebook is directly connected to the company's network.
Wake-On-LAN* support	The Wake-On-LAN function with the DVD Network Dock II and LANdesk Client Manager allows the LAN administrator to boot the client PC remotely.

* in combination with optional DVD Network Dock II

Pointing device

Feature	Benefit
Integrated MousePoint Pointing device	Easy to use. Precise control of cursor.
	No protruding extras when travelling.

AccuPoint™ II

Two programmable buttons for additional mouse functionality e.g. scrolling up and down	Useful for scrolling large documents
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Interfaces

Feature	Benefit
SVGA colour monitor port	Provides high-resolution display of colour and graphics on external monitor for sharp images.
FDD	Allows connection of an external FDD.
PS/2 keyboard/* PS/2 mouse port*	Allows use of 102-key keyboard when desired; increases productivity of operators familiar with 102-key keyboard. Provides full keyboard versatility. Allows faster, more accurate entry of numerical data.
USB Ports	It slot allows to connect up to 127 devices. USB is getting increasingly important for manufacturer of external devices. It is a more user-friendly and low-power expandability
Microphone	Enables connection of a microphone for audio input.
Headphone	Enables connection of a stereo headphone for audio output.
Port Replicator	Allows connection of external Port Replicator which features a PS/2, serial and parallel port.
Docking connector	Provides an instant connection to all devices hooked up to base ports.

Expansion

Feature	Benefit
2 Type II or 1 Type III PC Card (PCMCIA) slot	Provides mobile communication and expansion in a credit-card-sized format. Can be used for a wide range of communication and expansion modules such as modems, network adapters, flash memory cards and removable hard disks.
CardBus ready	Allows access to all the latest, high performance PC Card expansion devices.

Power system

Feature	Benefit
Lightweight removable, rechargeable lithium-ion battery pack	Higher capacity than other battery types, hardly any memory effect Environmentally friendly to dispose of Offers longer battery life
Toshiba Power Extensions	Allows user to specify when power-hungry components should be shut down to make most efficient use of available battery power

Multiple security system

Feature	Benefit
Two system password security levels	Stops unauthorised access to data and software when power is switched on.
PC Card lock	Locks PC Cards in system when used with a Kensington MicroSaver.
Secure sleep	Puts the PC into a secure sleep mode, while user has to leave the desk. The system can be started again with a password.
Kensington MicroSaver provision	Hardware-based theft prevention. The computer can be physically secured to an immovable object.

Special mobility features

Feature	Benefit
Ultra light weight design.	Especially designed for the no compromise fully mobile PC user. Weighing in at only 2 kg.
Silver coloured metal (magnesium) plate for more robustness	Very robust casing for the heavy mobile user. Superior stylish design.
25 mm high case on average	The ultra-thin design fits into every briefcase. Easy to carry through its light weight.
500 MHz, 600 MHz & 650MHz mobile Intel® Pentium® III processor (also with SpeedStep™ technology)	Latest and most powerful mobile processor. Provides the new Portégé to be a full main PC.
Up to 4.6 hours battery life with high capacity battery (optional)	Independent to power supply. Longer operating time for increased efficiency
Full size TFT display with 13.3" display size.	No compromise in working environment. The user can enjoy the full size of a 13.3" TFT display.
Full size keyboard	The full size keyboard offers comfortable working conditions for the heavy mobile user.

Toshiba support

Feature	Benefit
3-year International Warranty	Provides confidence that the notebook will give lasting, reliable performance throughout the world

Options

Feature	Benefit
Memory	32, 64, 128 or 256 MB SDRAM memory modules for expansion.
Power	Optional high capacity battery offers much longer battery life on the road.
Desktop expansion	DVD Network Dock II with built in DVD ROM, FDD and Ethernet connector for advanced multimedia and connectivity features.
Keyboard	Several sets of keycaps for different languages available

Options

Memory

PA Number	Article
PA3003U-K	32 MB memory kit
PA3004U-K	64 MB memory kit
PA3005U-K	128 MB memory kit
PA3051U-1NME	256 MB memory kit

Keyboard

PA Number	Article
PA3006E-1KBE	Keycaps for Belgian keyboard
PA3006E-1K BL	Keycaps for blank keyboard
PA3006E-1K CZ	Keycaps for Czech keyboard
PA3006E-1K DK	Keycaps for Danish keyboard
PA3006E-1K EN	Keycaps for English keyboard
PA3006E-1K FR	Keycaps for French keyboard
PA3006E-1K GR	Keycaps for German keyboard
PA3006E-1K IT	Keycaps for Italian keyboard
PA3006E-1K SP	Keycaps for Spanish keyboard

Power

PA Number	Article
PA2450UE	Universal AC adapter
PA3000U- 1BRS	Lithium-ion battery pack (6 cell)
PA3002U- 1BRL	High capacity battery pack (12 cell)
PA2508UE	Battery charger

Expansion

Number	Article
PA3007E-1DST	DVD Network Dock II