

All Details inside:

# Satellite Pro Series

Pro

- Technical Specification
- Features & Benefits
- Options



Choose freedom.

**TOSHIBA** 

# **Technical specification**

### **Processors**

1	
Processor type	Intel® Mobile Pentium® III processor at 700 MHz featuring Intel® SpeedStep™ technology
Processor speed	700 MHz
External bus speed	100 MHz
Cache memory	32 KB Level 1 and 256 KB Level 2 cache (integrated into CPU chip)
Processor core	1.6 volt core using 'Voltage Reduction Technology' in AC mode
voltage	1.35 volt core in battery mode
Co-processor	Integrated in processor
System bus	PCI
,	
Processor type	Intel® Mobile Pentium® III processor at 650 MHz featuring Intel® SpeedStep™ technology
Processor speed	650 MHz
External bus speed	100 MHz
Cache memory	32 KB Level 1 and 256 KB Level 2 cache (integrated into CPU chip)
Processor core voltage	1.6 volt core using 'Voltage Reduction Technology' in AC mode 1.35 volt core in battery mode
Co-processor	Integrated in processor
System bus	PCI
	•
Processor type	Intel® Mobile Pentium® III processor at 600 MHz featuring Intel® SpeedStep™ technology
Processor speed	600 MHz
External bus speed	100 MHz
Cache memory	32 KB Level 1 and 256 KB Level 2 cache (integrated into CPU chip)
Processor core	1.6 volt core using 'Voltage Reduction Technology' in AC mode
voltage	1.35 volt core in battery mode
Co-processor	Integrated in processor
System bus	PCI
- <b>,</b>	
Processor type	Intel® Mobile Pentium® III processor
Processor speed	500 MHz
External bus speed	100 MHz
Cache memory	32 KB Level 1 and 256 KB Level 2 cache (integrated into CPU chip)
Processor core	1.6 volt core using 'Voltage Reduction Technology'
voltage	, , , , , , , , , , , , , , , , , , ,
Co-processor	Integrated in processor
System bus	PCI
<b>,</b>	
Processor type	Intel® Mobile Celeron™
Processor speed	550 MHz
External bus speed	100 MHz
Cache memory	32 KB Level 1 and 128 KB Level 2 cache (integrated into CPU chip)
Processor core	1.6 volt core using 'Voltage Reduction Technology'
voltage	0,
Co-processor	Integrated in processor
System bus	PCI
•	Not each processor type and clock speed are available in all countries. Ask your dealer.

### **System memory**

Memory type SDRAM	Amount 64 MB (PC100)	Access speed 9 nanoseconds	Data bus width 64-bit
Maximum memory expansion (SDRAM)	320 MB	9 nanoseconds	64-bit
BIOS Flash EPROM	512 KB		
Video RAM	8 MB	50 nanoseconds	16-bit

Memory technology	Technology			Synchronous DRAM 3.3-volt (PC100)	
,	No. of memory expansion slots			2 free slots to configure	
	Expansion module siz			32, 64, 128	Ü
Diskette drive	Simultaneous internal	Luse with the C	D-ROM-	drive	
	Specification	High setting			Low setting
	Media supported				3.5 inch 2DD
	Storage capacity 1.44 MB		720 KB		
	Rotation	300 rpm			300 rpm
	Transfer rate	500 kbit per s	second		250 kbit per second
	Bytes per sector	512			512
	Sectors per track	18			9
Hard disks	Formatted capacity			12.0 GB *	
nara alono	Max. data transfer rat	e to/from media	а	Max. 153.3 N	//bit/sec
	Average seek time		_	12 ms	
	Track-to-track seek tir	me		3 ms	
	Drive rotation			4200 rpm	
	No. of disks			2	
	No. of read/write head	ds		4	
	Bytes per sector			512	
	Interleave			1:1	
	Interface			Enhanced ID	DE
	Hard disk height			9,5 mm	
	S.M.A.R.T hard disk t	echnology		Yes	
	Formatted capacity			6.0 GB *	
	Max. data transfer rat	e to/from media	a	Max. 153.3 N	Mbit/sec
	Average seek time			13 ms	
	Track-to-track seek tii	me		3 ms	
	Drive rotation No. of disks			4200 rpm	
	No. of read/write head	10		1-2 2-4	
	Bytes per sector	15		512	
	Interleave			1:1	
	Interface			Enhanced ID	E
	Hard disk height			9,5 mm	
	S.M.A.R.T hard disk t	echnology		Yes	
	1			*one GB mear	ns one billion bytes
<b>DVD-ROM</b> drive	Speed		Max. 6	x DVD-ROM, 2	24x CD-ROM Mode
	Interface		Enhanced IDE (ATAPI)		
		Supported CD-ROMs 12 cr		12 cm/8 cm	
	Applicable disc forma	t			ead only), DVD-RW (read only),
	(		Red-Book, Yellow-Book, CD-ROM XA, CDI-Bridge		
			(Photo-CD), CD-I, CD-I Ready, CD-G, Multisession		
				(Photo-CD, CD-Plus), Video CD, CD Extra (CD Plus),	
			CD-R, and CD-RW 120 ms (DVD-ROM), 95 ms (CD-ROM)		
DVD-ROM drive	Average seek time Rotation speed (rpm)			530 (1X)	5136 (24X)
DVD-ROW drive	Data transfer rates (ty	(nical)		ned mode:	3,600 KB/sec(max.24x)
	Sala handler rates (t)	piodij	Burst n		16.7 MB/sec (PIO mode 4)
				ingle mode:	8.33 MB/sec (DMA mode 2)
				nulti mode:	16.7 MB/sec (DMA mode 1)
	Weight		270 gra	ams	,
	Buffer size		128KB		
	DVD player coffware		Modion	notice DVD Ex	(proce (not cupported under

DVD player software

Mediamatics DVD Express (not supported under

Windows NT)

#### **CD-ROM drive**

Interface Enhanced IDE (ATAPI)  Supported CD-ROMs 12 cm/8 cm  Red-Book, Yellow-Book, CD-ROM XA, CDI-Bridge (Photo-CD), CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Plus), Video CD, CD Extra (CD Plus), CD-R, and CD-RW  Average seek time 130 ms  Rotation speed (1/min) 200 to 530 (1X) 5136 (24X)  Data transfer rates (typical) Sustained mode: 3,600 KB/sec(max.24x)  Burst mode: 16.7 MB/sec (PIO mode 4)  DMA single mode: 8.33 MB/sec (DMA mode 2)  DMA multi mode: 16.7 MB/sec (DMA mode 1)  Weight 195 grams	CD-ROM speed	Max. 24x		
Applicable disc format  Red-Book, Yellow-Book, CD-ROM XA, CDI-Bridge (Photo-CD), CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Plus), Video CD, CD Extra (CD Plus), CD-R, and CD-RW  Average seek time 130 ms Rotation speed (1/min)  200 to 530 (1X)  5136 (24X)  Data transfer rates (typical)  Sustained mode: 3,600 KB/sec(max.24x) Burst mode: 16.7 MB/sec (PIO mode 4) DMA single mode: 8.33 MB/sec (DMA mode 2) DMA multi mode: 16.7 MB/sec (DMA mode 1)  Weight	Interface	Enhanced IDE (ATAPI)		
(Photo-CD), CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Plus), Video CD, CD Extra (CD Plus), CD-R, and CD-RW  Average seek time 130 ms Rotation speed (1/min) 200 to 530 (1X) 5136 (24X)  Data transfer rates (typical) Sustained mode: 3,600 KB/sec(max.24x) Burst mode: 16.7 MB/sec (PIO mode 4) DMA single mode: 8.33 MB/sec (DMA mode 2) DMA multi mode: 16.7 MB/sec (DMA mode 1)  Weight	Supported CD-ROMs	12 cm/8 cm		
Rotation speed (1/min)         200 to 530 (1X)         5136 (24X)           Data transfer rates (typical)         Sustained mode: 3,600 KB/sec(max.24x)           Burst mode: 16.7 MB/sec (PIO mode 4)         DMA single mode: 8.33 MB/sec (DMA mode 2)           DMA multi mode: 16.7 MB/sec (DMA mode 1)         195 grams	Applicable disc format	(Photo-CD), CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Plus), Video CD, CD Extra (CD Plus),		
Data transfer rates (typical)  Sustained mode: 3,600 KB/sec(max.24x) Burst mode: 16.7 MB/sec (PIO mode 4) DMA single mode: 8.33 MB/sec (DMA mode 2) DMA multi mode: 16.7 MB/sec (DMA mode 1) Weight	Average seek time	130 ms		
Burst mode: 16.7 MB/sec (PIO mode 4)  DMA single mode: 8.33 MB/sec (DMA mode 2)  DMA multi mode: 16.7 MB/sec (DMA mode 1)  Weight 195 grams	Rotation speed (1/min)	200 to 530 (1X)	5136 (24X)	
	Data transfer rates (typical)	Burst mode: DMA single mode:	16.7 MB/sec (PIO mode 4) 8.33 MB/sec (DMA mode 2)	
Puffor pizo	Weight	195 grams		
Dullet Size 120ND	Buffer size	128KB		

### **Displays**

vveigni	195 grams	
Buffer size	128KB	
Screen size	13.0" DSTN	12.1" TFT
Screen type	Advanced DSTN	Active matrix TFT
Number of dots	800 x 600	800 x 600
Dot pitch	0.33 x 0.33 mm	0.3075 x 0.3075 mm
Diagonal	13.0 inch (33 cm)	12.1 inch (30.7 cm)
Contrast ratio	50:1 (typical)	100:1 (typical)
Contrast Control	Yes	No
Simultaneous colours*	16.7 mill.	16.7 mill.
Response rise/fall	50 ms / 50 ms	30 ms / 50 ms
LCD brightness	50 cd/m <sup>2</sup>	50 cd/m <sup>2</sup>
Semi-Bright (AC; Battery)		
Bright (AC; Battery)	80 cd/m <sup>2</sup>	70 cd/m <sup>2</sup>
Super-Bright (AC; Battery)		115 cd/m <sup>2</sup>
* Maximum colours with dithering		
Screen size	13.3" TFT	14.1" TFT
Screen type	Active matrix TFT	Active matrix TFT
Number of dots	1,024 x 768	1,024 x 768
Dot pitch	0.28 x 0.28 mm	0.28 x 0.28 mm
Diagonal	13.3 inch (33.8 cm)	14.1 inch (35.8 cm)
Contrast ratio	100:1 (typical)	100:1 (typical)
Simultaneous colours*	16.7 mill.	16.7 mill.
Response rise/fall	50 ms / 50 ms	30 ms / 50 ms
Brightness Semi-Bright (AC; Batt.)	50 cd/m <sup>2</sup>	50 cd/m <sup>2</sup>
Bright (AC; Battery)	70 cd/m <sup>2</sup>	70 cd/m <sup>2</sup>
Super-Bright (AC; Battery)	115 cd/m <sup>2</sup>	115 cd/m <sup>2</sup>
Screen size	15.0" TFT	
Screen type	Active matrix TFT	
Number of dots	1,024 x 768	
Dot pitch	0.28 x 0.28 mm	
Diagonal	15.0 inch (38.1 cm)	
Contrast ratio	100:1 (typical)	
Simultaneous colours*	16.7 mill.	
Response rise/fall	30 ms / 50 ms	
Brightness Semi-Bright (AC; Batt.)	50 cd/m <sup>2</sup>	
Bright (AC; Battery)	70 cd/m <sup>2</sup>	Not all display types and sizes
Super-Bright (AC; Battery)	115 cd/m <sup>2</sup>	are available in all countries.
* Maximum colours with dithering.		Ask your dealer

Video modes
Models with
S3 Savage IX

Video display	Resolution	Max. refresh rate	Max. number of colours
Internal display	640 x 480		Up to 16.7 million colours
	800 x 600		Up to 16.7 million colours
virtual display on	1024 x 768		Up to 16.7 million colours
virtual display	1280 x 1024		Up to 16.7 million colours
virtual display	1600 x 1200		Up to 65.536 colours
External SVGA	640 x 480	85 Hz	Up to 16.7 million colours
External SVGA	800 x 600	85 Hz	Up to 16.7 million colours
External SVGA	1024 x 768	85 Hz	Up to 16.7 million colours
External SVGA	1280x 1024	85 Hz	Up to 16.7 million colours
External SVGA	1600 x 1200	60 Hz	Up to 65.536 colours
virtual display virtual display External SVGA External SVGA External SVGA External SVGA	1280 x 1024 1600 x 1200 640 x 480 800 x 600 1024 x 768 1280x 1024	85 Hz 85 Hz 85 Hz 60 Hz	Up to 16.7 million colours Up to 65.536 colours Up to 16.7 million colours

<sup>\*</sup> More pixels required than are available. Picture will scroll.

### **Graphics adaptors**

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

# Multiple security system

Data Security	
System password security	Yes
HotLock security	Yes
User Power on Password	Yes
Supervisor Password	Yes
2 level HDD Password	Yes (on demand)
Keyboard Lock	Yes by Hotkey
Physical Security	
Main Memory	Yes by screw
Main Hard disk	Yes by screw
Slot for Kensington cable lock	Yes
PC Card lock	Yes with Kensington cable lock

### **Physical dimensions**

Model	Weight	Size (W x L x H)
13.0", 12.1", 13.3" and 14.1" models	3.06 kg	309 x 263 x 44 mm
All models with DVD-ROM	3.17 kg	309 x 263 x 44 mm
15" model	3.16 kg	313 x 270 x 45 mm
All	Casing	Polycarbonate/ABS

### **Battery**

Main	RTC
Lithium-ion	NiH <sub>2</sub>
Removable main battery pack	
10.8 V x 4000 mAh = 43.2 Wh (9 cells)	2.4 V x 12 mAh
4 days (typical)	
Up to 3 hrs	1 month (typical)

# Resume back-up Battery life

Recharging time	Power off (full charge)	2-2.5 hours
	Power off (90 % charge)	1.5 hours
	Power on	4-10 hours

#### **Power supply**

All, but 15.0" TFT and Mobile Intel® Pentium® III at 600/650/700 MHz featuring Intel® SpeedStep™ technology model	Input voltage	100 – 240 V AC, autosensing for world- wide usage
	Frequency	50 - 60 Hz
	Output voltage	15 V
	Output current	3 A
	Power dissipation	45 W
	Weight	300 g
	Size (L x W x H)	125 x 63 x 25 mm

#### **Power supply**

15.0" TFT and Mobile Intel® Pentium® III at 600/650/700 MHz featuring Intel® SpeedStep™ technology model	Input voltage	100 – 240 V AC, autosensing for world- wide usage
	Frequency	50 - 60 Hz
	Output voltage	15 V
	Output current	4 A
	Power dissipation	60 W
	Weight	430 g
	Size (L x W x H)	140 x 75 x 25 mm

#### **Expansion**

#### PC

PC Card16 and CardBus support Type III slot for 2 Type II cards or 1 Type III card 2 free internal memory slots

Connects to Card Station III with the optional Card Station III Spacer (15.0" TFT and Mobile Inel® Pentium® III at 600 MHz featuring Intel® SpeedStep™ technology model need an 60 Watts power supply)

Connects to Card Station IV (optional)

PC port expansion with Port Replicator (optional)

#### **Interfaces**

#### **PC** ports

Serial port (16550UART equivalent)

Parallel (ECP)

External monitor

Expansion Bus connector

Fast infrared port (FIR)

PS/2™ mouse or keyboard

TV-Out (NTSC/PAL output; RCA connector) – except Pentium® 450 MHz model

USB port

Headphone

External microphone (monaural)

RJ11 modem jack

#### **Special features**

Toshiba Hibernation and Resume

Toshiba Power Extensions

System Password Securities

Password Security

SecureSleep™

HDD password on request

Recovery CD

Slot for Kensington cable lock

Power on button lock

1 year international warranty

# Docking stations (optional)

Card Station IV	Port Replicator
Serial	Parallel (ECP)
Parallel (ECP)	Serial
External monitor	External monitor
PS/2™ mouse	Midi/Joystick
PS/2™ keyboard	PS/2 mouse
External microphone	PS/2 keyboard
Line in	Line in
Line out	Line out
2x USB	2 x USB
DC-in	DC-in
1 PC Card slot type III	Microphone
Slot Kensington cable slot	Headphones
Security slide	Slot for Kensington cable lock

#### **Card Station III Spacer**

Connects the Satellite Pro to Card Station III (15.0"TFT and the Intel® Pentium® III 600 MHz featuring Intel® SpeedStep™ technology models need an optional 60 Watts power supply)

#### Communication

Integrated modem	International V.90 modem
Supported Protocol	V.90 Data + Fax (56Kbps data, 14.4Kbps fax)
Modem chip	Lucent DSP1646 and CSP1034
Port	RJ 11
Ring Wake-up Resume	Yes

#### Keyboard

_	
Total number of keys	86
Key Pitch	19.05mm
Key stroke	3 mm
Integrated Pointing device	AccuPoint™ II, including two programmable scroll buttons
Windows® keys	Supported (2)
Function keys	12
No. of Hotkeys	8
Application Key Support	Yes
Euro Key	Yes

#### Sound system

Yamaha YMF744B-R sound chip

3 D sound

16-bit, SoundBlaster Pro V 3.01 compatible, Windows Sound System V 2.0 compatible

MIDI (play back) & Wave synthesis support

2 built in stereo speakers

Max. 48 KHz sampling rate

Full duplex sound

1 headphone jack (stereo), one line-in jack (stereo) & one volume control dial

External microphone port

**BIOS** 

ACPI (1.0b) enabled BIOS

SM BIOS V. 2.3

### **Bundled Software**

Pre-installed operating system:

Microsoft® Windows® 95 and Windows® 98
selectable installation

Microsoft® Windows® NT 4.0 and
Windows® 2000 selected installation on

For Benelux only: Pre-installed Microsoft®
Windows® 95 English, French or Dutch
selectable installation

Microsoft® Windows® NT 4.0 and
Windows® 2000 selectable installation on

request (limited language versions available) request (limited language versions available)

Toshiba utilities and drivers for Microsoft® Windows® 98

PC Card Management software

Toshiba Hibernation Utility

# Bundled Software cont'd.

On-line help (User's Manual) and modem Manual

DVD Express (bundled with DVD models) supported under Microsoft® Windows @ 95, Windows @ 98 and Windows @ 2000

#### Warranty

#### 1-year International Warranty

# Environmental conditions

	Operating	Non-operating
Temperature	5 °C to 35 °C	-20 °C to 65 °C
Max. thermal gradient	20 °C/hour	20 °C/ hour
Relative humidity	20 % to 80 %, non-condensing	10 % to 95 %, non-condensing
Altitude (relative to	-60 to 3,000 m *	-60 to 10,000 m
sea level)	(-200 to 10,000 feet) *	(-200 to 30,000 feet)
Shock	10 G (1.5 G**)	60 G (50 G**)
Vibration	0.5 G (0.25 G**)	1 G (1G**)

<sup>\*</sup> Aeroplane cabin pressures simulate low altitudes. Flying higher causes no restrictions.

#### Certification

This product is approved for electrical safety and/or electromagnetic compatibility (EMC) by the following associations:

ΤÜV

DIN GOST TÜV

UL1950 CSA

FCC

The manufacturer declares that this product complies with the following directives and regulations for the CE-marking. Responsible for CE marking is Toshiba Europe GmbH, Hammfelddamm 8, D-41460 Neuss, Germany.

93/68/EEC	CE marking directive
89/336/EEC	EMC directive
73/23/EEC	Low voltage directive
EN 60950	Electrical safety
EN 55022	EMC/Radio disturbances
EN 50082-1	EMC Immunity (residential, commercial & light industry)

<sup>\*\*</sup> When CD-ROM drive installed.

# **Features & Benefits**

Features	ultiple dvanced odes ween
Pentium®III processor at 600/650/700 MHz featuring Intel® SpeedStep™ technology enables your PC to handle me tasks simultaneously and offers high performance even for act business and graphics applications.  Intel® SpeedStep™ technology provides two performance me technology  Intel® SpeedStep™ technology provides two performance me near desktop performance and all benefits of mobility  Maximum performance mode for near desktop equivalent performance while connected to external power  Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500 MHz  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graphications. Pentium® III offers more benefits in video, graphications.	ultiple dvanced odes ween
tasks simultaneously and offers high performance even for act business and graphics applications.  Intel® SpeedStep™ lechnology provides two performance mote technology  Maximum performance and all benefits of mobility  Maximum performance mode for near desktop equivalent performance while connected to external power  Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500  MHz  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimedia applications. Pentium® III offers more benefits in video, graphical professional power users on the road and papplications.	odes
featuring Intel® SpeedStep™ technology  Intel® SpeedStep™ technology provides two performance mode technology  Maximum performance mode for near desktop equivalent performance while connected to external power  Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimedia applications. Pentium® III offers more benefits in video, graphical professional power users on the road applications.	ween
Intel® SpeedStep™ technology provides two performance mode technology  Maximum performance mode for near desktop equivalent performance while connected to external power  Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500  MHz  Intel® Mobile Designed for all professional power users on the road and in the office  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graphed.	ween
Maximum performance mode for near desktop equivalent performance while connected to external power  Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500  MHz  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	
Battery optimised performance mode for the best balance bet performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500 MHz  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	
performance and battery life  Battery optimised mode provides a 40-60% reduction in CPU while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500 MHz  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	
while maintaining 80% of the maximum performance  Pentium® III technology adds over 70 new instruction sets to accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500 MHz  Designed for all professional power users on the road and in to office  Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	power
accelerate multimedia applications.  Intel® Mobile Pentium®III processor at 500 MHz Designed for all professional power users on the road and in tooffice Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	
Pentium®III Designed for all professional power users on the road and in too office  MHz Improves speed of certain operations often used for multimed applications. Pentium® III offers more benefits in video, graph	
applications. Pentium® III offers more benefits in video, grap	the
sound performance	
Integrated Level 2 Ensures high speed memory access speeds, giving an improvement cache (256 KB on performance die)	ved
100 MHz external Accelerates data transfer rates between the processor and m bus speed memory	ain
Processor Feature Benefit	
Intel® Mobile The Intel® Mobile Celeron™ processor offers enough resource celeron™ all current office applications	ces for
processor at 500/550 MHz Enough resources for business to business presentations	
This processor features an optimised price / performance ration	)
Integrated Level 2 Ensures optimal memory access speeds, giving an improved cache (128 KB on performance die)	
100 MHz external Accelerates data transfer rates between the processor and m bus speed memory	ain
Memory Feature Benefit	
Standard 64 MB  64 MB RAM is ideal for Windows® to run on powerful memory	
SDRAM intensive software at a comfortable speed	y
SDRAM intensive software at a comfortable speed Two memory slots A larger amount of memory improves the operating speed to configure	y
Two memory slots A larger amount of memory improves the operating speed	

Memory, cont'd	512 KB Flash EPROM	Flash EPROM's allow user to quickly update BIOS if necessary without returning machine to supplier – just by updating via software
		Saves time and upgrade cost for the user
	32, 64 and 128 MB memory expansion	Faster manipulation of software and data stored in memory
	modules (optional)	User can easily upgrade memory when need arises
Integrated Dick Drive	Feature	Benefit
Integrated Disk Drive	3.5" diskette drive	Provides small, durable, industry-standard media for portable environment
		Reads from and writes to 3.5" 720 KB and 1.44 MB diskettes (adjusts automatically)
Hard disks	Feature	Benefit
Tiara diono	12 GB* hard disk	Huge storage capacity for demanding users
	drive	12 GB* offers enormous storage capacity for applications, graphics, audio files, large presentations and programs
	6 GB* hard disk drive	Provides large storage capacity for multiple programs and data
		6 GB* offers enough storage capacity for applications, graphics, audio files or large presentations *one GB means one billion bytes
	13 ms average access time and 1:1	Fast access to programs and data stored on hard disk
	interleave	A fast access to the hard disk ensures an improved overall system performance
	Low-power modes	Longer battery operating life
		User can choose the settings via software
	S.M.A.R.T hard disk technology	Hard disk with integrated self-testing functionality
		The hard disk is capable to send out a report when failure occurs if manageability software is installed
	•	
Integrated DVD-ROM drive	Feature	Benefit
-	6 speed DVD-ROM drive (12.7 mm high)	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
		Enormous storage capacity for the next generation of image
		databases, company presentations on DVD, software driven sales
		databases or offline product configuration
	CD-ROM	Reads CD-ROMs, CD-Rs and CD-RWs at up to 24 speed rates

Reads CD-ROMs, CD-Rs and CD-RWs at up to 24 speed rates

CD-ROM

compatibility

Integrated CD-ROM drive	Feature	Benefit
unve	24 speed CD-ROM drive (12.7 mm high)	High quality medium for multimedia presentations, electronic catalogues or other disk space consuming applications
		Reads from 8 cm and 12 cm CD-ROMs
		High-speed helps installation of software, CD-ROM based databases, audio- and video files
		Reads all modern CD-ROM formats such as Multisession, CD-R and CD-RW
Displays	Feature 13.0" DSTN (33 cm)	Benefit Ergonomic display and more relaxed working for the eyes
	13.0 2311 (33 cm)	
	12.1 " TFT (30.7 cm)	Comfortable display size; optimised for budget restrained customers Bright and non-flickering display enhances working condition and reduces eye strain
		Internal screen resolution of 800 x 600 with 24-bit colour depth (16.7 million colours)
	13.3" TFT (33.8 cm)	Bright and non-flickering display enhances working condition and reduces eye strain
		Internal screen resolution of 1024 x 768 with 24-bit colour depth (16.7 million colours)
	14.1" TFT (35.8 cm)	Bright and non-flickering enhances working condition and reduces eye strain
		Large display for graphics demanding users
		Internal screen resolution of 1024 x 768 with 24-bit colour depth (16.7 million colours)
	15.0" TFT (38.1cm)	Bright and non-flickering enhances working condition and reduces eye strain
		Largest available display
		Ideal for showing presentations direct on the display for a small audience
		No need to connect an external monitor in the office
		Internal screen resolution of 1024 x 768 with 24-bit colour depth (16.7 million colours)
<b>Graphics sub-system</b>	Feature	Benefit
	S3 Savage IX	Offers the highest performance and boasts superior graphics with a 128-bit architecture
	Resolutions	1024 x 768 x 16.7 million colours internal resolution
	8 MB video RAM	1600 x 1200 x 65.536 colours external resolution Provides leading edge performance along with the highest image
	O MID VIGOO IVAIVI	quality

Graphics subsystem,	AGF
cont'd	

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)

### **Pointing device**

Feature	Benefit
AccuPoint™ II	User friendly pointing device for precise control of cursor
	Two additional programmable scroll buttons for convenient scrolling through large documents or web sites
	No protruding extras when travelling

### Keyboard

Facture	Danafit
Feature	Benefit
Full-function keyboard	3 mm travel ensures faster, more comfortable data entry
Cursor keys	Allow fast, convenient cursor positioning
12 function keys and embedded keypad	Provides desktop keyboard functionality and greater productivity
8 hot keys	Allow users to change set-up features and HotLock security direct from the keyboard
Windows® keys	Significantly improves interaction with Windows® programs
Euro sign	Printed on keyboard. Ready for full transition to the Euro in 2002
Palm-rest for hands	Allows easy comfortable typing, even where there is no flat surface

### Interfaces

Feature	Benefit		
Serial port	16550UART equivalent allows to connect standard devices accepting serial signals		
Parallel (ECP) port	Allows use of peripheral devices accepting parallel signals		
	Permits easy data exchange with external storage devices		
	Permits easy and rapid data exchange with external devices, (e.g. CD-ROMs, printers or scanners)		
External SVGA colour monitor port	Provides high-resolution (up to 1600 x 1200 dots) display of colour and graphics on external monitor for sharp images		

Interfaces / cont'd	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		
		Allows use of desktop pointing devices such as a mouse with graphics and presentation software		
		Frees serial port for use by another device		
	USB port	Future protection by being compatible with the next generation of low-power, user-friendly expandability		
		Allows for up to 127 devices to run simultaneously on the PC		
	Microphone	Enables connection of a microphone for audio input		
	Headphone	Enables connection of a stereo headphone for audio output		
	TV out	Allows to connect a NTSC/PAL TV		
		Provides excellent presentation, graphics and multimedia capabilities with a TV		
	Fast infrared port	Wireless bi-directional transmission of files between many types of devices incl. PCs, printers, PDAs, modems, telephones		
		Low power consumption		
	l	IrDA 1.1 compliant industry-standard		
Design	Feature	Benefit		
	A4 notebook design	Provides the speed, power and expandability of a high performance desktop in a lightweight, go-anywhere form		
		A4 format fits into nearly every suitcase.		
	Rugged ABS casing	Tough enough to take the knocks of life on the road		
		Colour is integrated into material so casing doesn't require painting and there is no danger of paint peeling or scratching		
		One of the most modern currently available plastics		
Expansion	Feature	Benefit		
Expansion	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 adaptors, flash memory cards and removable hard disks		
	2 free memory slot (64 MB down on	Allows memory expansion up to 320 MB RAM		
	motherboard) CardBus ready	32, 64 or 128 MB RAM modules available Allows access to all the latest, high performance PC Card expansion		
	Calubus leady	devices		
Docking	Feature	Benefit		
(optional)	Card Station III Spacer	Connects the Satellite Pro to Card Station III		
		Ensures improved stationary ergonomics		

Docking (optional), cont'd	Card Station IV	Adds additional PC ports to the Satellite Pro		
Cont u		The additional ports are: serial, parallel, external SVGA monitor, 2 PS/2 ports, 2 USB ports, microphone jack, headphone jack, MIDI/Joystick port, line-in, line-out, 1 PC Card slot Type III or 2 PC Card slots Type II		
	Port Replicator	Adds additional PC ports to the Satellite Pro		
		Additional ports: serial, parallel, external SVGA monitor, 2 PS/2 ports, 2 USB ports, line-in, line-out, microphone jack , headphone jack and MIDI/Joystick port		
Power supply	Feature	Benefit		
. one. oupp.y	Lightweight	Higher capacity than other battery types, hardly any memory effect		
	removable, rechargeable	Environmentally friendly to dispose of		
	Lithium-ion battery	Offers longer battery life		
	pack	Most modern battery technology		
		•		
	Toshiba Power	Can be recharged at any time		
	Extensions	Allows user to specify when power-hungry components should be shut down to make most efficient use of available battery power		
	Toshiba Hibernation	Allows turning the notebook off without exiting from software		
	and Resume	application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power.		
		Hibernation stores the data on the hard disk. No need to use a battery to keep the data.		
		Resume stores the data in the memory.		
	ACPI enabled BIOS	Future protection by allowing compatibility with highly advanced power and expandability features in Microsoft's Windows® 98		
	Intelligent power supply	Provides easy access for monitoring battery life with battery "gas gauge," invoked through pop-up menu.		
	System reset button	Allows rebooting without cycling power and without keyboard use (functions even when keyboard is locked)		
Multiple security system	Feature	Benefit		
	Power on password	System asks for password before the PC boots		
	Hard disk protection	The hard disk is protected from removal by a screw.		
	Secure Sleep™	Instant security with a screen blank and keyboard/mouse lock-out using the F1 hot key		
	Kensington	Hardware-based theft prevention. The computer can be physically		
	MicroSaver provision Power button lock	secured to an immovable object Prevents from powering on/off the machine by mistake		
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.		
		Certified in all leading industrial countries enabling easy access to e-mail or web.		

Commun	ication,
cont'd	

56 K data	Most modern modem standard guarantees fast internet connection rates and saves money through higher data throughput. Receive data with up to 56 kbps.
14.4 K fax	Send and receive faxes with 14.4kbps

### **Special features**

Flash EPROM Built-in sound system  16-bit Sound Blaster Pro compatible sound card  Speakers inside the computer  Enables to give astonishing multimedia presentations Allows turning the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed	Feature	Benefit
Speakers inside the computer  Enables to give astonishing multimedia presentations  Allows turning the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed	Flash EPROM	Allows end user to easily update BIOS if needed
Speakers inside the computer  Enables to give astonishing multimedia presentations  Allows turning the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed		Provides audio support to visuals
Enables to give astonishing multimedia presentations  Allows turning the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed		16-bit Sound Blaster Pro compatible sound card
Toshiba Hibernation and Resume  Allows turning the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed		Speakers inside the computer
and Resume  application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power  Hibernation stores the data on the hard disk. No need to use a battery to keep the data Resume stores the data in the memory  Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed		Enables to give astonishing multimedia presentations
to keep the data Resume stores the data in the memory  Hot keys Allow users to change various system configuration options any time, at the press of a key  LED icon bar Users can see the status of the machine with lid closed		application; powers-up where you left off. AutoSave provides security
Hot keys  Allow users to change various system configuration options any time, at the press of a key  LED icon bar  Users can see the status of the machine with lid closed		to keep the data
	Hot keys	Allow users to change various system configuration options any time,
	LED icon bar	Users can see the status of the machine with lid closed
Power button flap Avoids the risk of accidentally turning the PC on or off	Power button flap	Avoids the risk of accidentally turning the PC on or off

### Toshiba support

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

### **Options**

Feature	Benefit
32, 64 and 128 MB memory modules	Permits convenient, easy-to-install memory expansion for memory-intensive software applications
Extra battery pack	Increases battery life while on the road
Card Station IV	Docking station for Satellite Pro models
Port Replicator	Expansion of PC ports. Add additional PC ports to the notebook
Card Station III spacer	Allows connection of Satellite Pro to Card Station III
Quick battery charger	One battery can be charged using the quick battery charger while the other is in use to extend overall operating time
Key caps for European languages	Users in virtually all countries work with most familiar set of keys
PC Card Ethernet adaptor	Lets you connect to your network

# **Options**

Memory	PA Number		Article
	PA3003U-K		32MB memory kit
	PA3004U-K		64 MB memory kit
	PA3005U-K		128 MB memory kit
Keyboard	PA Number		Article
	PA3006E-1KGR		Keycaps for German keyboard
	PA3006E-1KFR		Keycaps for French keyboard
	PA3006E-1KBE		Keycaps for Belgian keyboard
	PA3006E-1KSC		Keycaps for Scandinavian keyboard
	PA3006E-1KSL		Keycaps for Swiss keyboard
	PA3006E-1KIT		Keycaps for Italian keyboard
	PA3006E-1KSP		Keycaps for Spanish keyboard
	PA3006E-1KEN		Keycaps for English keyboard
Power	PA Number	Article	
	PA2450UE	Universal AC adaptor	15V, 3A, 45 watts
	PA2444UE		15V, 4A, 60 watts for 15.0" and Mobile Pentium z with SpeedStep technology model
	PA2487URG	Lithium-ion battery page	ck
	PA2488U-E	Battery charger for main battery	
Docking	Docking PA Number Article		
•	PA2731U-E	Port Replicator	
	PA2717UYN	Card Station III (to be	used with Card Station III Spacer)
	PA2730U	Card Station III Space	
	PA3024E-1PRP	Card Station IV	