

SATELLITE 220CDS Product Specifications

220CDS: 1.44 Billion Bytes: PA1240U-S2C

PROCESSOR

Intel Pentium® 133Mhz (2.9v/3.3v) w/VRT	Yes
External data bus width	64 bit
External data/address bus speed	66 MHz
Integrated Coprocessor	Yes
Processor Cache	16KB: (8KB code; 8KB data)

LEVEL 2 (L2) CACHE

Data Bus Width	64 bit
Data Bus Speed	66 MHz

DATA RAM:	Yes
1 Mbit Pipelined Burst Synchronous SRAM	(32K x 32bit, 3.3V) x 2
Access Time	8 ns

SYSTEM ARCHITECTURE (All models)

PCI BUS (v.2.1): (32-bit, 33 MHz)	Connecting Devices: PC Card Slots, Expansion Bus, Graphics Controller, Modem DSP
ISA BUS: 16-bit, 8.25 MHz	Connecting Devices: BIOS, FDD, HDD, CD-ROM, Sound chip, KBC

MEMORY: 16Mbit EDO DRAM, 3.3V

Standard	16 MB
Maximum	144 MB
Speed	60ns
Hyper Page mode memory access	Yes
Data width	64 bit
Local Bus Clock Speed	66MHz
BIOS (2Mbit FLASH EPROM)	Yes
PnP 1.0a SUPPORT	Yes: supports APM (v.1.2); VESA (v2.0); DPMS, DCC2, DMI (through Win95)

DISPLAY

Type	Dual-Scan Passive Matrix Color
Size	12.1" Diagonal
Dot Pitch	.30mm x .30mm
Contrast Ratio	27:1 (avg)

VIDEO

Memory: 4Mbit EDO DRAM, 3.3V	2 MB
Speed	50ns
Hyper Page mode support	Yes
Controller Chip	Chips & Technologies F65554
PCI Bus Architecture w/burst mode	Yes: 32-bit, 33 MHz
Graphics Accelerator:	Yes with 64-bit BitBLT support
Data Bus Width	64-bit
DirectDraw, Direct3D, H/W Cursor	Yes
Video Accelerator:	Yes
YUV-to-RGB color space conversion	Yes
Scaling	Yes
Zoomed Video Port Support	Yes
Interpolation	Yes
DirectVideo support	Yes:w/Game SDK driver fr/Microsoft
Color Palette	16.7M colors
Internal Resolution	800 x 600 x 64K colors
Smaller Image	640 x 480 x 64K/64K colors
Virtual Display Mode	1024 x 768 x 64K/64K colors
Virtual Display Mode	1280 x 1024 x 256/256K colors
External Resolution	<u>Colors/Palette</u>
640 x 480	16.7M colors/16.7M colors
800 x 600	16.7M colors/16.7M colors
1024 x 768	64K colors/64K
1280 x 1024	256 colors/256K
Refresh Rate @ 1024x768/ 64k colors Non-Interlaced	Vert.: 60HZ (Refresh Rate @ 800x600/ 64K colors Non-Interlaced : Vert.: 85 Hz)

SATELLITE 220CDS Product Specifications

220CDS: 1.44 Billion Bytes: PA1240U-S2C

STORAGE

Removable HDD (2.5" Enhanced IDE) 1.44 billion bytes=1.34GB (12-14msec)

SELECT BAY DEVICES

Second Battery

Battery Type

Optional: Part# PA2451UR (Includes battery adapter)

Li-Ion (10.8V, 3400mAH)

Modular FDD (3.5" 1.44MB)

FDD Dimensions

Installed/Swappable with CD-ROM

4.57"L x 3.8"W x .59"H

FDD Weight

Weight: .29 lbs

Simultaneous FDD & CD-ROM Support

Yes: *Requires optional FDD Case & Cable -- Part# PA2611U*

FDD Adapter Dimensions

7.0"L x 5.5"W

FDD Adapter Weight

.25 lbs

Modular HDD (2.5" Enhanced IDE)

Capacity

Optional/Swappable with FDD -- Part# PA2609U

2.168 billion bytes=2.02GB (13msec)

Modular CD-ROM: Toshiba XM-1502B

5.25" 10x-Average speed

Included/Swappable with FDD

Weight

.6 lbs

Interface

.ATAPI (Enhanced IDE)

Random Access Time

150 ms

Average Sustained Transfer Rate

1,500 KB/sec

Supported Disc formats

CD-DA, CD-ROM, CD-ROM XA, CD-Bridge (Photo-CD, Video-CD),
CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Plus)

KEYBOARD

84/86 keys, 3mm Travel Yes

12 dedicated function keys Yes

Cursor control (8 Keys, Inverted "T") Yes

Numeric keypad (Integrated Overlay) Yes

Integrated Pointing Device

AccuPoint™

EXPANSION SLOTS

Two Stacked PC CardBus Slots Yes: Holds two - 5mm PC Cards Type II or one - 10.5mm PC Card Type III.

Support Standards

Yes: 32-bit, 3.3V; and 16-bit, 5.0V PC card standards

ZV ready

Yes

Internal Memory Slot (One only)

Yes

EXPANSION PORTS

One 9-Pin Serial (16550 UART compliant) Yes: Rear of unit

One 25-Pin Parallel (8 bit ECP) Yes: Rear of unit

One 15-Pin RGB (SVGA video) Yes: Rear of unit

Fast Infrared port (IrDA 1.1:4Mbps compatible) Yes: Rear of unit

One (PS/2) 101 Keyboard/Mouse port Yes: Rear of unit ("Y" connector supported)

One External Floppy Drive port Yes: Left side

Universal Serial Bus (USB) port Yes: Rear of unit (Supports 127 devices. Throughput Rate: 12Mbits/sec.)

Microphone (3.5mm mini jack, stereo) Yes: Front of unit

Headphone (3.5mm mini jack, stereo) Yes: Front of unit

Line-in (3.5mm mini jack, stereo, 2V rms) Yes: Front of unit

Noteworthy security lock port Yes: Right side

LOCATION

Yes: Rear of unit

Yes: Rear of unit

Yes: Rear of unit

Yes: Rear of unit

Yes: Rear of unit ("Y" connector supported)

Yes: Left side

Yes: Rear of unit (Supports 127 devices. Throughput Rate: 12Mbits/sec.)

Yes: Front of unit

Yes: Front of unit

Yes: Front of unit

Yes: Right side

SATELLITE 220CDS Product Specifications

220CDS: 1.44 Billion Bytes: PA1240U-S2C		
NoteDock III™ Port Replicator (Optional)	Part# PA2717U	
(2) Type III PCI/CardBus ready PC Card slots	Yes: each slot supports one card	
Supported Interfaces	Serial, USB, parallel, PS/2 keyboard, PS/2 mouse, DC in, SVGA port, lock slot, joystick/MIDI, audio line-in, line-out, headphone, microphone	
INTERNAL MODEM (Optional)	33.6 /14.4 Kbps Data/Fax/Voice modem <i>with V.80 for Video Conferencing</i>	
DAA Support	Canadian & Euro/Australian DAA	
Data support		
Protocols supported	Bell-103/212A, CCITT-V.21/V.22, V.32, V.32bis, V.34,	
Error correction	MNP 1-4	
Data compression	MNP 5, CCITT V.42 bis	
Fax support	Fax class 1	
Protocols supported	V.21 ch2, V.27 ter, V.29, V.17	
Supported Functions	Speaker phone, Telephony Answering Machine, Ring Wake-up Resume Incoming Call Discrimination, Caller ID	
POWER		
Autosensing External AC Adapter	5.51"L x 2.95"W x .98" --- .75 lbs.	
Input (Voltage/Frequency)	100-240V; 50-60Hz	
Output (Voltage/Amps)	15 VDC; 3A (max)	
Power Output (Watts)	45W	
Battery Type: Li-Ion (10.8V, 3600mAH)	Yes (one standard): Part# PA2487UR	
Battery Life: (Full Power/Low Power)	2.5+ hrs. (<i>Use of the 2nd battery option extends total battery time by 67% max.</i>)	
Recharge Time (Computer Off/On)	2-3 hrs.(Off) /4-10 hrs.(On)	
MaxTime® Power Management	Yes	
SOUND SYSTEM (All Models)		
Chipset:	Yamaha OPL3-SA3	
16 bit stereo audio playback/record	Yes	
Maximum sampling rate	48 kHz	
FM Synthesis support	Yes	
Full duplex function	Yes	
Sound formats supported:	SoundBlaster Pro™, .WAV, MIDI	
3D Sound Support	Yes	
Direct3DSound, DirectSound support	Yes: with Windows 95 Game SDK driver from Microsoft	
Speaker system	Two top-mounted stereo speakers (28mm, 8 Ω)	
DIMENSIONS	11.95"W x 9.4"D x 2"H	
WEIGHT (includes .86 lbs. battery)	6.9 lbs.	
BUNDLED SOFTWARE²	Windows 95 only on Satellite 225CDS.	
User selectable Windows®95 or Windows® for Workgroups 3.11 and MS-DOS 6.22® with Special Enhancements; Puma Tranxit (infrared software), Video for Windows, Intel Indeo Video, Mediamatics Arcade Pak, Fn-esse, MagiCDisk, Companion Diskette, SystemSoft Card & Socket Services, Online documentation, Online Registration		
SECURITY	Lock slot, power-on & HDD password, screen blank, keyboard lock	
WARRANTY	3 YR Parts / 1 YR. Labor	
ENVIRONMENTAL SPECIFICATIONS		
	Operating	Non-operating
Temperature:	41°F (5°C) to 95°F (35°C)	-4°F (-20°C) to 149°F (65°C)
Thermal Gradient: 20° C per hour (max.)	N/A	N/A
Relative Humidity:	20% to 80% non-condensing	10% to 90% non-condensing
Altitude:	-197 to 9,843ft. (-60 to 3000m)	-197 to 32,808ft. (-60 to 10,000m)
Shock:	10G; 1.5G w/CD-ROM installed	60G; 50G w/CD-ROM installed
Vibration:	0.5G; 0.25G w/CD-ROM installed	1G; 1G w/CD-ROM installed
² Satellite 225CDS (Part# PA1240U-S6C) is the Retail equivalent of the Satellite 220CDS, but comes with a 1 Year Parts & 1 Year Labor Warranty and the following additional Windows 95 software: Microsoft Works, Microsoft Outlook, Microsoft Money, Microsoft Golf, Microsoft Encarta 97, and Quicken SE.		