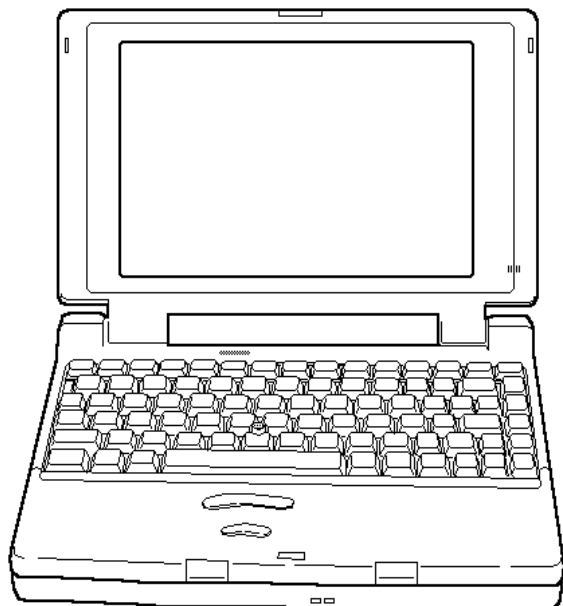


## TECRA 750CDM: *The Ideal Desktop Alternative --Now with MPEGII & Dolby Sound!*



### KEY SELLING POINTS

- 233MHz Intel Pentium® 1.8v/2.5v with MMX technology for superior performance and long battery life!
- 512KB Pipelined Burst SRAM Level 2 (L2) cache maximizes CPU for the sophisticated power user
- 32MB EDO DRAM (60ns) expandable to 160 MB with TWO MEMORY SLOTS for added flexibility
- PCI Bus supports PC Card slots, HDD, CD-ROM, Graphics controller, Modem DSP, Video capture controller
- 13.3 TFT active matrix display (1024 x 768 with 16.7M color support) is equivalent to a 15 monitor
- S3 Virge/MX 3D 64-bit graphic controller has 4MB SGRAM provides 70% faster 3D graphics support
- DuoView Technology for advanced simultaneous monitor support including Composite video-out & S-video Out. Simultaneous display with different resolutions & Virtual desktop using future operating systems.
- Removable 5.1 Billion byte (= 4.77GB) HDD for the ultimate in storage space.  
Select Bay support by model --- (2) Standard devices: 20X Max speed CD-ROM & FDD.  
Optional devices: DVD-ROM, 20x Max CD-ROM, 3.82GB HDD, and 2nd battery.
- MPEGII playback and AC-3 Dolby Digital Sound
- 3D full duplex 16-bit sound with Wavetable synthesis support (.WAV, MIDI, SoundBlaster Pro 3.01 compatible)
- Built-in K56 Flex Upgradeable modem with DSVD, V.34 and V.80 support for Video Conferencing
- 2 hrs. battery time (Full power) with one battery installed Over 4 hrs. with Select Bay 2nd battery installed.
- Video Capture Kit includes integrated digital camera with new PCI/ZV dedicated port, Intel Video Phone with Proshare Technology 2.0, Microsoft VidCap, and Microsoft Netmeeting 2.0 with data sharing for H.323 Internet-based video conferencing and H324 analog phone line video conferencing.
- Exclusive Sarnoff VideoBrush™ software turns your PC into a portable scanner. Convert scanned images, documents, and whiteboards into JPEG format for easy storage, editing, and Internet intergration.

PART #	Tecra 750CDM & Accessories	PART #	Tecra 750CDM & Accessories
PA1253U-T2C	750CDM 233 Mhz Pentium w/MMX, 4.77GB, 20X CD-ROM	NWWIRELESS	PORT Wireless Lan Access Point
KTT650/8	8MB EDO Memory Module (3.3 volt)	NWACCESSPT	PORT Wireless Lan PC Card with Antenna
KTT650/16	16MB EDO Memory Module (3.3 volt)	NWGSP01♥	PORT Global Positioning System PC Card
KTT650/32	32MB EDO Memory Module (3.3 volt)	NWGPSCD-USA	PORT GPS USA software (all regions of USA)
KTT650/64	64 MB EDO RAM Memory Module (3.3 volt)	NWAVC02	PORT Audio/Video Capture Type II PC Card
PA2710U	Desk Station V Plus	NWHD340	PORT PC Card Type III 340 Mb HDD
PA2716U	Notedock II Enhanced Port Relicator	PA2445UR	Primary Battery Pack (Li-Ion)
PA2613U	DVD-ROM drive kit (Select Bay module)	PA2446UR	2nd Lithium Ion Battery Pack (Select Bay module)
PA2607U	4.1 Billion byte (=3.82GB) HDD (Select Bay module)	PA2447U	Battery pack recharger (For Primary or 2nd battery)
NW17MON	PORT-Noteworthy 17" 1280x1024 Monitor	PA2444U	AC Power Adapter (60W)
NWPR100STD	PORT-Noteworthy Monitor Stand for all port replicators	NW802L	PORT-Noteworthy SmartCord Auto Adapter (15V)
NWZVMPEG1	PORT ZV Port/MPEG-1 PC Card	PA1050M	PORT-Noteworthy Leather Attache
NWETH01X	Noteworthy Ethernet 10 Base T, PCMCIA Type II	NWCCPRO	PORT-Noteworthy Performance Pro Carrying Case
NWETH02X	Noteworthy Ethernet 10 Base 2, PCMCIA Type II	NWCCUFB	PORT-Noteworthy Ultimate Woven Fabric Case: BK
NWTR02X	Noteworthy Token-Ring card, PCMCIA Type II	NWCCDFB	PORT-Noteworthy Universal Fabric Case, Bk Fabric
NW3270	PORT-Noteworthy 3270 Emulation card, PCMCIA Type II	NW3350L	PORT-Noteworthy security lock
SW3270	IBM® Personal Communication Software	NWMOU2	PORT-Noteworthy Two-Button Mouse
NWSCI01	PORT SCSI-II adapter, PCMCIA Type II	NWMOU3	PORT-Noteworthy Screen Scroller Mouse
NWTYPE01	PORT PC Card Type Adapter	NW627S	PORT-Noteworthy 21-Key Keypad
NWMICROTAC	PORT Cellular Phone Cable for Motorola Elite	NWKB104EE	PORT-Noteworthy Enhanced Keyboard

## **TECRA 750CDM: *The Ideal Desktop Alternative --Now with MPEGII & Dolby Sound!***

NWELITE

PORT Cellular Phone Cable for Motorola MicroTac

|| NWKB104MM

PORT-Noteworthy Multimedia Keyboard

♥ For complete specifications and CD-ROM software options call 800-457-7777.

# TECRA 750CDM Product Specifications

**750CDM: PA1259U-T2C**  
**5.1 Billion Bytes = 4.77 GB**

## PROCESSOR

Intel Pentium ®233Mhz (1.8v/2.5v)	Yes: with MMX support
External data bus width	64 bit
External data/address bus speed	66 MHz
Integrated Coprocessor	Yes
Processor Cache (L1)	32KB: (16KB code; 16KB data)
Standards	ACPI v. 1.0 ready

## LEVEL 2 (L2) CACHE

	Yes: 512KB
Data Bus Width/ Data Bus Speed	64 bit/66 MHz

## DATA RAM:

2 Mbit Pipelined Burst Synchronous SRAM (64K x 32bit, 2.5V/3.3V) x 2 -- Access Time: 8ns

## MEMORY: 64 Mbit EDO DRAM, 3.3V

Standard/ Maximum	32MB
Maximum	160MB
Speed	60ns
Hyper Page mode memory access	Yes
Data width/ Data Bus speed	64 bit/66 MHz

## BIOS

	Yes: (512KB 4Mbit FLASH EEPROM, 3.3V)
Standards supported	APM v.1.2, PnP v.1.0A, VESA 2.0, DDC2B, DPMS, ACPI v.1.0

## SYSTEM ARCHITECTURE

### Connecting Devices

PCI BUS (v.2.1): (32-bit, 33 MHz)	PC Card Slots, Expansion Bus, Graphics Controller, Modem DSP, Video Capture controller, DVD-ROM, DVD-ROM decoder, HDD
ISA BUS: 16-bit, 8 MHz	BIOS ROM, KBC, FDD, Sound chip

## STORAGE

Removable HDD (2.5" Enhanced IDE) 5.1 Billion Bytes = 4.77 GB (Read/Write: 12msec/13msec) , Buffer: 512KB

## SELECT BAY DEVICES

### DESCRIPTION

### WEIGHT

### Second Battery

*Optional: Part# PA2446U*  
 Battery Type Li-Ion (10.8V, 3600mAH) 1.15 lbs.

### Modular FDD (3.5" 1.44MB)

*Included/Swappable with CD-ROM*  
 FDD Dimensions 4.57"L x 3.78"W x .5"H .60 lbs.

### Simultaneous FDD & CD-ROM Support

Yes: External FDD adapter included  
 FDD Adapter Dimensions 7.0"L x 5.5"W .25 lbs.

### Modular HDD (2.5 Enhanced IDE)

*Optional/For use in SelectBay only: Part # PA2607U*  
 Capacity 4.1 billion bytes = 3.82GB (Read/Write: 13msec/14msec), Buffer: 512KB  
 Weight .55 lbs.

### Modular CD-ROM: Toshiba XM-1602B

5.25" 20X Max. speed *Installed/ For use in SelectBay only*  
 Weight .70 lbs  
 Interface .ATAPI (Enhanced IDE)  
 Random Access Time 135 ms @ 20X Max speed  
 Average Sustained Transfer Rate 3420KB/sec @ 20X Max speed; 2394KB/sec @ 14X Average speed  
 Supported Disc formats Red Book, Yellow Book, CD-ROM XA, CD-I Bridge (Photo-CD)  
 CD-I, CD-I Ready, CD-G, Multisession (Photo-CD, CD-Extra), CD-RW  
*Yes: (w/Windows 95 only)*  
*Yes: (w/Windows 95 only)*

### Modular DVD-ROM: Toshiba SD-C2002

#### *Optional*

	<u>DVD-ROM</u>	<u>CD-ROM</u>
Operation modes	2X	16X
Access Speed	2X	16X
Random Access Time	180ms	120ms
Sustained Data Transfer rate	2,700 KB/sec	2,400 KB/sec
Storage space/disk	4.7 GB	4.7 GB

# TECRA 750CDM Product Specifications

**750CDM: PA1259U-T2C**  
**5.1 Billion Bytes = 4.77 GB**

## DISPLAY

Type	13.3" Diagonal TFT Active Matrix
Dot Pitch	.26mm x .26mm
Contrast Ratio	100:1 (min)

## VIDEO

Memory: 16Mbit SGRAM, 3.3V	4 MB
Access Speed	83 MHz <i>with Hyper-page mode support</i>
Data Bus Width/Clock Speed	64-bit/33 Mhz
Graphic Controller	
PCI Bus Architecture w/burst mode	Yes: 32-bit, 33 MHz
Standards supported	DPMS, PnP v.1.0A, VESA 2.0
DuoView™ Device support <sup>1</sup>	Allows display of different images (or the same image) on following screen combinations: notebook/external monitor; notebook/TV; external monitor/TV
Controller Chip	S3 Virge MX 3D (= 86C260)
64-bit BitBLT Engine	Yes
2D Supported Features	BitBLT, H/W Cursor, DirectDraw
3D Supported Features	
Modeling	Fogging
Shading	Flat shading, Gouraud shading
Rendering	Bilinear/Trilinear texture mapping, Anti-aliasing, MIP mapping, Z-buffering
Direct3D support	Yes
OpenGL	Yes
Digital Video Accelerator	
YUV Color Space Conversion	Off-loads conversion from CPU for higher performance full motion video without compromising picture quality or frame rate.
Scaling/ Interpolation	Yes: vertical & horizontal
Zoomed Video Port Support	Yes: vertical & horizontal
DirectVideo support	Yes:w/Game SDK driver fr/Microsoft
DirectMPEG	Yes
TV Encoder support	Yes: NTSC/PAL video out, and S-Video out with flicker reducing filter

## INTERNAL VIDEO SUPPORT

		<u>Colors</u>	<u>Refresh Rate (Non-Interlaced)</u>
Smaller Image	640 x 480	24-bit (16.7M)	N/A
Smaller Image	800 x 600	24-bit (16.7M)	N/A
Full Screen	1024 x 768	24-bit (16.7M)	N/A
Virtual Display Mode	1280 x 1024	16-bit (64K)	N/A
Virtual Display Mode	1600 x 1200	8-bit (256)	N/A

## EXTERNAL VIDEO SUPPORT (CRT)

	<u>Colors</u>	<u>Refresh Rate (Non-Interlaced)</u>
640 x 480	24-bit (16.7M)	85 Hz
800 x 600	24-bit (16.7M)	85 Hz
1024 x 768	24-bit (16.7M)	85 Hz
1280 x 1024	16-bit (64K)	75 Hz
1600 x 1200	8-bit (256)	42 Hz (Interlaced)

## VIDEO CAPTURE SUPPORT

	<u>Colors</u>	<u>Fps (w/ZV Port/.AVI file)</u>
160 x 120	Up to 16.7M	30
320 x 240	Up to 16.7M	15
640 x 480	Up to 16.7M	3

Input sources	ZV Port-enabled PC Card or ZV Port-enabled External Camera unit
Connected Bus type	PCI bus (for ProShare/Video conferencing) and ZV port (normal capture)
Supported file formats	.BMP, .JPEG, .GIF (for still images), .AVI (for video)
Maximum # of Still images to be stored	12
Maximum time of video recording	Varies by free space of main memory and HDD

1. Future operating systems may support simultaneous display of different resolutions on mutple devices.

# TECRA 750CDM Product Specifications

**750CDM: PA1259U-T2C**  
**5.1 Billion Bytes = 4.77 GB**

## CAMERA

Mount	External (hook on right edge of display panel)
Type	1/4-inch CCD
Effective pixels	640 x 480 (= 307.2K)
Lens (Manual Focus)	F2.8, f = 4.6 mm
Focusing range	> 10 cm, by manual focus
Viewing angle of Center	Horizontal: ±22.5 degrees (45° total); Vertical: ±16.9 degrees (33.8° total)
Minimum illumination	40 luxes
Tilting angle	-50 to +50 degrees
Panning angle	-45 to +225 degrees (horizontal)
Interface connector	Digital/26 pin proprietary connectory
Interface cable length	50cm
Automatic Light Control (ALC)	Yes: AGC (0 db~ +12db); ELC (1/60 ~ 1/10,000 sec)
White Balance ATW	Yes
Dimensions	5.63"L x 1.14"W x .79"D
Weight	.25 lbs.

## SOUND SYSTEM

Chipsets:	Yamaha 3D sound effect-enabled OPL3-SA3 and Wavetable-enabled OPL4-ML2
Functions supported	
Sound formats supported:	SoundBlaster Pro™ v.3.01, MIDI, Windows Sound System v.2.0
16 bit stereo audio playback/record	Yes: w/48kHz maximum sampling rate
Full duplex function	Yes: including simultaneous playback and record
Mixing	CD-ROM audio, Zoomed Video audio (stereo), CardBus audio (monaural)
DirectSound support	Yes: with Windows 95 Game SDK driver from Microsoft
Volume control	Yes
Speaker system:	Two top-mounted stereo speakers (28mm, 16 Ω)

## INTERNAL MODEM (All models)

DAA support	K56 Flex Upgradeable with DSVD, V.34 and V.80 support for Video Conferencing
Data support	US/Canada and Euro/Australia
Protocols supported	Bell-103/212A, CCITT-V.21/V.22, V.23, V.22bis, V.32, V.32bis, V.34
Error correction	MNP 1-4
Data compression	MNP 5 for upto 2X data compression, CCITT V.42 bis for upto 4X data compression
Fax support	Fax class 1, Class 1 ECM
Protocols supported	V.21 ch2, V.27 ter, V.29, V.17
Cellular support	<i>US Cellular support under Windows 95 only</i>
Protocols supported (Phone)	Bell-103/212A, CCITT-V.21/V.22, V.23, V.22bis, V.32, V.32bis, V.34
Protocols supported (Fax)	V.21 ch2, V.27 ter, V.29, V.17
Fax class	Fax class 1, Class 1 ECM
Phones supported <sup>3</sup>	Motorola Micro TAC (DPC550, Alpha, Lite, and Ultralite) and Motorola Elite <i>only</i>
Telephony Functions ( <i>Windows 95 only</i> )	
Standard software	Ring Zero RingCentral telephony software Speaker phone, Telephony Answering Machine, Ring Wake-up Resume Incoming Call Discrimination, Caller ID
DSVD protocols supported	ITU-T <b>V.70</b> , V.75, V.76, G.729, V.80, V.25terA, V.34, V.8bis
Video Conferencing ( <i>Windows 95 only</i> )	
Standard software	Intel Video Phone with Proshare Technology 2.0 and Microsoft Netmeeting 2.0
Protocols supported	<b>ITU-T H.323 (Internet video conferencing); H.324 (POTS video conferencing);</b> H.245; H.223; G.723; H.263; <b>V.80</b> ; V.25terA; <b>V.34</b> ; V.8bis
Data sharing support	T.120; T.121; T.122; T.123; T.124; T.125; T.126; T.127

# TECRA 750CDM Product Specifications

**750CDM: PA1259U-T2C**  
**5.1 Billion Bytes = 4.77 GB**

<b>EXPANSION SLOTS</b>	<b>LOCATION</b>
Two Stacked PC Card Slot <sup>2</sup>	Yes: Left side ( <i>CardBus &amp; ZV Card Ready</i> )
32-bit, 3.3V PC CardBus Support	Yes
16-bit, 5.0V PC Card Support	Yes
<b>Two</b> Internal Memory Slots	Yes: Below left-half of the palm rest (above main HDD)
<b>EXPANSION PORTS</b>	<b>LOCATION</b>
One 9-Pin Serial (16550 UART compliant)	Yes: Rear of unit
One 15-Pin RGB (SVGA video)	Yes: Rear of unit
One Expansion Bus	Yes: Rear of unit ( <i>for use with Docking Station or Port Replicator</i> )
One 25-Pin Parallel (8 bit ECP)	Yes: Rear of unit
One DC IN port	Yes: Rear of unit
Noteworthy security lock port	Yes: Rear of unit
Microphone (3.5mm mini jack, monoaural)	Yes: Rear of unit
Headphone (3.5mm mini jack, stereo, 16Ω min)	Yes: Rear of unit ( <i>stereo, common with Headphone/AC3 digital</i> )
Line-in (3.5mm mini jack, stereo, 2V rms)	Yes: Rear of unit
Line-out (3.5mm mini jack, stereo, 0.7V rms)	Yes: Rear of unit
<b>Dolby AC3 Digital</b>	Yes: Rear of unit ( <i>5.1 channel, common with Headphone/AC3 digital</i> )
One (PS/2) 101 Keyboard/Mouse port	Yes: Rear of unit ( <i>supports Y Connector</i> )
One S-Video out port	Yes: Rear of unit
One NTSC/PAL out port	Yes: Rear of unit
Two Fast Infrared ports (front and back)	Yes: Rear of unit ( <i>IrDA 1.1:4 Mbps compatible</i> )
One External Floppy Drive port	Yes: Left side
Two Universal Serial Bus (USB) ports	Yes: Left side ( <i>Supports 127 devices. Throughput Rate: 12Mbits/sec.</i> )
One Power switch	Yes: Left side
One Reset Button	Yes: Left side
Noteworthy security lock port	Yes: Left side ( <i>Use when docked</i> )
One RJ-11 port for internal modem (supplied)	Yes: Right side
One Cellular Modem port <sup>3</sup>	Yes: Right side
One External Camera port	Yes: Right side
<b>KEYBOARD</b>	
84keys, 3mm Travel	Yes: 12 dedicated function keys; Cursor control (8 Keys, Inverted "T")
Windows 95 support	Yes
Keyboard tilt	Yes
Numeric keypad (Integrated Overlay)	Yes
<b>Integrated Pointing Device</b>	AccuPoint™
<b>Enhanced Port Replicator II (Optional)</b>	Part# PA2716U
Two Type III CardBus ready PC Card slots	Yes: each slot supports one card
Supported Interfaces	Serial, parallel, PS/2 keyboard, PS/2 mouse, DC in, SVGA monitor, FDD port, lock slot, joystick/MIDI, audio line-in, line-out, headphone, microphone
<b>Desk Station V Plus (Optional)</b>	Part# PA2710U
Supported Interfaces	(2) Full length 32-bit PCI/16-bit ISA slots; (1) Half Length 32-bit PCI slot; (2) Type III PC Card slots; (1) SCSI II; (1) 5.25" half height drive bay; (1) Select Bay for Modular FDD or CD-ROM
Ports	Serial, parallel, PS/2 keyboard, PS/2 mouse, DC in, SVGA monitor, FDD port, lock slot, joystick/MIDI, audio line-in, line-out, headphone, microphone
Other features	Designed for Windows 95 and PNP; Hot Docking Support

2. Slot supports two Type II PC Cards or one Type III PC Card.    3.Requires the purchase of appropriate cellular cable: 991-40042.

# TECRA 750CDM Product Specifications

**750CDM: PA1259U-T2C**  
**5.1 Billion Bytes = 4.77 GB**

**POWER**

<b>60W Autosensing External AC Adapter</b>	5.51"L x 2.95"W x .98" --- .90 lbs. (Part#:NW2444U)		
Input (Voltage/Frequency)	100-240V; 50-60Hz		
Output (Voltage/Amps)	15 VDC; 4.0A (max)		
Battery Type: Li-Ion (3.6V 1200mAh, 12 cells)	Yes: Part# PA2445UR (2.83"W x 1.14"H x 6.61"L) -- 1.1 lbs.		
Battery Life	<u>One battery</u>	<u>Two batteries</u>	
Full Power mode	2 hrs.	4 hrs.	
Low Power mode	3 hrs.	6 hrs.	
Recharge Time: Main Battery <sup>4</sup> (Computer Off/On)	<u>Notebook alone</u>	<u>Docked In Port Replicator</u>	<u>Docked In Desk Station</u>
	3.8- 4.0 hrs./5-9 hrs.	3.8 - 4.0 hrs./5-12 hrs.	4-5 hrs./ 6-12 hrs.
Power Savings	MaxTime®; APM v.1.2 BIOS support		

**DIMENSIONS**

11.95"W x 9.45"D x 2.13"H

**WEIGHT (includes 1.1 lbs. battery)<sup>5</sup>**

8.0 lbs. (with FDD installed); 8.3 lbs. (with DVD-ROM installed)

**BUNDLED SOFTWARE:** Windows 95; RingZero RingCentral v.4.xx Telephony application; Toshiba VidCap software; Puma Intellisync 97; Sarnoff Video Brush scanning software; Microsoft Netmeeting 2.0; Intel Video Phone w/Proshare Technology 2.0

**Included on CD:** Internet Explorer 4.0; LANdesk Client Manager 3.0, SystemSoft CardWorks; Intel Video Interactive (32-bit,v.4.0) Toshiba Fn-esse utility; Online manual. *Units ship with Recovery CD, Windows95 Companion disk, and Application CD.*

**SECURITY**

Lock slot, Password:power-on, supervisor, HDD access, Docking station eject

**WARRANTY**

3 YR Parts & Labor (battery 1 year)

**ENVIRONMENTAL SPECIFICATIONS**

	<u>Operating</u>	<u>Non-operating</u>
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.)	--	--
Relative Humidity: Operating	20% to 80% non-condensing	10% to 90% non-condensing
Altitude: Operating	-197 to 9,843ft. (-60 to 3000m)	-197 to 32,808ft. (-60 to 10,000m)
Shock: Operating	10G (11ms); 1.5G w/CD-ROM installed	60G (11ms); 50G w/CD-ROM installed
Vibration: Operating	0.5G; 0.25G (5~500Hz) w/CD-ROM	1G; 1G (5~500Hz) w/CD-ROM

4. Recharge time may vary depending on condition of battery, and consumption of power for function performed during recharge: eg. use of LCD, HDD/CD-ROM, sound and modem, CardBus card in Port Replicator or PCI card in Desk Station V Plus. 5. Optional 2nd battery PA2446UR weights 1.15 lbs.