Panasonic
ideas for life

Protect. Manage.

Windows®. Life without Walls™. Panasonic recommends Windows 7.

THE TOUGHBOOK 52

The only full-power desktop replacement laptop with legendary Toughbook durability.

In your world, what falls down must start up. Panasonic's semi-rugged Toughbook® 52 leads the way in reliability and performance, whether on your desk or on the road. With either a 15.4" widescreen or a 13.3" sunlight-viewable 1000 nit touchscreen, it's the ultimate business tool for group presentations and advanced technology to run multiple applications without a hitch. Intel® vPro™ processors add increased security and enhanced remote management, and optional Gobi™ mobile broadband lets you work seamlessly pretty much anywhere.



TOUGHBOOK



THE PANASONIC TOUGHBOOK 52.



SOFTWARE
- Genuine Windows® 7 Professional[1]
- Setup, Diagnostics, PC Information Viewer, Online Reference Manual, Adobe® Reader, Battery Recalibration Utility, Hard Disk Data Erase Utility, Recovery DVD, WinDVD® 8, Roxio Creator® LJB

CPU & DISPLAY
- Intel® Core™ i5-540M (2.53GHz, L3 3MB, vPro™)
  - 15.4" widescreen 1920 x 1200 WUXGA LCD
  - ATI Radeon™ HD5650, 512MB dedicated VRAM
- Intel® Core™ i5-520M (2.4GHz, L3 3MB, vPro™)
  - 15.4" widescreen 1280 x 800 WXGA LCD
  - Intel® QM57 video controller, max. 1024MB UMA VRAM on XP[2]
- Intel® Core™ i3-330M (2.13GHz, L3 3MB)
  - 15.4" widescreen 1280 x 800 WXGA LCD
  - Intel® HM55 video controller, max. 1024MB UMA VRAM on XP[2]
- Intel® Core™ 2 Duo P8400 (2.26GHz, L2 3MB, 1066MHz, vPro™)
  - 13.3" touchscreen 1024 x 768 XGA sunlight-viewable 1000 nit LCD
  - Intel® GM45 video controller, max. 1024MB UMA VRAM on XP[2]
- External video support
- Anti-glare screen treatment
- Anti-reflective screen treatment*

STORAGE & MEMORY
- 2GB SDRAM standard, expandable to 8GB[3,4]
  - DDR3 (i5 and i3 CPU models)
  - DDR2 (P8400 CPU model)
- Shock-mounted flex-connect hard drive with quick-release
  - 160GB (520M, 330M and P8400 CPU) or 250GB (540M CPU)[4]

AUDIO
- Intel® high-definition audio compliant
- Integrated stereo speakers
- Convenient keyboard volume and mute controls

KEYBOARD & INPUT
- Touchscreen LCD (touchscreen model only)
- Integrated stylus holder (touchscreen model only)
- Adjustable dual overhead keyboard light (touchscreen model only)
- 87-key with dedicated Windows® key
- Electrostatic touchpad with scrolling support

MULTIMEDIA POCKET
- DVD Super MULTI Drive with Dual Layer Support

EXPANSION SLOTS
- PC card type II x 1
- SD card (SDHC)
- ExpressCard/54 x 1

INTERFACE

• Docking connector	Dedicated 100-pin
• External video	D-sub 15-pin
• Headphones/speaker	Mini-jack stereo
• Microphone/line in	Mini-jack stereo
• Serial	D-sub 9-pin
• USB 2.0 (x 4)	4-pin
• IEEE 1394a (FireWire)*	4-pin
• 10/100/1000 Ethernet	RJ-45
• 56K Modem*	RJ-11

WIRELESS
- Optional Gobi™2000 (i5 and i3 CPU models) or Gobi™1000 (P8400 CPU)
- Intel® Centrino® Advanced-N 6200 802.11a/b/g/n (i5 CPU models)
- Atheros AR9285 802.11b/g/n (i3 CPU model)
- Intel® Wireless WiFi Link 5100 802.11a/b/g/draft-n (P8400 CPU model)
- Optional Bluetooth®—standard on models with 540M CPU
  - Class 1, v2.1 + EDR (i5 and i3 CPU models)
  - Class 1, v2.0 + EDR (P8400 CPU model)
- Security
  - Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
  - Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES
- Slide on/off switch

POWER SUPPLY
- Battery operation[5]:
  - 540M CPU—4 hours (long life battery)
  - 520M CPU—9 hours (long life battery)
  - 330M CPU—6 hours (lightweight battery)
  - P8400 CPU—8 hours (long life battery)
- Lightweight Li-Ion battery pack (11.1V, typical 5200mAh, minimum 5000mAh)
- Long life Li-Ion battery pack (11.1V, typical 7800mAh, minimum 7500mAh)
- Battery charging time: 4 hours (i5 and P8400 models), 3 hours (i3 CPU model)[5]
- AC Adapter: AC 100V—240V 50/60Hz, auto sensing/switching worldwide power supply
- Pop-up on-screen battery status reporting

POWER MANAGEMENT
- Suspend/Resume Function, Hibernation, Standby, ACPI BIOS

SECURITY FEATURES
- Password Security: Supervisor, User, Hard Disk Lock
- Cable lock slot
- Trusted platform module (TPM) security chip v.1.2
- Computrace® theft protection agent[6]
- Intel® Anti-Theft Technology (i5 CPU models)
- Fingerprint reader (option)
- SmartCard reader (option)

WARRANTY
- 3-year limited warranty, parts and labor

Financing options now available from Panasonic Finance Solutions; please call number above for more details.

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- *15.4" Widescreen or 13.3" Touchscreen LCD*
- *Magnesium Alloy Case with Handle*
- *Shock-mounted Flex-connect Hard Drive*
- *Drop and Spill-resistant*
- *Mobile Broadband-ready Design*

DIMENSIONS & WEIGHT
- 11.3"(L) x 14.0"(W) x 2.0"(H)
- Weight varies by battery type:
  - 7.2 or 7.5 lbs. (without touchscreen)
  - 7.6 or 7.9 lbs. (with touchscreen)

INTEGRATED OPTIONS[7]
- Gobi™ mobile broadband (EV-DO Rev. A, HSPA)
- SmartCard reader
- Fingerprint reader

ACCESSORIES[7]

• AC Adapter (3-pin)	CF-AA5713AM
• Battery Charger	CF-VCBTB1W
• Lightweight Battery Pack	CF-VZSU65U
• Long Life Battery Pack	CF-VZSU29ASU
• LIND Car Adapter 120W	CF-LNDDC120
• LIND Car Adapter 120W Mounting Bracket	CF-LNDBRK120
• LIND Shutdown Timer	CF-LNDLPT
• InfoCase ComUniversal Carrying Case (large capacity)	TBCCOMUNV-P
• InfoCase ComUniversal Roller	TBCRLR-P
• InfoCase Backpack	TBCBPK-P
• InfoCase Always-on 52 Case	TBC52AOCS-P
• Desktop Port Replicator	CF-VEB522M
• Memory Cards	
– 2GB DDR3 (i5 and i3 CPU models)	CF-WMBA902GF
– 4GB DDR3 (i5 and i3 CPU models)	CF-WMBA904G
– 1GB DDR2 (P8400 CPU model)	CF-TTWMBA801GE
– 2GB DDR2 (P8400 CPU model)	CF-TTWMBA802GE
– 4GB DDR2 (P8400 CPU model)	CF-WMBA804G
• Touchscreen Replacement Stylus	CF-VNP009U
• 13.3" LCD Protector Film	CF-VPF15U
• DisplayPort to HDMI Adapter	TTDPHDMI

Please consult your reseller or Panasonic representative before purchasing.

[1] A full set of Windows XP drivers are available at panasonic.com/toughbook/support.

[2] The size of the VRAM cannot be set by the user and varies by operating system as well as size of RAM. Windows 7 max. VRAM is 763MB with 2GB of memory, or 1435MB with 4GB of memory.

[3] Total usable memory will be less depending upon actual system configuration. 8192MB of memory is not available on all models and operating systems.

[4] 1GB = 1,000,000,000 bytes.

[5] Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from MobileMark 2007.

[6] Requires software and activation to enable theft protection.

[7] Accessories and Integrated Options may vary depending on your notebook configuration.

*Not available on i3 CPU model.

TOUGHBOOK®