

TOUGHBOOK

CF-52_{Mk2}

Semi Rugged Series



Main Features

- Genuine Windows Vista® Business
- Desktop replacement 15.4" wide screen and latest Intel® Centrino® Processor Core™ 2 Duo
- Shock-resistant body survives 76-cm free-fall tests*1
- Magnesium Alloy casing with easy to carry handle
- 160 GB SATA Removable Shock Mounted Removable HDD
- Moisture and Dust Resistant Keyboard and Touch Pad
- Operates with the standard battery for up to 7.5 hours*2
- Integrated Bluetooth™ as standard
- Sealed port and connector covers for water and dust resistance
- Serial, USB 2.0 x 4 and IEEE 1394a connectors as standard
- Embedded options: 3G, Fingerprint scanner & Smart Card Reader

Panasonic recommends Windows Vista® Business

A Semi Ruggedised, Durable, Powerful, Business PC



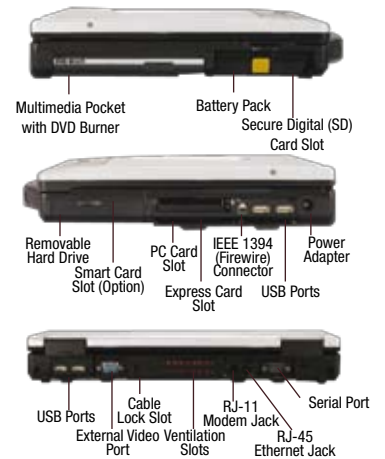
ISO 14001

We implement environment management systems in our factories worldwide and have acquired ISO14001 certification.

ECO

Lead-free solder used for PCB component mounting.

Interface



- Genuine Windows Vista® Business (XP Downgrade DVD in box)
- Intel® Centrino® Technology:
- Intel® Core™ 2 Duo Processor (Standard Voltage version P8400): 3MB L2 cache, 2.26 GHz, 1066 MHz FSB
- Intel® Shirley Peak PRO/Wireless 4965 (802.11 a/b/g/n)
- HDD: 160 GB³ SATA
- RAM: Standard 1GB⁴ (4 GB max.⁵)
- 15.4" TFT / WXGA resolution



*1 Test conducted in non-operating condition. The shock resistance, vibration resistance, dust-proof, and splash-proof specifications do not guarantee that the product can be operated without damage or malfunction. *2 The period of battery operation time varies according to the operating environment, LCD brightness, and system settings. Measured using BatteryMark™ Ver.4.0.1" (LCD brightness Minimum). *3 1 GB = 1,000 MB, in capacity. The actual capacity may be less than displayed, depending on the OS and application software. *4 1 MB = 1,048,576 bytes in capacity. *5 When the existing 1GB-MB DIMM is replaced with a 2-GB DIMM. *6 1 GB = 1,000 MB, in capacity. Operating system or some application software will report as fewer GB.

Panasonic

ideas for life

CF-52 Mk2

CF-52GCMBVAM

Operating System		Genuine Windows Vista® Business (xP Downgrade DVD in box)
CPU		Intel® Centrino® Core 2 Duo Processor P8400 (2.26 GHz, 3 MB ¹ L2 cache, 1066 MHz FSB)
Chipset		Intel® GM45
Memory¹		1 GB (4 GB Max.)
Video Memory^{1,2}		UMA (384 MB Max.)
Hard Disk Drive³		160 GB SATA
Display Method		15.4" TFT/WXGA 200 nit
Wireless LAN		Intel® ShirleyPeak 802.11 a/b/g/n
Bluetooth		Version 2.0+EDR
LAN		IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000 Base T (10/100/100)
Modem		Data: 56 kbps (V.92) FAX: 14.4 kbps
Sound		WAVE and MIDI playback, Monaural speaker, Intel® High Definition Audio subsystem support
Security Chip		TPM (TCG V1.2 compliant) ⁴
Card Slot	PC Card ExpressCard HCSD Memory Card Smart Card Reader	Type I or Type II x 1 (3.3V: 400 mA, 5V: 400 mA) ExpressCard/34 or ExpressCard/54 x 1 HCSD x 1, Data transfer rate = 8 MB per second ⁵ x 1 Optional
RAM Module Slot		200-pin, 1.8 V, SO-DIMM, DDR2 SDRAM, PC2-4200 Compliant
Interface		USB port (4-pin, USB 2.0) x 4, Serial Port (Dsub 9-pin male), Modem port (RJ-11), LAN port (RJ-45), External display port (Mini Dsub 15-pin female), IEEE1394a Interface Connector (4-pin x 1), Microphone Jack (Miniature jack, 3.5 DIA, Stereo), Headphone Jack (Miniature jack, 3.5 DIA, Impedance 32 Ω, Output Power 4 mW x 2, Stereo) Setup Utility, Hard Disk Data Erase Utility*
Keyboard / Pointing Device		87 keys Water Resistant / Touch Pad
Power Supply		AC adaptor, DC adapter or Battery pack
AC Adaptor		Input: 100 V to 240 V AC, 50 Hz/60 Hz, Output: 16.0 V DC, 3.75 A
Battery Pack	Operating Time ⁶ Charging Time ⁶ (Power off)	Li-ion 9 cell 11.1v 7800mAh Approx. 7.0 hours to 7.5 hours ⁷ (Approx. 7.5 hours ⁸) Approx. 4.5 Hours
Power Consumption⁹		Approx. 26 W ¹⁰ / Approx. 55 W (Maximum when recharging in the on state)
Physical Dimensions (W x H x D)		355.7 mm x 286.3mm x 8 x 50.7mm - 51.9mm with handle
Weight		Approx. 3.35 kg
Operating Environment		Temperature: 5°C to 35°C Humidity: 30% to 80% RH (No condensation)
Storage Environment		Temperature: -20°C to 60°C Humidity: 30% to 90% RH (No condensation)
Utility Programs		DMI Viewer, Adobe Reader, PC Information Viewer, SD Utility, Icon Enlarger, Loupe Utility, WinDVD™ 5 (OEM Version), B's Recorder GOLD8 BASIC, B's CLIP 6, Intel® PROSet/Wireless Software ¹¹ , Bluetooth™ Stack for Windows® by TOSHIBA ¹² , Wireless Switch Utility, Hotkey Settings, Battery Recalibration Utility, Infineon TPM Professional Package ¹³ , Recover Pro™ ¹³ , Setup Utility / Hard Disk Data Erase Utility ¹⁴ / PC-Diagnostic Utility ¹⁴

*1 1 GB = 1,000 MB

*2 A segment of the main memory is allotted automatically depending on the computer's operating status. The size of the Video Memory cannot be set by the user.

*3 1 GB = 1,000,000,000 bytes. Your operating system or some application software will report as fewer GB.

*4 For information on TPM, click [start] - [Run] and input "c:\util\drivers\tpm\README.pdf", and refer to the Installation Manual of "Trusted Platform Module (TPM)".

*5 Operation has been tested and confirmed using Panasonic SD Memory Cards with a capacity of up to 32 GB.

The transfer rate using the SD Memory Card slot on this computer is 8 MB per second. (This is a theoretical value, and differs from actual speeds.)

The transfer rate is 8 MB per second even if you use an SD Memory Card that supports high-speed transfer rates.

Operation on other SD equipment is not guaranteed.

This computer is not compatible with Multi Media Cards. Do not insert these kinds of cards.

*6 Varies depending on usage

*7 Measured using BatteryMark. Version 4.0.1 (LCD brightness: Maximum - Minimum)

*8 Measured using MobileMark. 2005 (LCD brightness: 60 cd/m²)

*9 26 W when the battery pack is fully charged (or not being charged) and the computer is OFF.

Approx. 1.2 W when the Wake up from LAN has been enabled.

*10 Rated power consumption 23-E-1

*11 Only for model with wireless LAN Approx.

*12 Only for model with Bluetooth

*13 You need to install to use the feature.

*14 The Product Recovery DVD-ROM is required.

Panasonic reserves the right to change design and specifications with out notice.