

THE SEMI RUGGEDIZED NOTEBOOK WITH WIDE-SCREEN. TOUGHBOOK CF-52

Intel® Centrino® 2 Processor Technology with Intel® Core™ 2 Duo Processor

Genuine Windows® XP Professional or Genuine Windows Vista® Business

15.4" WXGA Active Matrix (TFT) colour LCD

Robust magnesium alloy display case



Shock-protected, easily removable HDD Integrated DVD Multi Drive

Firewire (IEEE 1394a), USB 2.0 and serial port

Battery life up to 7 hours

Withstands drops from a height of 76cm*

TOUGHBOOK

Panasonic ideas for life

Information at www.toughbook.eu





The CF-52 is the ideal all-round notebook when you are on the move or in the office. As a Toughbook, it comes up with a range of "ruggedized" features protecting its key components against vibrations and even falls from a height of up 76cm*. The display is surrounded by dampers and is mounted in a durable magnesium case. The hard disk drive is embedded in a shock-absorbing foam and is connected to the motherboard by flexible cabling. The splash resistant keyboard and touchpad helps to stop water or any other liquid from entering the casing and causing internal damage, while rubber port covers protect all sensitive external connections.

Mobile Computing

The CF-52 has a bright 15.4" widescreen LCD in 16:10 format with WXGA resolution – particularly beneficial when displaying complex graphics. The maximum 4GB RAM (2 x 2GB DIMM), Intel® Centrino® 2 Processor Technology, a weight of only 3.4kg and the integrated carrying handle provide maximum working flexibility. Two Diversity WLAN antennas ensure optimal reception at all times, and finally, state-of-the-art energy-saving components combined with the CF-52's durable battery enable a running time of up to 7 hours.

Intal® Cantrina® 2 Processor Tachnalage



Mobile Computing	Intel® Centrino® 2 Processor Technology		
Platform	- Intel® Core™ 2 Duo Processor P8400 (2.26GHz, 3MB L2 cache, 1066MHz FSB)		
	- Mobile Intel® GM45 Express Chipset		
	- Intel® Wireless WiFi Link 5100AGN (802.11a/b/g/draft-n)		
OS	Genuine Windows Vista® Business Service Pack 1 or		
	Genuine Windows® XP Professional Service Pack 2 with Advanced Security Technologies (NTFS File System)		
RAM	1GB DDR2 SDRAM (expandable to 2GB + 2GB on project basis)		
Graphic Chip	Intel® GM45 graphics controller; UMA (1GB RAM: max. 1024MB with Win XP; max. 1423MB with Win Vista®)		
HDD	160GB SATA (shock resistant; withstands a 76cm* drop)		
Optical Disc Drive	DVD Multi Drive		
LCD	15.4" Active Matrix (TFT) colour LCD		
	1280 × 800 pixels (WXGA)		
LCD Cabinet	Magnesium alloy		
Bluetooth®	Version 2.0 + EDR		
WLAN	IEEE 802.11a/b/g/draft-n		
LAN	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T		
Modem	Data: 56kbps (V.92) FAX: 14.4kbps		
Sound	Analog Devices AD 1883 (conforms to Intel® High Definition Audio)		
	Integrated stereo speakers		
Input Devices	Touchpad and keyboard (both splash resistant)		
Indicators	11 LEDs (2x Power, Battery, HDD, Multimedia Pocket, NumLK, CapsLK, ScrLK, SD, WWAN, Wireless ready)		



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Interfaces	Serial (16550A compatible):	Dsub, 9-pin	
	External display (VGA port):	Mini Dsub, 15-pin	
	Headphones:	Mini-jack, 3.5 DIA, stereo	
	Microphone:	Mini-jack, 3.5 DIA, stereo	
	DC input:	Jack	
	USB 2.0:	4x 4-pin	
	Firewire (IEEE1394a):	1x 4-pin	
	Modem:	RJ-11	
	LAN:	RJ-45	
	Port replicator:	100-pin	
Expansion Slots	PC Card**:	1x Type I or Type II (3.3V: 400mA, 5V: 400mA)	
	ExpressCard**:	1x ExpressCard/34 or ExpressCard/54	
	SD/SDHC Memory Card:	1x	
	Optional RAM Module:	200-pin, 1.8V, SO-DIMM, DDR2 SDRAM, PC2-6400 Compliant	
Power	AC Adapter:	Input: 100V ~ 240V, 50Hz/60Hz; Output: 15.6V, 8A	
	Battery:	Lithium-lon (11.1V, 7.8Ah)	
	Battery life:	Approx. 7.0h (Vista model, LCD brightness: 60cd/m²)	
	Charging time:	Approx. 4.0h (Power on)	
Power Consumption	Approx. 45W – max. 100W (maximum when recharging)		
Power Management	Standby function, ACPI BIOS		
Software	e.g. Adobe® Reader, WinDVD™ (0EM Version), B's Recorder GOLD9 BASIC, B's CLiP 7, PC Diagnostic Utility		



Software Security Features

	Password security (supervisor password, user password, nard disk tock)			
	Integrated hardware security lock slot			
Dimensions (W x H x D) 355.7mm x 50.7–51.9mm x 286.8mm/14.0" x 2.0" x 11.3" (including carrying handle)				
Weight	Approx. 3.4 kg/7.5 lb (including carrying handle)			
Integrated Options	Fingerprint Reader, Smart Card Reader, UMTS/HSDPA module			
Accessories	1GB RAM module:	CF-WMBA801G		
	2GB RAM module:	CF-WMBA802G		
	AC Adapter:	CF-AA5803A		
	Battery charger:	CF-VCBTB1U		
	Battery pack:	CF-VZSU29ASU		
	Port replicator:	CF-VEB522W		
Testing Standards	MIL-STD 810F			
Specification and configuration may vary depending on country, Accessories may vary depending on your notebook configuration. Consult a Panasonic sales office				



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- * Non-operating, 6 surfaces (tested at Panasonic laboratory; no guarantee that unit never gets broken)
- ** Config. A: 1x PC Card Type I or II + 1x ExpressCard Config. B: (available 2008/11): 2x PC Card Type I or II, no ExpressCard

TPM (Trusted Platform Module – TCG V1.2 compliant)

As an ENERGY STAR® Partner, Matsushita Electric Industrial Co., Ltd. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. Active Matrix colour display conforms to industry standards. Some displays may contain isolated illuminated or dark pixels as an artefact of the manufacturing process (effective pixels: minimum 99.998%). RAM capacity calculated as follows: 1MB = 1,048,576 bytes. HDD capacity calculated as follows: 1GB = 1,000,000,000 bytes. Panasonic and Toughbook are brand names and registered trademarks of Matsushita Electric Industrial Co., Ltd. Acrobat® is a registered trademark of Adobe® Systems Incorporated. Intel, Intel Inside, the Intel Inside logo, Core, Intel Centrino, and the Intel Centrino logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft® and Windows® are registered trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies. All rights reserved.

