Panasonic

1.21 kg Light Weight
Even with DVD Drive

Mobile PC made for your business

TOUGHBOOK CF-SX2

Weighing only about 1.21 kg*3

Battery power runs for approx. 9 hours*4

Passed 76 cm free-fall test*5 & 100-kgf pressurized vibration test*6

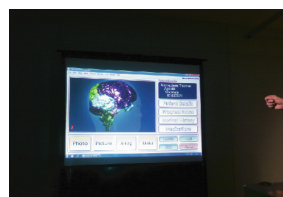| OS	Windows 7 Professional
CPU	Intel® Core™ i5-3320M Processor (3 MB*1 cache up to 3.30 GHz) with Intel® Turbo Boost Technology
LCD	12.1" Color TFT (1600 x 900 dots)
HDD	250 GB*2
RAM	4 GB*1

■ 720p HD web camera enables video conference

■ Strong & light shell drive developed by Panasonic

■ HDMI port for high quality audio & visual output

■ High resolution LCD displays sharp image & text

*1 1 MB = 1,048,576 bytes/1 GB = 1,073,741,824 bytes. *2 The HDD is 1 GB (1,000,000,000 bytes) in capacity. The actual capacity may be less than displayed, depending on the OS and application software. *3 Average value. May differ depending on models. *4 Operating time measured in accordance with JEITA battery run time measurement method (Ver. 1.0). Varies depending on the usage conditions, or when an optional device is attached. When Economy Mode (ECO) is disabled. *5 Carried out in Panasonic technical research lab. Dropped on to bottom (in operation-mode). *6 Carried out in a Panasonic laboratory in non-operation mode. Vibration with pressure of 980 N (100 kgf) is applied uniformly over the top and bottom faces.

* The shock resistance, pressure resistance, and splash-proof functions are not a guarantee against damage or malfunction.
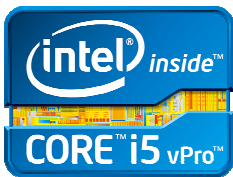
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Panasonic recommends Windows.

CF-SX2

Model No.		CF-SX2 series
OS[1]		Windows 7 Professional 32-bit or Windows 7 Professional 64-bit
CPU		Intel® Core™ i5-3320M Processor (3 MB[2] cache, up to 3.30 GHz) with Intel® Turbo Boost Technology
Chipset		Mobile Intel® QM77 Express Chipset
Main Memory[2],[3]		4 GB, DDR3L SDRAM (8 GB[2] Max.)
Video Memory		UMA (<32-bit> 1551 MB[2] Max., <64-bit> 1696 MB[2] Max.)[4]
Video Controller		Built-in Chip Set
Hard Disk Drive		250 GB[5]
		Approx. 40 GB[5] (HDD Recovery partition) and Approx. 300 MB[5] (Recovery partition) are used as recovery partitions. (Users cannot use these partitions.)
CD/DVD Drive		DVD MULTI Drive built-in, Buffer underrun error prevention function: Supported
Display Method		12.1 (TFT) (1600 × 900 dots)
	Internal LCD	65,536/16,777,216 colors (1600 × 900 dots)[6]
	External Display[7]	65,536/16,777,216 colors (800 x 600 dots, 1024 x 768 dots, 1280 x 720 dots, 1280 x 768 dots, 1280 x 1024 dots, 1360 x 768 dots, 1366 x 768 dots, 1400 x 1050 dots, 1600 x 900 dots, 1600 x 1200 dots, 1680 x 1050 dots, 1920 x 1080 dots,1920 x 1200 dots)
	Simultaneous Display on LCD + External Display[7]	65,536/16,777,216 colors (800 x 600 dots, 1024 x 768 dots, 1280 x 720 dots, 1280 x 768 dots, 1360 x 768 dots, 1366 x 768 dots, 1600 x 900 dots)[7]
Wireless LAN		Intel® Centrino® Advanced-N 6205 (IEEE802.11a/b/g/n compliant)
Bluetooth™		Ver 4.0
Wireless WAN (Optional)		Ericsson F5521gw
	HSUPA	5.7 Mbps
	HSPA+	21 Mbps
LAN		IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T
Sound		WAVE and MIDI playback, Intel® High Definition Audio subsystem support
Card Slots	SD Memory Card Slot	x 1 (SDHC & SDXC Memory Card support)[8]
	SIM Card Slot	x 1
RAM Module Slot		x 1, DDR3L SDRAM, 204-pin, 1.35 V, SO-DIMM, PC3-10600 Compliant
Interface		USB 3.0 Ports × 2 (left side)[9] / USB 2.0 Port x 1 (right side)[10] / LAN Port (RJ-45) × 1 / External Display Port (VGA) (Mini Dsub 15-pin female) / HDMI Port (Type A)[11] / Microphone Jack (Miniature jack, 3.5 DIA) / Headphone Jack (Miniature jack, 3.5 DIA)
Keyboard / Pointing Device		84 keys / Touch Pad
Camera	Resolution	High Definition 720p
	Effective number of pixels	Max. 1280 x 720
	Microphone	Built-in
Power Supply		AC adaptor or Battery pack
AC Adaptor		Input: 100 V - 240 V AC, 50 Hz / 60 Hz
		Output: 16 V DC, 5 A
Battery Pack		Small: Li-ion 7.2 V, 6800 mAh (included) Large: Li-ion 7.2 V, 13600 mAh (optional)
	Operating Time[12]	Approx. 9 hours (without WWAN) / Approx. 8 hours (with WWAN) <Economy Mode (ECO) - Disable>
	Charging Time[13]	Approx. 3 hours (Power Off) / Approx. 2.5 hours (Power on)
Power Consumption[14]		Approx. 25 W[15] / Approx. 65 W (maximum when non-recharging in the ON state)
Physical Dimensions (W x D x H)		295 mm x 197.5 mm x 25.4 mm
Weight[16]		Approx. 1.21 kg
Operating Environment	Temperature	5 °C to 35 °C
	Humidity	30 % to 80 % RH (No condensation)
Pre-installed Software[1]		Adobe Reader, PC Information Viewer, Intel® PROSet/Wireless Software, Bluetooth Stack for Windows® by TOSHIBA, Wireless Switch Utility, Wireless Connection Disable Utility[17], Hotkey Settings, Battery Recalibration Utility, Aptio Setup Utility, PC-Diagnostic Utility, Roxio Creator LJB, CyberLink PowerDVD 10,Hard Disk Data Erase Utility[18], Recovery Disc Creation Utility, Dashboard for Panasonic PC, Quick Boot Manager, Power Plan Extension Utility, Camera Utility, USB Charge Setting Utility, PC Information Popup, Touchpad Utility

*1 When reinstalling Windows using the data of the recovery area on the hard disk, you can select the OS to be installed (either Windows 7 (32-bit) or Windows 7 (64-bit)). Operations of this computer are not guaranteed except for the pre-installed OS, or the OS which is generated by the product recovery software pre-installed.*2 1 MB = 1,048,576 bytes / 1 GB = 1,073,741,824 bytes. *3 For 32-bit OS, the usable memory available will be less depending on the specifications (3.4 GB to 3.5 GB). *4 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. The size of Video memory is allotted depending on the operating system. *5 1 MB = 1,000,000 bytes / 1 GB = 1,000,000,000 bytes. Your operating system or some application software will report as fewer GB. *6 A 16,777,216 color display is achieved by using the dithering function. *7 Display may be impossible using some connected external displays. *8 This slot is compatible with High-Speed Mode. Operation has been tested and confirmed using Panasonic SD/SDHC/SDXC Memory Cards with a capacity of up to 64 GB. Operation on other SD equipment is not guaranteed.*9 Compatible with USB 1.1/2.0/3.0. Does not guarantee operation of all USB-compatible peripherals.*10 Compatible with USB 1.1/2.0. Does not guarantee operation of all USB-compatible peripherals.*11 Does not guarantee operation of all HDMI-compatible peripherals. *12 Operating time measured in accordance with JEITA battery run time measurement method (Ver.1.0). Varies depending on the usage conditions, or when an optional device is attached.*13 Varies depending on the usage conditions, CPU speed, etc.*14 Approx. 0.5 W when the battery pack is fully charged (or not being charged) and the computer is off. <When using with 115 V AC> Even when the AC adaptor is not connected to the computer, power is consumed (Max. 0.2 W) simply by having the AC adaptor plugged intoa an AC outlet. <When using with 100~240 V AC> Even when the AC adaptor is not connected to the computer, power is consumed (Max. 0.4 W) simply by having the AC adaptor plugged into an AC outlet.*15 Rated power consumption. *16 Average value. May differ depending on models. *17 Must be installed before use.*18 Perform on the recovery partition. (If this software cannot be performed on the recovery partition, perform from the recovery disc)

TOUGH1211.SX2

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