Lenovo

Lenovo ThinkPad T520 Intel® Core™ i5 i5-2520M Laptop 39.6 cm (15.6") 4 GB DDR3-SDRAM 500 GB Intel® HD Graphics 3000 Windows 7 Professional Black

Brand : Lenovo	**Product family:** ThinkPad	**Product code:** 42404AU
Product name : T520		

15.6" HD, Intel Core i5-2520M (2.50GHz), 4GB RAM, 500GB HDD, Intel HD Graphics 3000, VGA, DisplayPort, Wi-Fi, LAN, BT3.0, Windows 7 Professional (64)
Lenovo ThinkPad T520. Product type: Laptop. Processor family: Intel® Core™ i5, Processor model: i5-2520M, Processor frequency: 2.5 GHz. Display diagonal: 39.6 cm (15.6"), Display resolution: 1366 x 768 pixels. Internal memory: 4 GB, Internal memory type: DDR3-SDRAM. Total storage capacity: 500 GB, Optical drive type: DVD Super Multi. On-board graphics card model: Intel® HD Graphics 3000, Discrete graphics card model: Intel® HD Graphics 3000. Operating system installed: Windows 7 Professional. Product color: Black. Weight: 2.51 kg

Design

Product type *	Laptop
Product color *	Black

Display

Display diagonal *	39.6 cm (15.6")
Display resolution *	1366 x 768 pixels
LED backlight	✔
Native aspect ratio	16:9
Display surface	Matt
Contrast ratio (typical)	500:1

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i5
Processor generation	2nd gen Intel® Core™ i5
Processor model *	i5-2520M
Processor cores	2
Processor threads	4
Processor boost frequency	3.2 GHz
Processor frequency *	2.5 GHz
System bus rate	5 GT/s
Processor cache	3 MB
Processor cache type	Smart Cache
Processor socket	Socket 988
Processor lithography	32 nm
Processor operating modes	64-bit
Processor series	Intel Core i5-2500 Mobile Series
Processor codename	Sandy Bridge
Bus type	DMI
FSB Parity	✗
Stepping	J1
Thermal Design Power (TDP)	35 W
Tjunction	100 °C
Maximum number of PCI Express lanes	16

Software

Operating system architecture	64-bit
Operating system installed *	Windows 7 Professional

Processor special features

Intel® Wireless Display (Intel® WiDi)	✔
Intel® My WiFi Technology (Intel® MWT)	✔
Intel® Anti-Theft Technology (Intel® AT)	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Turbo Boost Technology	2.0
Enhanced Intel SpeedStep Technology	✔
Intel® Clear Video HD Technology (Intel® CVT HD)	✔
Intel Clear Video Technology	✗
Intel® InTru™ 3D Technology	✔
Intel® Insider™	✗
Intel® Quick Sync Video Technology	✔
Intel Flex Memory Access	✔
Intel® Smart Cache	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✔
Intel Enhanced Halt State	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel Demand Based Switching	✗
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✗
Intel 64	✔

Processor

PCI Express slots version	2.0
PCI Express configurations	1x16, 2x8, 1x8+2x4
CPU multiplier (bus/core ratio)	25
ECC supported by processor	✘

Memory

Internal memory *	4 GB
Internal memory type	DDR3-SDRAM
Memory clock speed	1333 MHz
Memory slots	2x SO-DIMM
Memory slots (available)	1
Maximum internal memory *	8 GB

Storage

Total storage capacity *	500 GB
HDD capacity	500 GB
HDD interface	SATA II
HDD speed	7200 RPM
Optical drive type *	DVD Super Multi
Card reader integrated	✔
Compatible memory cards	MMC, SD, SDHC, SDXC

Graphics

Discrete graphics card model *	Intel® HD Graphics 3000
On-board graphics card *	✔
Discrete graphics card *	✔
On-board graphics card family	Intel® HD Graphics
On-board graphics card model *	Intel® HD Graphics 3000
On-board graphics card base frequency	650 MHz
On-board graphics card dynamic frequency (max)	1300 MHz
On-board graphics card ID	0x116
Maximum resolution	2560 x 1600 pixels

Audio

Audio system	HD
Number of built-in speakers	2
Speaker power	2 W

Network

Wi-Fi	✔
Networking features	Gigabit Ethernet
Ethernet LAN	✔
Bluetooth	✔
Bluetooth version	3.0+HS
Cabling technology	10/100/1000Base-T(X)

Ports & interfaces

USB 2.0 ports quantity *	4
Ethernet LAN (RJ-45) ports	1
DisplayPorts quantity	1
DVI port	✘
VGA (D-Sub) ports quantity	1
Headphone outputs	1
S/PDIF out port	✘
Microphone in	✔
Docking connector	✘
ExpressCard slot	✔
CardBus PCMCIA slot type	✘
SmartCard slot	✘
Modem (RJ-11) ports	1

Processor special features

Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	37.5 x 37.5 (rPGA988B); 31 x 24 (BGA1023)
Supported instruction sets	AVX
Processor code	SR048
CPU configuration (max)	1
Embedded options available	✘
Graphics & IMC lithography	32 nm
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Identity Protection Technology version	1.00
Intel Virtualization Technology (VT-x)	✔
Intel Dual Display Capable Technology	✔
Intel FDI Technology	✔
Intel Rapid Storage Technology	✘
Intel Fast Memory Access	✔
Processor ARK ID	52229
Conflict-Free processor	✘
Integrated 4G WiMAX	✔

Battery

Battery life (max)	7.7 h

Power

AC adapter power	65 W
DC-in jack	✔

Security

Cable lock slot	✘
Fingerprint reader	✔
Password protection type	HDD, Supervisor

Certificates

Compliance certificates	RoHS

Sustainability

Sustainability certificates	ENERGY STAR

Weight & dimensions

Width	372.8 mm
Depth	245.1 mm
Height (front)	3.18 cm
Height (rear)	3.56 cm
Width (imperial)	37.3 cm (14.7")
Depth (imperial)	24.5 cm (9.65")
Height (front) (imperial)	3.18 cm (1.25")
Height (rear) (imperial)	3.56 cm (1.4")
Weight *	2.51 kg

Packaging content

AC adapter included *	✔

Other features

Infrared data port	✘
Graphics card family	Intel
Display	LCD
Power supply type	AC/DC
Internal modem	✔

Ports & interfaces		Other features	
TV-out	✕	TV tuner integrated	✕
		Intel segment tagging	Home office, Small Business

Performance	
Motherboard chipset	Intel® QM67 Express

Keyboard	
Pointing device	Touchpad
Keyboard number of keys	89

Ports & interfaces		Other features	
TV-out	✕	TV tuner integrated	✕

Performance	
Motherboard chipset	

Catalog Object Cloud