## Lenovo ThinkPad T420 Intel® Core™ i5 i5-2410M 35,6 cm (14") 4 GB DDR3-SDRAM 320 GB HDD Windows 7 Professional Black

Brand : Lenovo

Product family: ThinkPad

Product code: NW19YRT

Product name : T420

Intel Core i5-2410M(2.3GHz), 4GB DDR3, 320GB, 14.0" HD+ (1366 x 768), Intel HD Graphics 3000, Windows 7 Professional 64-bit

Lenovo ThinkPad T420. Processor family: Intel® Core™ i5, Processor model: i5-2410M, Processor frequency: 2,3 GHz. Display diagonal: 35,6 cm (14"), Display resolution: 1366 x 768 pixels. Internal memory: 4 GB, Internal memory type: DDR3-SDRAM. Total storage capacity: 320 GB, Storage media: HDD, Optical drive type: DVD±RW. On-board graphics card model: Intel® HD Graphics 3000. Operating system installed: Windows 7 Professional. Product colour: Black. Weight: 2,24 kg





## Software Design Product colour \* Black Operating system architecture 64-bit Housing material Plastic Drivers included Operating system installed \* Windows 7 Professional Display Display diagonal \* 35,6 cm (14") Processor special features Display resolution \* 1366 x 768 pixels Intel® Wireless Display (Intel® 1 WiDi) LED backlight Intel® My WiFi Technology (Intel® Native aspect ratio 16:9 MWT) Display surface Matt Intel® Anti-Theft Technology 230 cd/m<sup>2</sup> Display brightness (Intel® AT) Dual-screen × Intel® Identity Protection Technology (Intel® IPT) Contrast ratio (typical) 300:1 Intel® Hyper Threading Technology Processor (Intel® HT Technology) Processor manufacturer \* Intel Intel® Turbo Boost Technology 2.0 Processor family \* Intel® Core<sup>™</sup> i5 Enhanced Intel SpeedStep Technology 2nd gen Intel® Core<sup>™</sup> i5 Processor generation Intel® Clear Video HD Technology i5-2410M Processor model \* (Intel® CVT HD) 2 Processor cores Intel Clear Video Technology × Processor threads 4 Intel® InTru<sup>™</sup> 3D Technology 1 2,9 GHz Processor boost frequency Processor frequency \* 2.3 GHz Intel® Insider™ × 5 GT/s System bus rate Intel<sup>®</sup> Quick Sync Video Technology 1 Processor cache 3 MB Intel Flex Memory Access Processor cache type Smart Cache Intel® Smart Cache BGA 1023 Processor socket Intel® AES New Instructions (Intel® × Processor lithography 32 nm AES-NI) Processor operating modes 64-bit Intel Trusted Execution Technology × Intel Core i5-2400 Mobile Series Processor series Intel Enhanced Halt State Processor codename Sandy Bridge Intel VT-x with Extended Page Bus type DMI 1 Tables (EPT) FSB Parity × Intel Demand Based Switching X ]1 Stepping Intel® Clear Video Technology for Thermal Design Power (TDP) 35 W Mobile Internet Devices (Intel CVT × for MID) 100 °C Tjunction Intel 64

Processor		Processor special features	
Maximum number of PCI Express	16	Execute Disable Bit	✓
lanes PCI Express slots version	2.0	Idle States	✓
PCI Express configurations	1x8, 1x16, 2x4, 2x8	Thermal Monitoring Technologies	1
CPU multiplier (bus/core ratio)	23	Processor package size	37.5x37.5 (rPGA988B); 31 x 24 (BGA1023)
ECC supported by processor	×	Supported instruction sets	AVX
Memory		Embedded options available	×
Internal memory *	4 GB	Graphics & IMC lithography	32 nm
Internal memory type	DDR3-SDRAM	Intel Virtualization Technology for Directed I/O (VT-d)	×
Memory clock speed	1333 MHz	Intel Identity Protection Technology	1.00
Memory slots Maximum internal memory *	2x SO-DIMM 8 GB	version	1,00
	0.00	Intel Virtualization Technology (VT-	1
Storage		x) Intel Dual Display Capable	
Total storage capacity *	320 GB	Technology	
Storage media * Number of HDDs installed	HDD 1	Intel FDI Technology	1
HDD capacity	320 GB	Intel Rapid Storage Technology	×
HDD interface	SATA	Intel Fast Memory Access	1
HDD speed	7200 RPM	Processor ARK ID	52224
Optical drive type *	DVD±RW	Conflict-Free processor	×
Card reader integrated	✓	Integrated 4G WiMAX	1
Compatible memory cards	MMC, SD, SDHC, SDXC	Battery	
Graphics		Battery life (max)	9 h
Discrete graphics card model *	Not available	Power	
On-board graphics card *	1		00.W/
Discrete graphics card *	×	AC adapter power	90 W
On-board graphics card family	Intel <sup>®</sup> HD Graphics	DC-in jack	<b>v</b>
On-board graphics card model *	Intel <sup>®</sup> HD Graphics 3000	Security	
On-board graphics card base	650 MHz	Cable lock slot	1
frequency On-board graphics card dynamic		Fingerprint reader	1
frequency (max)	1200 MHz	Trusted Platform Module (TPM)	1
On-board graphics card ID	0x116	Password protection type	BIOS
Maximum graphics card memory	0,256 GB	Operational conditions	
Audio		Operating temperature (T-T)	5 - 35 °C
Audio system	HDA	Storage temperature (T-T)	5 - 43 °C
Number of built-in speakers	2	Operating relative humidity (H-H)	8 - 95%
Speaker power	1 W	Storage relative humidity (H-H)	5 - 95%
Built-in subwoofer	×	Operating altitude	0 - 3048 m
Built-in microphone	<ul> <li>Image: A set of the set of the</li></ul>	Weight & dimensions	
Audio system direct 3D sound	×	Width	340 mm
Network		Depth	229,8 mm
Wi-Fi	1	Height (front)	2,99 cm
Networking features	1Gb Ethernet	Height (rear) Width (imperial)	3,04 cm 34 cm (13.4")
Wi-Fi standards	802.11b, 802.11g, Wi-Fi 4 (802.11n)	Depth (imperial)	23 cm (9.05")
Ethernet LAN	1	Height (front) (imperial)	3 cm (1.18")
Bluetooth	×	Height (rear) (imperial)	3,05 cm (1.2")
WWAN	Installed	Weight *	2,24 kg
Data network	Not supported	Packaging content	
Cabling technology	10/100/1000Base-T(X)	AC adapter included *	1
		•	
4G WiMAX	×	Handheld remote control	×
4G WiMAX Ports & interfaces	×		×
	× 3	Other features	
Ports & interfaces		Other features LightScribe	×
Ports & interfaces USB 2.0 ports quantity * eSATA/USB 2.0 ports quantity Ethernet LAN (RJ-45) ports	3 1 1	Other features LightScribe Infrared data port	× ×
Ports & interfaces USB 2.0 ports quantity * eSATA/USB 2.0 ports quantity	3 1	Other features LightScribe	×

Ports & interfaces		Other features	
VGA (D-Sub) ports quantity	1	Туре	PC
Headphone outputs	1	Display	LED
S/PDIF out port	×	Power requirements	100/240 V
Microphone in	1	Hot keys	7
Line-in	×	TV-in port	×
Docking connector	×	HDD user password	1
ExpressCard slot	1	Internal modem	×
CardBus PCMCIA slot type	×	Audio system full duplex	×
SmartCard slot	×	TV tuner integrated	×
TV-out	×	Intel segment tagging	Home office, Small Business

## Performance

Motherboard chipset

Keyboard	
Pointing device	ThinkPad UltraNav
Numeric keypad *	×
Full-size keyboard	×
Keyboard number of keys	89
Keyboard layout	QWERTY

Intel® QM67 Express

**Catalog Object Cloud** 



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