## Lenovo ThinkPad L420 Intel® Core™ i5 i5-2410M 35,6 cm (14") 4 GB DDR3-SDRAM 320 GB HDD Windows 7 Professional

Brand : Lenovo Product family: ThinkPad Product code: NYV4VMD-BNDL

**Product name:** L420

Lenovo ThinkPad L420. غدانواده پردازنده (تا المدل : Intel® Core™ (3. مدل پردازنده : 5-2410M, Processor frequency: 2,3 مدل پردازنده : 5-2410M, Processor frequency: 2,3 GHz. 35,6 مدل پردازنده (14"), 1366 توج (14"), 268 pixels. Internal memory: 4 GB, رزولوشن صفحه نمایش: 208 x 768 pixels. Internal memory: 4 GB طرفیت کل ذخیره سازی: DDR3-SDRAM. 320 خاصطه داخلی (10. DDR3-SDRAM. 320 خواه داخلی المدل (10. DR3-SDRAM. 320 خورایو نوری بورد (10. سیستم عامل ارائه شده .1018 (10. Braphics 3000 مدل آداپتور گرافیکی در روی بورد (2.33 kg





Display		Ports & interfaces	
Display diagonal *	35.6 cm (14") 1366 x 768 pixels	TV-out	×
Display resolution *		Performance	
LED backlight	1	Motherboard chipset	Intel® HM65 Express
Native aspect ratio	16:9	Keyboard	·
Display brightness Contrast ratio (typical)	220 cd/m <sup>2</sup> 500:1	Pointing device	ThinkPad UltraNav
	300.1	Numeric keypad *	X
Processor		Keyboard layout	OWERTY
Processor manufacturer *	Intel	, ,	QWEINT
Processor family *	Intel® Core™ i5	Software	
Processor generation	2nd gen Intel® Core™ i5	Operating system architecture	64-bit
Processor model *	i5-2410M	Operating system installed *	Windows 7 Professional
Processor cores	2	Processor special features	
Processor threads Processor boost frequency	4 2.9 GHz	Intel® Wireless Display (Intel®	,
Processor frequency *	2.9 GHz 2.3 GHz	WiDi)	✓
System bus rate	5 GT/s	Intel® My WiFi Technology (Intel®	1
Processor cache	3 MB	MWT)	
Processor cache type	Smart Cache	Intel® Anti-Theft Technology (Intel® AT)	✓
Processor socket	BGA 1023	Intel® Identity Protection Technology (Intel® IPT)	✓
Processor lithography	32 nm		
Processor operating modes	64-bit	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor series	Intel Core i5-2400 Mobile Series	Intel® Turbo Boost Technology	2.0
Processor codename	Sandy Bridge	Enhanced Intel SpeedStep Technology	✓
Bus type	DMI		
FSB Parity	×	Intel® Clear Video HD Technology	/
Stepping	J1	(Intel® CVT HD)	
Thermal Design Power (TDP)	35 W	Intel Clear Video Technology	×
Tjunction	100 °C	Intel® InTru™ 3D Technology	✓
Maximum number of PCI Express lanes	16	Intel® Insider™	×

Processor		Processor special features	
PCI Express slots version	2.0	Intel® Quick Sync Video Technology	<b>✓</b>
PCI Express configurations	1x8, 1x16, 2x4, 2x8	Intel Flex Memory Access	✓
CPU multiplier (bus/core ratio)	23	Intel® Smart Cache	✓
ECC supported by processor	X	Intel® AES New Instructions (Intel® AES-NI)	×
Memory	4.00	Intel Trusted Execution Technology	×
Internal memory *	4 GB	Intel Enhanced Halt State	1
Internal memory type Memory clock speed	DDR3-SDRAM 1333 MHz	Intel VT-x with Extended Page	
Memory slots	2x SO-DIMM	Tables (EPT)	<b>/</b>
Maximum internal memory *	8 GB	Intel Demand Based Switching	×
Storage		Intel® Clear Video Technology for	
	220 CB	Mobile Internet Devices (Intel CVT for MID)	×
Total storage capacity * Storage media *	320 GB HDD	Intel 64	<b>✓</b>
Number of HDDs installed	1	Execute Disable Bit	1
HDD interface	SATA	Idle States	1
HDD speed	5400 RPM		
Optical drive type *	DVD±RW	Thermal Monitoring Technologies	✓ 37.5x37.5 (rPGA988B); 31 x 24
Card reader integrated	✓	Processor package size	(BGA1023)
Compatible memory cards	MMC, SD, SDHC, SDXC	Supported instruction sets	AVX
Graphics		Embedded options available	×
Discrete graphics card model *	Not available	Graphics & IMC lithography	32 nm
On-board graphics card *	<b>✓</b>	Intel Virtualization Technology for Directed I/O (VT-d)	×
Discrete graphics card * On-board graphics card family	X Intel® HD Graphics	Intel Identity Protection Technology version	1.00
On-board graphics card model *	Intel® HD Graphics 3000	Intel Virtualization Technology (VT-x)	<b>✓</b>
On-board graphics card base frequency	650 MHz	Intel Dual Display Capable Technology	✓
On-board graphics card dynamic frequency (max)	1200 MHz	Intel FDI Technology	<b>✓</b>
On-board graphics card ID	0x116	Intel Rapid Storage Technology	×
Audio		Intel Fast Memory Access	<b>✓</b>
Audio system	High Definition Audio	Processor ARK ID	52224
Number of built-in speakers	2	Conflict-Free processor	×
Speaker power	1.5 W	Integrated 4G WiMAX	<b>✓</b>
Built-in microphone	1	Battery	
Network		•	Likhima Isa (Li Isa)
		Battery technology  Number of battery cells	Lithium-Ion (Li-Ion) 6
Wi-Fi	• 002 111, 002 11, W/ F' A (002 11, )	Battery life (max)	7 h
Wi-Fi standards	802.11b, 802.11g, Wi-Fi 4 (802.11n)		7.1
Ethernet LAN	<b>✓</b>	Power	
Bluetooth	20.116	DC-in jack	<b>✓</b>
Bluetooth version	3.0+HS 10/100/1000Base-T(X)	Security	
Cabling technology	10/100/1000base-1(X)	Cable lock slot	✓
Ports & interfaces		Cable lock slot type	IBM
USB 2.0 ports quantity *	3	Fingerprint reader	✓
eSATA/USB 2.0 ports quantity	1		
Ethernet LAN (RJ-45) ports	1	Weight & dimensions	
	1	Weight & dimensions  Width	344 mm
DisplayPorts quantity	1	Width	344 mm 233 mm
DisplayPorts quantity DVI port	1 ×	Width Depth	344 mm 233 mm 3.2 cm
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity	1 <b>x</b> 1	Width	233 mm
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs	1 X 1 1	Width Depth Height (front)	233 mm 3.2 cm
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port	1	Width Depth Height (front) Height (rear) Weight *	233 mm 3.2 cm 3.6 cm
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port Microphone in	1 X 1 1	Width Depth Height (front) Height (rear) Weight * Other features	233 mm 3.2 cm 3.6 cm 2.33 kg
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port Microphone in Docking connector	1	Width Depth Height (front) Height (rear) Weight * Other features Infrared data port	233 mm 3.2 cm 3.6 cm 2.33 kg
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port Microphone in Docking connector ExpressCard slot	1	Width Depth Height (front) Height (rear) Weight * Other features Infrared data port Graphics card family	233 mm 3.2 cm 3.6 cm 2.33 kg
DisplayPorts quantity DVI port VGA (D-Sub) ports quantity Headphone outputs S/PDIF out port Microphone in Docking connector	1	Width Depth Height (front) Height (rear) Weight * Other features Infrared data port	233 mm 3.2 cm 3.6 cm 2.33 kg

