Lenovo

Lenovo ThinkPad W540 Intel® Core™ i7 i7-4700MQ Estación de trabajo móvil 39.6 cm (15.6") Full HD 8 GB DDR3L-SDRAM 500 GB Unidad de disco duro NVIDIA® Quadro® K1100M Windows 7 Professional Negro

Marca : Lenovo

Familia de productos: ThinkPad

Código del producto: 20BGA03BLM

Nombre del producto : W540

Intel Core i7-4700MQ (2.4 GHz), 8GB DDR3L SDRAM, 500GB HDD, 15.6" FHD (1920x1080), NVIDIA Quadro K1100M 2GB, Gigabit Ethernet, WLAN 802.11 ac/a/b/g/n, Bluetooth 4.0, DVD±RW, 4-in-1 CR, Windows 7 Professional 64-bit/Windows 8.1 Pro
Lenovo ThinkPad W540. Tipo de producto: Estación de trabajo móvil, Factor de forma: Concha. Familia de procesador: Intel® Core™ i7, Modelo del procesador: i7-4700MQ, Frecuencia del procesador: 2.4 GHz. Diagonal de la pantalla: 39.6 cm (15.6"), Tipo HD: Full HD, Resolución de la pantalla: 1920 x 1080 Pixeles. Memoria interna: 8 GB, Tipo de memoria interna: DDR3L-SDRAM. Capacidad total de almacenaje: 500 GB, Unidad de almacenamiento: Unidad de disco duro, Tipo de unidad óptica: DVD±RW. Sistema operativo instalado: Windows 7 Professional. Color del producto: Negro

Design

Product type *	Mobile workstation
Product colour *	Black
Form factor *	Clamshell
Market positioning	High performance

Display

Display diagonal *	39.6 cm (15.6")
Display resolution *	1920 x 1080 pixels
Touchscreen *	✗
HD type	Full HD
LED backlight	✔
Native aspect ratio	16:9
Display brightness	220 cd/m²

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i7
Processor generation	4th gen Intel® Core™ i7
Processor model *	i7-4700MQ
Processor cores	4
Processor threads	8
Processor boost frequency	3.4 GHz
Processor frequency *	2.4 GHz
Processor cache	6 MB
Processor cache type	Smart Cache
Processor socket	PGA946
Processor lithography	22 nm
Processor operating modes	64-bit
Processor series	Intel Core i7-4700 Mobile series
Processor codename	Haswell
Bus type	DMI2
FSB Parity	✗
Stepping	C0
Thermal Design Power (TDP)	47 W
Tjunction	100 °C

Keyboard

Pointing device	ThinkPad UltraNav
Numeric keypad *	✔
Keyboard backlit	✔
Spill-resistant keyboard	✔
Full-size keyboard	✔
Windows keys	✔

Software

Operating system architecture	64-bit
Recovery operating system	Windows 8.1 Pro
Operating system installed *	Windows 7 Professional

Processor special features

Intel® Wireless Display (Intel® WiDi)	✔
Intel® My WiFi Technology (Intel® MWT)	✔
Intel Smart Connect Technology	✗
Intel® Anti-Theft Technology (Intel® AT)	✔
Intel® Rapid Start Technology	✗
Intel® Smart Response Technology	✗
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Turbo Boost Technology	2.0
Intel® Matrix Storage Technology (Intel® MST)	✗
Intel® High Definition Audio (Intel® HD Audio)	✗
Intel® Active Management Technology (Intel® AMT)	✗
Enhanced Intel SpeedStep Technology	✔
Intel® Clear Video HD Technology (Intel® CVT HD)	✔

Processor

Maximum number of PCI Express lanes	16
PCI Express slots version	3.0
PCI Express configurations	1x16, 2x8, 1x8+2x4
ECC supported by processor	✘

Memory

Internal memory *	8 GB
Internal memory type	DDR3L-SDRAM
Memory clock speed	1600 MHz
Memory slots	4x SO-DIMM
Maximum internal memory *	32 GB

Storage

Total storage capacity *	500 GB
Storage media *	HDD
Number of HDDs installed	1
HDD capacity	500 GB
HDD interface	SATA
HDD speed	7200 RPM
HDD size	2.5"
Optical drive type *	DVD±RW
Card reader integrated	✔
Compatible memory cards	MMC, SD, SDHC, SDXC

Graphics

Discrete graphics card model *	NVIDIA® Quadro® K1100M
Discrete graphics card memory	2 GB
Discrete graphics memory type	GDDR5
On-board graphics card *	✔
Discrete graphics card *	✔
On-board graphics card family	Intel® HD Graphics
On-board graphics card model *	Intel® HD Graphics 4600
On-board graphics card base frequency	400 MHz
On-board graphics card dynamic frequency (max)	1150 MHz
Maximum on-board graphics card memory	1.74 GB
On-board graphics card DirectX version	11.1
On-board graphics card ID	0x416
Number of discrete graphics cards supported	1
Number of discrete graphics cards installed	1

Audio

Audio system	Dolby Home Theater v4
Number of built-in speakers	2
Built-in microphone	✔

Camera

Front camera	✔
Front camera resolution	1280 x 720 pixels

Network

Wi-Fi	✔
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac), 802.11b, 802.11g, Wi-Fi 4 (802.11n)
Ethernet LAN	✔
Ethernet LAN data rates	10,100,1000 Mbit/s
Bluetooth	✔
Bluetooth version	4.0

Processor special features

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® Secure Key	✔
Intel TSX-NI	✘
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✘
Intel 64	✔
Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	37.5 x 32 x 1.6 mm
Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Processor code	SR15H
CPU configuration (max)	1
Embedded options available	✘
Intel Virtualization Technology for Directed I/O (VT-d)	✘
Intel Identity Protection Technology version	1.00
Intel Secure Key Technology version	1.00
Intel TSX-NI version	0.00
Intel Virtualization Technology (VT-x)	✔
Intel Dual Display Capable Technology	✘
Intel FDI Technology	✔
Intel Rapid Storage Technology	✘
Intel Fast Memory Access	✘
Processor ARK ID	75117
Conflict-Free processor	✔

Battery

Battery technology	Lithium-Ion (Li-Ion)
Number of battery cells	9
Battery life (max)	6 h

Power

DC-in jack	✔

Security

Cable lock slot	✔
Cable lock slot type	Kensington
Fingerprint reader	✔

Weight & dimensions

Width	376 mm
Depth	249 mm
Height	28 mm
Weight *	2.47 kg

Ports & interfaces

USB 2.0 ports quantity *	2
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
Ethernet LAN (RJ-45) ports	1
DVI port	✘
VGA (D-Sub) ports quantity	1
Thunderbolt ports quantity	1
S/PDIF out port	✘
Microphone in	✘
Combo headphone/mic port	✔
Docking connector	✘
ExpressCard slot	✔
CardBus PCMCIA slot type	✘
SmartCard slot	✘

Packaging content

AC adapter included *	✔
Manual	✔
Power cord included	✔

Other features

Maximum internal memory (64-bit)	32 GB
Intel segment tagging	Professional