Lenovo

Lenovo ThinkPad X240 Intel® Core™ i7 i7-4600U Laptop 31,8 cm (12.5") Touchscreen 8 GB DDR3-SDRAM 128 GB SSD Windows 8 Pro Black

Brand : Lenovo **Product family:** ThinkPad **Product code:** 20AL0011AT

Product name : X240

Intel Core i7-4600U (2.1 GHz), 8GB RAM, 128GB SSD, 12.5" HD (1366x768) MultiTouch, Intel HD Graphics 4400, 802.11ac/a/b/g/n, Bluetooth 4.0, Windows 8 Pro 64
Lenovo ThinkPad X240. Product type: Laptop, Form factor: Clamshell. Processor type: Intel® Core™ i7, Processor: i7-4600U, Processor frequency: 2,1 GHz. Display diagonal: 31,8 cm (12.5"), Display resolution: 1366 x 768 pixels, Touchscreen. Internal memory: 8 GB, Internal memory type: DDR3-SDRAM. Total storage capacity: 128 GB, Storage media: SSD. Mobile network generation: 3G. Operating system software: Windows 8 Pro. Product colour: Black

Design

Product type *	Laptop
Product colour *	Black
Form factor *	Clamshell
Housing material	Plastic

Display

Touch screen type	Capacitive
Display diagonal *	31,8 cm (12.5")
Display resolution *	1366 x 768 pixels
Touchscreen *	✔
HD type	Not supported
Touch technology	Multi-touch
Panel type	IPS
LED backlight	✔
Native aspect ratio	16:9
Display brightness	300 cd/m²
Dual-screen	✘
Contrast ratio (typical)	700:1

Processor

Processor manufacturer *	Intel
Processor type *	Intel® Core™ i7
Processor generation	4th gen Intel® Core™ i7
Processor *	i7-4600U
Processor number of cores	2
Processor threads	4
Processor boost frequency	3,3 GHz
Processor frequency *	2,1 GHz
System bus data transfer rate	5 GT/s
Processor cache	4 MB
Processor cache type	Smart Cache
Processor socket	BGA 1168
Processor lithography	22 nm
Processor operating modes	64-bit
Processor series	Intel Core i7-4600 Mobile series
Processor codename	Haswell
Bus type	DMI2
FSB Parity	✘

Keyboard

Numeric keypad *	✘
Spill-resistant keyboard	✔
Windows keys	✔

Software

Operating system architecture	64-bit
Operating system software *	Windows 8 Pro

Processor special features

Intel Wireless Display (WiDi) Technology	✔
Intel My WiFi Technology	✘
Intel Smart Connect Technology	✔
Intel Anti-Theft Technology	✔
Intel® Smart Response Technology	✔
Intel Identity Protection Technology	✔
Intel Hyper-Threading Technology	✔
Intel Turbo Boost Technology	2.0
Intel® Small Business Advantage (Intel® SBA)	✔
Intel Matrix Storage Technology	✘
Intel HD Audio Technology	✔
Enhanced Intel SpeedStep Technology	✔
Intel Clear Video HD Technology	✔
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 Trusted Execution Technology	✔
Intel Enhanced Halt State	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel Demand Based Switching	✘

Processor

Stepping	D0
Thermal Design Power (TDP)	15 W
Tjunction	100 °C
Maximum number of PCI Express lanes	12
PCI Express slots version	2.0
PCI Express configurations	4x1, 2x4
ECC supported by processor	✗

Memory

Internal memory *	8 GB
Internal memory type	DDR3-SDRAM
Memory speed	1600 MHz
Memory form factor	SO-DIMM
Memory layout (slots x size)	1 x 8 GB
Memory slots	1x SO-DIMM
Maximum memory *	8 GB

Storage

Total storage capacity *	128 GB
Storage media *	SSD
Number of SSDs installed	1
Solid-state drive capacity	128 GB
Solid-state drive interfaces	SATA II
Optical drives *	✗
Card reader integrated	✔
Compatible memory cards	MMC, SD, SDHC, SDXC

Graphics

Discrete graphics card model *	Not available
On-board graphics card *	✔
Discrete graphics card *	✗
On-board graphics card family	Intel® HD Graphics
On-board graphics card model *	Intel® HD Graphics 4400
On-board graphics card base frequency	200 MHz
On-board graphics card dynamic frequency (max)	1100 MHz
Maximum on-board graphics card memory	1,74 GB
On-board graphics card DirectX version	11.2/12
On-board graphics card OpenGL version	4.3
On-board graphics card ID	0xA16

Audio

Audio system	Dolby Advanced Audio v2
Number of built-in speakers	2
Speaker power	3 W
Built-in microphone	✔

Camera

Front camera	✔
Front camera resolution	1280 x 720 pixels

Network

Mobile network generation	3G
3G standards	HSPA+
Wi-Fi	✔
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac), 802.11b, 802.11g, Wi-Fi 4 (802.11n)
Mobile network connection *	✔
Ethernet LAN connection	✔

Processor special features

Intel® Secure Key	✔
Intel TSX-NI	✗
Intel Stable Image Platform Program (SIPP)	✔
Intel Clear Video Technology for MID	✗
Intel 64	✔
Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	40 x 24 x 1.5 mm
Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Processor code	SR1EA
CPU configuration (max)	1
Embedded options available	✗
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Smart Connect Technology version	1,00
Intel Identity Protection Technology version	1,00
Intel Smart Response Technology version	1,00
Intel Stable Image Platform Program (SIPP) version	1,00
Intel Secure Key Technology version	1,00
Intel Small Business Advantage (SBA) version	1,00
Intel ME Firmware Version	9.5
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	76616
Conflict-Free processor	✔

Battery

Number of battery cells	3
Battery capacity *	23,5 Wh
Battery life (max)	8,7 h

Power

AC adapter power	45 W
AC adapter frequency	50 - 60 Hz
AC adapter input voltage	100 - 240 V
DC-in jack	✔

Security

Cable lock slot	✗
Fingerprint reader	✔
Trusted Platform Module (TPM)	✔

Certificates

Compliance certificates	RoHS

Sustainability

Sustainability certificates	EPEAT Gold, ENERGY STAR

Weight & dimensions

Width	305,5 mm

Network

Ethernet LAN data rates	10,100,1000 Mbit/s
Bluetooth	✔
Bluetooth version	4.0

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
Ethernet LAN (RJ-45) ports	1
Mini DisplayPorts quantity	1
DVI port	✘
VGA (D-Sub) ports quantity	1
Headphone outputs	1
S/PDIF out port	✘
Microphone in	✔
Combo headphone/mic port	✔
Docking connector	✔
ExpressCard slot	✘
CardBus PCMCIA slot type	✘
SmartCard slot	✘
Number of SATA III connectors	4
USB Sleep-and-Charge	✔
USB Sleep-and-Charge ports	1

Weight & dimensions

Depth	208,5 mm
Height	21,5 mm
Weight *	1,49 kg

Packaging content

AC adapter included *	✔
Manual	✔
Quick start guide	✔
Power cord included	✔

Other features

LightScribe	✘

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