ThinkPad E450 Platform Specifications

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor							Multicard Reader 4-in-1 reader (MMC, SD, SDHC, SDXC)		
	Processor Number # of Cores # of Threads Base Frequency Max Turbo Frequency Cache Memory speed Processor Graphics						Ports	Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector		
	i3-4005U 2	4	1.7 GHz	- 3M	opeea	HD4400	Monitor cable	None	LIIIA COTTITECTOI	
	i3-5005U 2	4	2.0 GHz	- 3M		HD5500	Camera	Some: 0.3-megapixel, fixed focus		
	i5-5200U 2	4	2.2 GHz	2.7 GHz 3M	В	HD5500	Aalia aanaant	Some: HD720p resolution, fixed focus	Dallar ® Advanced Avdia TM v.4 /	
	i7-5500U 2	4	2.4 GHz	3.0 GHz 4M	В	HD5500	Audio support	HD Audio, Conexant® CX20751 codec stereo speakers. 2W x 2 / dual array m	, Dolby® Advanced Audio™ v4 / nicrophone, combo audio / microphone jack	
Graphics	Intel HD Graphics in processor only, or AMD Radeon R5 M240 Graphics, 1GB DDR3 memory, AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, digital monitor support via HDMI™ (supporting HDCP to output protected content);						Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None		
	supports dual independent display Max resolution: 1920x1080 (HDMI)@60Hz						Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole TPM: Trusted Platform Module, TCG 1.2-compliant Soft: Software TPM enabled		
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						vPro Fingerprint reade NFC	None eader Some: Fingerprint reader on the keyboard bezel, swipe sensor None		
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio Some: supports 10-finger gesture					•	Battery type Battery life AC adapter	Li-lon 6-cell (47Wh) 6-cell (47Wh): up to 9.0 hr Some: 45-watt AC adapter (Integrated Graphics) Some: 65-watt AC adapter (Discrete Graphics)		
Multi-touch							Preload	Some: No operating system	Some: Windows 8.1 64-bit	
Storage Optical M.2 SSD	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory None None Intel WGl218V Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One of the following, configurable by model: Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card							Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions)	Some: Windows 8.1 Pro 64-bit Lenovo Solution Center Lenovo SHAREit Lenovo Companion	
Ethernet							_			
Bluetooth™									 Norton Studio 	
WLAN						M.2 Card			purchase a product key to activate Norton Internet Security (30 days of virus definitions)	
	 BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card 							Some: Windows 7 Professional preinstalled through downgrade	Some: Windows 10 Pro 64 • Lenovo Solution Center	
WWAN		None						rights in Windows 10 Pro 64 • L	 Lenovo SHAREit 	
SIM card		None					_	 Lenovo Solution Center Lenovo SHAREit ThinkVantage Product Recovery Rescue and RecoveryTM Microsoft Office preloaded; purchase a product key to a McAfee LiveSafe 		
Smart Card Read ExpressCard	ad None None								purchase a product key to activate	
Dimensions Weight	None Touch(WxDxH): 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm 6-cell None Touch: from 4.00 lb (1.81kg) Graphite Black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								(30 days of virus definitions)	
Case color Case material							Limited warranty	1-year - depot repair service / service upgrades available		
- aso material							Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		
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Model	20DC00C8++				
Product	ThinkPad E450				
Region	EMEA				
Machine Type	20DC				
TopSeller	TopSeller				
Processor	Core i3-5005U (2C, 2.0GHz, 3MB)				
vPro	No				
Graphics	Integrated Intel HD Graphics 5500				
Memory	4GBx1				
Display	14" HD (1366x768)				
Multi-touch	None				
Storage	500GB 7200rpm				
Optical	None				
WLAN + Bluetooth	Intel 3160 ac, 1x1 + BT4.0				
WWAN	None				
SIM Card	None				
Color	Black				
Case Material	PC/ABS				
Camera	720p				
Keyboard	Non-backlit				
Fingerprint Reader	Fingerprint Reader				
NFC	None				
TPM	dTPM 1.2				
Battery	6-cell (47Wh)				
Power Adapter	45W				
Operating System	Windows 10 Pro 64				
Warranty	1-year, Depot				
Global	No				
Ann Date (mm/yy)	12/15				













