

# ThinkPad E450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		None	
	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400			
	i3-5005U	2	4	2.0 GHz	-	3MB		HD5500			
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500			
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB	HD5500					
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); supports dual independent display Max resolution: 1920x1080 (HDMI) @60Hz								Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None	
Chipset	Intel SoC (System on Chip) platform 16GB max <sup>7</sup> / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole <i>TPM</i> : Trusted Platform Module, TCG 1.2-compliant <i>Soft</i> : Software TPM enabled	
Memory									vPro Fingerprint reader NFC	None <i>Some</i> : 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								Battery type Battery life AC adapter	Li-Ion 6-cell (47Wh) 6-cell (47Wh): up to 9.0 hr <i>Some</i> : 45-watt AC adapter (Integrated Graphics) <i>Some</i> : 65-watt AC adapter (Discrete Graphics)	
Multi-touch	<i>Some</i> : supports 10-finger gesture								Preload	<i>Some</i> : No operating system <i>Some</i> : Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • 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)  <i>Some</i> : Windows 7 Professional preinstalled through downgrade rights in Windows 10 Pro 64 • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™	
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some</i> : Hybrid drive with 8GB NAND flash memory									<i>Some</i> : Windows 8.1 64-bit <i>Some</i> : Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • Evernote • Maxthon Cloud Browser • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)	
Optical M.2 SSD	None None										
Ethernet Bluetooth™	Intel WGI218V Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
WLAN	<i>One of the following, configurable by model:</i> • 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 • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card										
WWAN	None										
SIM card	None										
Smart Card Read ExpressCard	None None										
Dimensions	<i>None Touch(WxDxH)</i> : 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm										
Weight	<i>6-cell None Touch</i> : from 4.00 lb (1.81kg)										
Case color	Graphite Black										
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										
Limited warranty									1-year - depot repair service / service upgrades available		
Environment									EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		

Model	20DC009Bxx
Product	ThinkPad E450
Region	EAST
Machine Type	20DC
TopSeller	TopSeller
Processor	Core i3-4005U (2C, 1.7GHz, 3MB)
vPro	No
Graphics	Integrated Intel HD Graphics 4400
Memory	4GBx1
Display	14" HD (1366x768)
Multi-touch	None
Storage	500GB (8GB) SSHD 5400rpm
Optical	None
WLAN + Bluetooth	Intel 7265 ac, 2x2 + 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 8.1 64-bit
Warranty	1-year, Depot
Global	No
Ann Date (mm/yy)	03/15



