

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector Monitor cable None Camera Some: 0.3-megapixel, fixed focus Some: HD720p resolution, fixed focus Audio support HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack		
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics			
	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™ Security Security chip vPro Fingerprint reader NFC		
Chipset	Intel SoC (System on Chip) platform										
Memory	16GB max* / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										
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										
Multi-touch	Some: supports 10-finger gesture										
Storage	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								Preload Some: No operating system 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)		
Optical M.2 SSD	None None										
Ethernet	Intel WGI218V Gigabit Ethernet Connection										
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
WLAN	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 • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card										
WWAN	None								Some: Windows 8.1 64-bit Some: 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)		
SIM card	None										
Smart Card Read ExpressCard	None None										
Dimensions	None Touch(WxDxH): 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm										
Weight	6-cell None Touch: from 4.00 lb (1.81kg)										
Case color	Graphite Black								Some: Windows 10 Pro 64 • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • Microsoft Office preloaded; purchase a product key to activate • McAfee LiveSafe (30 days of virus definitions)		
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		20DC0084XX
Product		ThinkPad E450
Region		EAST
Machine Type		20DC
TopSeller		TopSeller
Processor		Core i7-5500U (2C, 2.4 / 3.0GHz, 4MB)
vPro		No
Graphics		AMD Radeon R7 M260 2GB
Memory		4GBx1
Display		14" FHD (1920x1080)
Multi-touch		None
Storage		1TB 5400rpm
Optical		None
WLAN + Bluetooth		Intel 7265 ac, 2x2 + BT4.0
WWAN		None
SIM Card		None
Color		Black
Case Material		Aluminum
Camera		720p
Keyboard		Non-backlit
Fingerprint Reader		Fingerprint Reader
NFC		None
TPM		None
Battery		6-cell (47Wh)
Power Adapter		65W
Operating System		Windows 8.1 DG Windows 7 Pro 64
Warranty		1-year, Depot
Global		No
Ann Date (mm/yy)		01/15



