Lenovo V520S-08IKL SFF Platform Specifications

Processor					
Intel® Celeron®, Intel Pentium®, or 6/7th Generation Intel Core™ i3 / i5 / i7 Processor					
Processor	Cores / Threads	Frequency Base/Max(GHz)	Cache	Memory Support (Up to)	Integrated Graphics
Celeron G3930	2 / 2	2.9G	2 MB	DDR4-2133	HD 610
Pentium G4400	2 / 2	3.3G	3 MB	DDR4-2133	HD 510
Pentium G4560	2 / 4	3.5G	3 MB	DDR4-2400	HD 610
Core i3-6100	2 / 4	3.7G	3 MB	DDR4-2133	HD 530
Core i5-6400	4 / 4	2.7G / 3.3G	6 MB	DDR4-2133	HD 530
Core i3-7100	2 / 4	3.9G	3 MB	DDR4-2400	HD 630
Core i5-7400	4 / 4	3.0G / 3.5G	6 MB	DDR4-2400	HD 630
Core i5-7500	4 / 4	3.4G / 3.8G	6 MB	DDR4-2400	HD 630
Core i7-7700	4 / 8	3.6G / 4.2G	8 MB	DDR4-2400	HD 630

Memory
32GB max, UDIMM, DDR4-2400*, two 288-pin DIMM sockets, non-ECC, dual-channel capable
* System automatically clocks down for the processors with lower memory controller

Storage
Some: Hard Drive / SATA 6.0Gb/s, 3.5", 5400 rpm or 7200 rpm
Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s, M.2
Some: Intel Optane™ Memory Ready (models with 7th gen Core processor), M.2

Optical
Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
Some: DVD Burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm)

Onboard SATA
Three onboard SATA 6.0Gb/s connectors (for HDD/SSD and ODD)

Media reader
Optional 7-in-1 media reader

Graphics
Intel HD Graphics 510/530/610/630 in processor, uses main memory, DirectX® 12, one VGA, one DisplayPort™, one HDMI, supports three independent displays, works along with discrete graphics to support more displays;
Max resolution: 4096x2304 (DP)@60Hz; 4096x2160 (HDMI)@24Hz; 1920x1080 (VGA)@60Hz
Some: **NVIDIA Geforce® GT 730**, DirectX 12, **1GB**, PCIe 2.0 x8 adapter, one VGA, one HDMI, 35 watts;
Max resolution: 3840x2160 (HDMI)@30Hz; 2048x1536 (VGA)@75Hz
Some: **NVIDIA Geforce GT 730**, DirectX 12, **2GB**, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts;
Max resolution: 3840x2160 (DisplayPort)@60Hz

Monitor Cable
None

Chipset
Intel B250 Chipset

Front ports
Four USB 3.0, microphone (3.5mm), headphone (3.5mm)

Rear ports
Two USB 3.0, two USB 2.0, one serial (9-pin), optional parallel (25-pin), one ethernet (RJ-45), one VGA, one DisplayPort, one HDMI, additional VGA, DisplayPort, or HDMI on optional graphic card on some models

Rear audio ports
Line-in (3.5mm), line-out (3.5mm), microphone (3.5mm)

Audio support
High Definition (HD) Audio, Realtek® ALC662, optional internal speaker (1.5 watt)

WLAN[13]
Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.1 combo adapter, 1x1

Bluetooth™
Some: Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter

Ethernet
One gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®

Modem
None

Manageability
None

Security chip
Firmware TPM 2.0 (fTPM)

Security features
● One lock to secure both cover and entire system to fixed object:
  -Padlock loop (in rear for opt padlock)
  -Security slot (in rear for optional Kensington® MicroSaver® cable)
● Power-on password
● Administrator password
● Hard disk password
● Boot sequence control
● Boot without keyboard and mouse
● USB port disablement

Keyboard
Some: Lenovo Calliope Keyboard (USB connector), black

Mouse
Some: Lenovo Calliope Mouse (USB connector), black

Mechanical
● SFF (8.4L), black color, metal case
● 11.4" W X 13.6" D X 3.5" H
● 290.5mm W X 343.5mm D X 89mm H
● Approx. 10.5 lb (4.75 kg), weight may vary by configuration
Bay 1: Slim external ODD bay
Bay 2: 3.5", 1" high, internal, HDD/SSD (optional bay, bay comes with disk)
Bay 3: 2.5", internal, HDD/SSD (optional bay, bay comes with disk)
Slot 1: Low Profile, PCIe 3.0 x16
Slot 2: Low Profile, PCIe 3.0 x1
M.2 card slots: Two M.2 (one for WLAN, one for SSD/Optane)

Floor Stand
None

Power supply
180 watts, autosensing, 85% PSU

Limited warranty[3]
Some: **1-year** or **3-year**, **depot service** / service upgrades available
Some: **1-year** or **3-year**, **limited onsite service** / service upgrades available

Preload
Preloaded operating system
Some: Windows 10 Pro 64-bit
Some: Windows 10 Home 64-bit
Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (not available with 7th Gen Intel processor)
Preloaded applications (only some listed)
● Microsoft Office preloaded; purchase a product key to activate
● Lenovo User Guide
- Only for Window 10
● Lenovo Companion
● Lenovo ID
- Only for Window 7
● Lenovo Solution Center
● McAfee® LiveSafe™ (30-day trial)
● Adobe® Reader®

Environment
ENERGY STAR® 6.1; EPEAT™ Gold rating (North America); ErP Lot 3; GREENGUARD®; RoHS-compliant

Accessories
For compatible accessories, please go to **http://www.lenovoquickpick.com/**