

PERFORMANCE

Processor

Processor Family

Intel® Celeron®, Intel Pentium® Gold, or 8th / 9th Generation Intel Core™ i3 / i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G4930	2	2	3.2GHz	-	2MB	DDR4-2400	Intel UHD Graphics 610
Pentium Gold G5420	2	4	3.8GHz	-	4MB	DDR4-2400	Intel UHD Graphics 610
Core i3-8100	4	4	3.6GHz	-	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9100	4	4	3.6GHz	4.2GHz	6MB	DDR4-2400	Intel UHD Graphics 630
Core i3-9100F	4	4	3.6GHz	4.2GHz	6MB	DDR4-2400	-
Core i5-8400	6	6	2.8GHz	4.0GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9400	6	6	2.9GHz	4.1GHz	9MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9400F	6	6	2.9GHz	4.1GHz	9MB	DDR4-2666	-
Core i7-8700	6	12	3.2GHz	4.6GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-9700	8	8	3.0GHz	4.7GHz	12MB	DDR4-2666	Intel UHD Graphics 630

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- FreeDOS
- No operating system

Graphics

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD Graphics 630	Integrated	Shared	1x HDMI® 1.4, 1x VGA	1920x1080@30Hz(HDMI), 1920x1200@60Hz(VGA)	DirectX® 12
Intel UHD Graphics 610	Integrated	Shared	1x HDMI 1.4, 1x VGA	1920x1080@30Hz(HDMI), 1920x1080@60Hz(VGA)	DirectX 12
NVIDIA® GeForce® GT 730	Discrete	2GB GDDR5	1x HDMI 1.4, 1x VGA	3840x2160@30Hz(HDMI), 2048x1536@75Hz(VGA)	DirectX 12

Notes:

- Integrated graphics information and onboard video ports information are not applicable for all models without integrated graphics (for the details, please refer to processor section)

Monitor Support

Supports up to 2 independent displays via onboard ports (VGA and HDMI), more displays support via discrete graphics

Chipset

Intel B365 chipset

Memory

Memory Type

DDR4-2666

Notes:

- Installed memory is actually 2666MHz, but may run at 2400MHz or 2666MHz depending on the memory support capability of processor

Memory Slots

Two DDR4 UDIMM slots, dual-channel capable

Memory Protection

Non-ECC

Max Memory

Up to 16GB DDR4-2666

Notes:

- The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

Storage

Storage Support

Up to 2 drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 512GB
- Optional Intel Optane™ Memory or Optane Memory Integrated with SSD, M.2

RAID

Not support

Storage Type

Disk Type	Interface	RPM	Security
M.2 2242 SSD	PCIe NVMe	-	-
Intel Optane Memory with Solid State Storage, M.2 2280	PCIe NVMe, PCIe 3.0 x4	-	-
Intel Optane Memory M10	PCIe NVMe, PCIe 3.0 x2	-	-
3.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2280 SSD	PCIe NVMe	-	-

Removable Storage

Optical

DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)

Card Reader

7-in-1 card reader (SD, SDHC, SDXC, MMC, MS, MS-Pro, MMC plus)

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC623 codec

Power Supply

Power	Type	Efficiency	Key Features
180W	Fixed	85%	100V - 240V

DESIGN

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- No keyboard

Mouse

- Lenovo Calliope Mouse (USB connector), black
- No mouse

Mechanical

Buttons

- Power button
- Optical drive eject button(for the models with ODD)

Form Factor

SFF (7.4L)

Dimensions (WxDxH)

100 x 270 x 288.5 mm (3.94 x 10.63 x 11.36 inches)

Weight

4.37 kg (9.64 lbs)

Case Color

Black

Bays

- 1x slim ODD bay
- 1x 3.5" or 2.5" disk bay, HDD / SSD

Expansion Slots

- One PCIe 3.0 x16, full height, half length
- One PCIe 3.0 x1, full height, half length
- Two M.2 slots (one for WLAN, one for SSD)

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, 1x RJ45

WLAN + Bluetooth™

802.11ac 1x1 Wi-Fi + Bluetooth 4.0, M.2 card

Ports

Front Ports

- 4x USB 3.1 Gen 1
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Notes:

- The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;

USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;

USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;

USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

Thunderbolt™ 3: 40 Gbit/s;

FireWire 400: 400 Mbit/s;

FireWire 800: 800 Mbit/s;

Optional Front Ports

1x card reader

Rear Ports

- 4x USB 2.0
- 1x serial (9-pin)
- 1x Ethernet (RJ-45)
- 1x HDMI 1.4
- 1x DisplayPort™
- 1x VGA
- 1x line-out (3.5mm)

Notes:

- For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY

Security

Physical Locks

Kensington® Security Slot

BIOS Security

- Power-on password
- Administrator password
- Hard disk password

SERVICE

Warranty

Base Warranty

- 1-year depot or mail-in service
- 1-year limited onsite service
- 2-year depot service

CERTIFICATIONS

Green Certifications

- ErP Lot 3
- RoHS compliant

