**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>2.</td>
<td>Microphone mute button</td>
</tr>
<tr>
<td>3.</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>4.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>Power button</td>
</tr>
<tr>
<td>7.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>8.</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>9.</td>
<td>Power connector</td>
</tr>
<tr>
<td>10.</td>
<td>Serial *</td>
</tr>
<tr>
<td>11.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>12.</td>
<td>4x USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>

**Notes:**
- Ports with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel Pentium®, or 10th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron G5900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td>-</td>
<td>2MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 610</td>
</tr>
<tr>
<td>Celeron G5905</td>
<td>2</td>
<td>2</td>
<td>3.5GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 610</td>
</tr>
<tr>
<td>Celeron G5920</td>
<td>2</td>
<td>2</td>
<td>3.5GHz</td>
<td>-</td>
<td>2MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 610</td>
</tr>
<tr>
<td>Celeron G5925</td>
<td>2</td>
<td>2</td>
<td>3.6GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 610</td>
</tr>
<tr>
<td>Pentium Gold G6400</td>
<td>2</td>
<td>4</td>
<td>4.0GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 610</td>
</tr>
<tr>
<td>Pentium Gold G6500</td>
<td>2</td>
<td>4</td>
<td>4.1GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Pentium Gold G6600</td>
<td>2</td>
<td>4</td>
<td>4.2GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i3-10100</td>
<td>4</td>
<td>8</td>
<td>3.6GHz</td>
<td>4.3GHz</td>
<td>6MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i3-10300</td>
<td>4</td>
<td>8</td>
<td>3.7GHz</td>
<td>4.4GHz</td>
<td>8MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i3-10320</td>
<td>4</td>
<td>8</td>
<td>3.8GHz</td>
<td>4.6GHz</td>
<td>8MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i5-10400</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.3GHz</td>
<td>12MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i5-10500</td>
<td>6</td>
<td>12</td>
<td>3.1GHz</td>
<td>4.5GHz</td>
<td>12MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i5-10600</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
<td>4.8GHz</td>
<td>12MB</td>
<td>DDR4-2666</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i7-10700</td>
<td>8</td>
<td>16</td>
<td>2.9GHz</td>
<td>4.8GHz</td>
<td>16MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics 630</td>
</tr>
<tr>
<td>Core i9-10900</td>
<td>10</td>
<td>20</td>
<td>2.8GHz</td>
<td>5.2GHz</td>
<td>20MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics 630</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 IoT Enterprise
- Ubuntu Linux
- No operating system

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Connector</th>
<th>Max Resolution</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel UHD graphics 610</td>
<td>Integrated</td>
<td>Shared</td>
<td>1x DP</td>
<td>4096x2304@60Hz(DP)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel UHD graphics 630</td>
<td>Integrated</td>
<td>Shared</td>
<td>1x DP</td>
<td>4096x2304@60Hz(DP)</td>
<td>DirectX 12</td>
</tr>
<tr>
<td>AMD Radeon™ 625</td>
<td>Discrete</td>
<td>2GB GDDR5</td>
<td>1x DP</td>
<td>4096x2304@60Hz(DP)</td>
<td>DirectX 12</td>
</tr>
</tbody>
</table>

Notes:
1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via DisplayPort™

Chipset

Chipset
Intel Q470 chipset
Memory

Memory Type
- DDR4-2666
- DDR4-2933

Memory Slots
Two DDR4 DIMM slots, dual-channel capable

Memory Protection
Non-ECC

Max Memory\(^{\text{ii}}\)
Up to 64GB DDR4-2933

Notes:
1. The max memory is based on the test results with current Lenovo\(^{\text{®}}\) memory offerings. The system may support more memory as the technology develops.

Storage

Storage Support
Up to three drives, 2x 2.5" HDD + 1x M.2 2242/2280 SSD
- 2.5" HDD up to 2TB each
- M.2 SSD up to 1TB
- Optional Intel Optane\(^{\text{™}}\) Memory, M.2

RAID\(^{\text{iii}}\)
RAID 0/1 support for HDDs

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x4</td>
<td>-</td>
<td>Opal</td>
</tr>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Intel Optane Memory M10</td>
<td>PCIe NVMe, PCIe 3.0 x2</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
1. RAID is not preset by default, user can config RAID 0/1 according to the demand

Removable Storage

Optical
- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek\(^{\text{®}}\) ALC233 codec

Speakers
Stereo speakers, 3W x2

Microphone
Dual array microphone

Camera
- 1080p, with ThinkShutter (physical switch on/off)
ThinkCentre M90a

- IR &1080p, with ThinkShutter (physical switch on/off), Windows Hello support
- No camera

**Power Supply**

<table>
<thead>
<tr>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
</tr>
<tr>
<td>150W Adapter</td>
</tr>
<tr>
<td>170W Adapter</td>
</tr>
</tbody>
</table>

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>350 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>-</td>
<td>horizontal: +/- 89°, vertical: +/- 89°</td>
<td>Borderless design, support Low Blue Light Mode, PrivacyGuard</td>
</tr>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>-</td>
<td>horizontal: +/- 89°, vertical: +/- 89°</td>
<td>Borderless design, support Low Blue Light Mode</td>
</tr>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>250 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>-</td>
<td>horizontal: +/- 89°, vertical: +/- 89°</td>
<td>Borderless design, support Low Blue Light Mode</td>
</tr>
</tbody>
</table>

**Touchscreen**
- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

**Notes:**
1. California Electronic Waste Recycling Fee
   - In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product.
   - For more information, go to https://www.calrecycle.ca.gov/Electronics/Consumer
2. PrivacyGuard is only available for MT11JX

**Input Device**

**Keyboard**
- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Calliope Mouse (USB connector), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- No mouse

**Mechanical**

**Buttons**
- Power button
- PrivacyGuard on/off button (only for the models with PrivacyGuard)
- Microphone mute button

**Form Factor**
AIO (23.8 inches)

**Dimensions (WxDxH)**
<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with full function monitor stand, without ODD, with PrivacyGuard, with camera)</td>
<td>541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)</td>
</tr>
<tr>
<td>Models (without stand, with ODD, without PrivacyGuard, with camera)</td>
<td>541 x 57.8 x 340.5 mm (21.3 x 2.3 x 13.4 inches)</td>
</tr>
<tr>
<td>Models (without stand, without ODD, without PrivacyGuard, with camera)</td>
<td>541 x 46 x 340.5 mm (21.3 x 1.8 x 13.4 inches)</td>
</tr>
<tr>
<td>Models (without stand, with ODD, with PrivacyGuard, with camera)</td>
<td>541 x 61.3 x 340.5 mm (21.3” x 2.4” x 13.4 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, without ODD, without PrivacyGuard, with camera)</td>
<td>541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with ODD, without PrivacyGuard, with camera)</td>
<td>541 x 200 x 414.2 to 494.2 mm (21.3 x 7.9 x 16.3 to 19.5 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, without ODD, with PrivacyGuard, with camera)</td>
<td>541 x 49.5 x 340.5 mm (21.3 x 1.9 x 13.4 inches)</td>
</tr>
<tr>
<td>Models (with UltraFlex IV stand, with ODD, without PrivacyGuard, with camera)</td>
<td>Lowest in flat mode: 541 x 312.8 x 227.4 mm (21.3 x 12.3 x 9.0 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)</td>
</tr>
<tr>
<td>Models (with UltraFlex IV stand, without ODD, without PrivacyGuard, with camera)</td>
<td>Lowest in flat mode: 541 x 312.8 x 227.4 mm (21.3 x 12.3 x 9.0 inches) Highest in vertical mode: 541 x 232.7 x 467.7 mm (21.3 x 9.2 x 18.4 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with full function monitor stand, without ODD, without PrivacyGuard, with camera)</td>
<td>7.51 kg (16.6 lbs)</td>
</tr>
<tr>
<td>Models (with UltraFlex IV stand, without ODD, without PrivacyGuard, with camera)</td>
<td>8.26 kg (18.2 lbs)</td>
</tr>
<tr>
<td>Models (with UltraFlex IV stand, without ODD, with PrivacyGuard, with camera)</td>
<td>8.45 kg (18.2 lbs)</td>
</tr>
<tr>
<td>Models (without stand, with ODD, with PrivacyGuard, with camera)</td>
<td>6.45 kg (14.2 lbs)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with ODD, without PrivacyGuard, with camera)</td>
<td>7.84 kg (17.3 lbs)</td>
</tr>
<tr>
<td>Models (without stand, with ODD, without PrivacyGuard, with camera)</td>
<td>5.25 kg (11.6 lbs)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with ODD, with PrivacyGuard, with camera)</td>
<td>8.71 kg (19.2 lbs)</td>
</tr>
<tr>
<td>Models (without stand, without ODD, with PrivacyGuard, with camera)</td>
<td>6.13 kg (13.5 lbs)</td>
</tr>
<tr>
<td>Models (with UltraFlex IV stand, with ODD, without PrivacyGuard, with camera)</td>
<td>8.58 kg (18.9 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

Black

**Bays**

- 1x slim ODD bay
- 2x 2.5” disk bay (2nd 2.5" HDD occupies ODD bay)

**Expansion Slots**

Two M.2 slots (one for WLAN, one for SSD)

**EOU**

Toolless cover and stand assembly / removal

**Stand**

- Full function monitor stand, supports -5° to +30° tilt, up to 80mm lift
- UltraFlex IV stand, supports -5° to +70° tilt, up to 164mm lift (flat mode) / up to 115mm lift (vertical mode)
- No stand

**Mounting**

Supports VESA mount (100mm)
CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel Ethernet Connection I219-LM, 1x RJ45, supports Wake-on-LAN
Optional Ethernet
No optional Ethernet
WLAN + Bluetooth™
- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9560, 802.11ac Dual-Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, Intel vPro technology support, M.2 Card
- No WLAN and Bluetooth

Ports
Rear Ports
- 4x USB 3.2 Gen 1 (one supports Smart Power On)
- 1x Ethernet (RJ-45)
- 1x DisplayPort
Optional Rear Ports
1x serial
Right Ports
- 2x USB 3.2 Gen 2
- 1x USB-C 3.2 Gen 1 (5V/3A charging)
- 1x headphone / microphone combo jack (3.5mm)
Optional Right Ports
1x card reader

Notes:
1. 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.
2. For video ports on discrete graphics, please see graphics section

Monitor Cable
Monitor Cable
- DP to VGA dongle
- DP to dual DP dongle
- DP to DVI-D dongle
- DP to HDMI® 1.4 dongle
- No monitor cable

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified
Physical Locks
Kensington® Security Slot
Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch
Fingerprint Reader
- Touch style fingerprint reader on mouse
- No fingerprint reader

Other Security
- ThinkShutter camera cover
- None

BIOS Security
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement
- Self-healing BIOS

MANAGEABILITY

System Management

System Management
- Intel vPro with Intel AMT 14.0
- None

Notes:
1. Require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection

SERVICE

Warranty

Base Warranty
- 1-year depot service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

ENVIRONMENTAL

Operating Environment

Temperature
- Storage: -20°C (-4°F) to 60°C (140°F)
- Operating: 5°C (41°F) to 35°C (95°F)

Humidity
- Operating: 20% to 80% (non-condensing)

Altitude
- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

Notes:
1. If your computer is stored or transported in temperatures less than 10°C (50°F), allow the computer to rise slowly to an optimal operating temperature before use. This process might take up to two hours. Using the computer in a lower operating temperature might result in irreparable damage to your computer.

CERTIFICATIONS

Green Certifications
Green Certifications[^1]
- EPEAT™ Silver
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified 8.0
- TCO edge
- RoHS compliant

Notes:
1. Energy Star 8.0 and EPEAT are only available for MT 11CD/11CE, TCO 8.0 and TCO Edge are not for the models with PrivacyGuard.

Other Certifications

Other Certifications
- TUV Low Blue Light certified
- TÜV Eye comfort certified
- (Optional) TÜV Ultra Low Noise certified

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)