PERFORMANCE

**Processor**

**Processor Family**

10th Generation Intel® Core™ 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>Core i5-10300H</td>
<td>4</td>
<td>8</td>
<td>2.5GHz</td>
<td>4.5GHz</td>
<td>8MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i7-10750H</td>
<td>6</td>
<td>12</td>
<td>2.6GHz</td>
<td>5.0GHz</td>
<td>12MB</td>
<td>DDR4-2933</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i7-10870H</td>
<td>8</td>
<td>16</td>
<td>2.2GHz</td>
<td>5.0GHz</td>
<td>16MB</td>
<td>DDR4-3200</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i7-10875H</td>
<td>8</td>
<td>16</td>
<td>2.3GHz</td>
<td>5.1GHz</td>
<td>16MB</td>
<td>DDR4-3200</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i9-10980HK</td>
<td>8</td>
<td>16</td>
<td>2.4GHz</td>
<td>5.3GHz</td>
<td>16MB</td>
<td>DDR4-3200</td>
<td>Intel UHD Graphics</td>
</tr>
</tbody>
</table>

**Operating System**

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

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce® GTX 1650 Ti</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA GeForce GTX 1660 Ti Max-Q</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>VR ready, DirectX 12</td>
</tr>
<tr>
<td>NVIDIA GeForce RTX™ 2060 Max-Q</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>VR ready, DirectX 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via USB-C (up to 4096x2304@60Hz)

**Chipset**

Intel HM470 chipset

**Memory**

**Memory Type**

- DDR4-2933
- DDR4-3200

Notes:

- Installed memory is actually 3200MHz but may run at 2933MHz due to processor limitation

**Memory Slots**

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

**Max Memory**

- Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR4-2933 offering
- Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200 offering
- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR4-2933 offering
- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200 offering

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 two drives, 2x M.2 2280 SSD
• M.2 2280 SSD up to 2TB

<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>-</td>
</tr>
</tbody>
</table>

**Removable Storage**

Optical
Not Support

Card Reader
4-in-1 card reader (SD, SDHC, SDXC, MMC)

**Multi-Media**

Audio Chip
High Definition (HD) Audio, ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos speaker system for gaming

Microphone
Dual array microphone

Camera
720p, with privacy shutter, fixed focus

**Battery**

Battery
Integrated Li-Polymer 71Wh battery, supports Rapid Charge Boost (get 2 hours of runtime with a 15-minute charge)

Max Battery Life
MobileMark® 2018: 5.8 hr

Notes:

• All battery life claims are approximate maximum and based on results using the MobileMark 2014 and/or MobileMark 2018 battery-life benchmark tests. Actual battery life will vary and depends on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

**Power Adapter**

• 170W slim tip AC adapter
• 230W slim tip AC adapter

**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>15.6&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>-</td>
<td>100% sRGB</td>
<td>-</td>
<td>Refresh rate 144Hz, DC dimmer, Dolby VisionTM</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>-</td>
<td>100% sRGB</td>
<td>-</td>
<td>Refresh rate 60Hz, DC dimmer, Dolby Vision</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>UHD (3840x2160)</td>
<td>None</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>-</td>
<td>100% Adobe® RGB</td>
<td>Refresh rate 60Hz, VESA HDR 400, DC dimmer, Dolby VisionTM</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
• 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

**Touchscreen**
Non-touch

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys, numeric keypad

**Keyboard Backlight**
- RGB LED backlight
- White LED backlight

**Touchpad**
Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP)

**Mechanical**

**Dimensions (WxDxH)**
356 x 250 x 15.9-17.9 mm (14.01 x 9.84 x 0.6-0.7 inches)

**Weight**
1.86 kg (4.1 lbs)

**Case Color**
Slate grey

**Surface Treatment**
Anodizing

**Case Material**
Aluminium (top), Aluminium (bottom)

**System Lighting**
"Y" Logo with white lighting on top cover
RGB lighting on power button

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Not Support

**WLAN + Bluetooth™**
- 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card
- Killer Wi-Fi 6 AX1650, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On)
- 2x USB-C 3.2 Gen 2 / Thunderbolt™ 3 (support data, PD 100w and DP 1.4)
- 1x card reader
- 1x headphone / microphone combo jack (3.5mm)
- 1x power connector

**Notes:**
- Depending on many factors, actual data transfer speed may be lower than theoretical speed

**Monitor Cable**
- 1x Lenovo USB-C 3-in-1 Hub (USB-C to VGA/HDMI®/USB-A)
- Not configured
SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in chipset
Fingerprint Reader
Touch style fingerprint reader on power button
BIOS Security
• Supervisor password
• Hard disk password
Other Security
Camera privacy shutter

SERVICE

Warranty
Base Warranty
• 1-year depot service
• 1-year depot with 2-year system board service
• 2-year (1-yr battery) depot service

CERTIFICATIONS

Green Certifications
• ErP Lot 3
• RoHS