<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Summary Of Change</td>
<td>3</td>
</tr>
<tr>
<td>ThinkBook S</td>
<td>4</td>
</tr>
<tr>
<td>ThinkBook 13s-IWL</td>
<td>4</td>
</tr>
<tr>
<td>ThinkBook 13s-IWL Platform Specifications</td>
<td>5</td>
</tr>
<tr>
<td>ThinkBook 14s-IWL</td>
<td>6</td>
</tr>
<tr>
<td>ThinkBook 14s-IWL Platform Specifications</td>
<td>7</td>
</tr>
<tr>
<td>Legal Information</td>
<td>8</td>
</tr>
</tbody>
</table>
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

July 17, 2019 - Version 545

Additions in this update

► New product(s)
  None

► New model(s)
  None

► Others
  ThinkBook 13s-IWL, ThinkBook 14s-IWL Specifications > Storage - added Intel Optane Memory H10 with SSD, M.2 2280, PCIe NVMe 3.0 x 4

Withdrawals in this update

► Withdrawn product(s)
  None
## ThinkBook 13s-IWL Platform Specifications

### Processor
<table>
<thead>
<tr>
<th>Processor Number</th>
<th># of Cores</th>
<th># of Threads</th>
<th>Base Frequency</th>
<th>Max Turbo Frequency</th>
<th>Cache</th>
<th>Memory Types</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Generation Intel® Core™ i5 / i7 Processor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i5-8265U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>3.9 GHz</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
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<tr>
<td>i7-8565U</td>
<td>4</td>
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<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
</tbody>
</table>

### Graphics
- Intel UHD Graphics 620 in processor only or Intel UHD Graphics 620 in processor and AMD Radeon™ 540X, 2GB GDDR5 memory.
- Supports external digital monitor via HDMI or USB Type-C.
- Supports three independent displays.
- Max resolution: 3840x2160@60Hz (USB Type-C); 3840x2160@30Hz (HDMI).

### Chipset
- Intel SoC (System on Chip) platform

### Memory
- 16GB max / 2400MHz DDR4, one DDR4 SO-DIMM socket
- * System clocks down for processors with lower memory controller

### Display
- Size: 13.3" FHD (1920x1080)
- Resolution: Anti-glare
- Type: IPS
- Brightness: 300 nits
- Aspect Ratio: 16:9
- Contrast Ratio: 800:1
- Viewing Angle: 170°

### Storage
- One of the following, configurable by model:
  - M.2 SSD / SATA 6.0Gb/s
  - M.2 (2242) SSD / PCIe NVMe, PCIe 3.0 x 2
  - M.2 (2280) SSD / PCIe NVMe, PCIe 3.0 x 4
  - Intel Optane™ Memory H10 with SSD, M.2 2280, PCIe NVMe 3.0 x 4

### Optical
- None

### Ethernet
- Gigabit Ethernet connection via optional Lenovo USB-C to Ethernet Adapter

### WLAN
- Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card

### Bluetooth
- Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

### Audio
- HD720p camera, fixed focus, ThinkShutter
- Audio support: HD Audio, Realtek ALC3287 codec, Dolby® Audio™ X3, Skype For Business certified
- Dual array integrated digital microphone, microphone subsystem optimized for voice recognition

### Keyboard
- 6-row, spill-resistant, multimedia Fn keys, optional LED backlight
- Buttonless Mylar surface touchpad, multi-touch

### Security
- Power-on password, hard disk password, supervisor password, FIDO® (Fast Identity Online)
- Security chip: Discrete TPM 2.0, TCG Certified
- Fingerprint reader: Optional: Integrated on Power Button
- Battery: Integrated Li-ion 45Wh battery, supports Rapid Charge (quick charge 30min 50% / 2h 100%) with 65W slim tip AC adapter
- Max battery life: MobileMark® 2014: 11 hr
- AC adapter: 45W or 65W slim tip AC adapter

### Battery
- Integrated Li-ion 45Wh battery, supports Rapid Charge (quick charge 30min 50% / 2h 100%) with 65W slim tip AC adapter

### Preload
- Windows® 10 Home 64 or Windows 10 Pro 64

### Limited warranty
- One of the following, configurable by model:
  - 1-year depot repair service
  - 1-year/2-yr motherboard depot repair service
  - 2-year/1-yr battery depot repair service

### Environment
- ENERGY STAR® 7.0; RoHS-compliant

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*Note: The specifications above may not be available in all regions.*
## Processor

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## Graphics

AMD Radeon™ 540X, 2GB GDDR5 memory; supports external digital monitor via HDMI or USB Type-C; supports three independent displays; Max resolution: 3840x2160@60Hz (USB Type-C); 3840x2160@30Hz (HDMI).

## Chipset

Intel SoC (System on Chip) platform

## Memory

16GB max / 2400MHz DDR4, one DDR4 SO-DIMM socket

## Display

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<tr>
<th>Size</th>
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<th>Surface Type</th>
<th>Brightness</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Viewing Angle</th>
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<tr>
<td>14.0&quot; FHD</td>
<td>1920x1080</td>
<td>Anti-glare</td>
<td>IPS</td>
<td>250 nits</td>
<td>16:9</td>
<td>170°</td>
</tr>
<tr>
<td>14.0&quot; FHD</td>
<td>1920x1080</td>
<td>Anti-glare</td>
<td>TN</td>
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## Storage

One of the following, configurable by model:
- M.2 SSD / SATA 6.0Gb/s
- M.2 (2242) SSD / PCIe NVMe, PCIe 3.0 x 2
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- Intel Optane™ Memory H10 with SSD, M.2 2280, PCIe NVMe 3.0 x 4

## Optical

- None

## Ethernet

Gigabit Ethernet connection via optional Lenovo USB-C to Ethernet Adapter

## WLAN

Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card

## Bluetooth™

Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

## Dimensions

WxDxH: 12.70" x 8.77" x 0.65"; 322.5mm x 222.8mm x 16.5mm

## Weight

3.28 lb / 1.49 kg

## Case color

Mineral Grey

## Case material

Display cover: Aluminum
Bottom: Aluminum

## Media reader

None

## Ports

- Two USB 3.1 Gen 1 (one with Always On), One USB-C 3.1 Gen 2 (with the function of DisplayPort), HDMI 1.4b, headphone / microphone combo jack, AC power adapter jack
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

## Camera

HD720p camera, fixed focus, ThinkShutter

## Audio support

HD Audio, Realtek ALC3287 codec / stereo speakers, 2W x 2, Dolby Audio™ X3, dual array integrated digital microphone, microphone subsystem optimized for voice recognition

## Keyboard

6-row, spill-resistant, multimedia Fn keys, optional LED backlight

## Trackpad

Buttonless Mylar surface touchpad, multi-touch

## Security

Power-on password, hard disk password, supervisor password, FIDO® (Fast Identity Online)

## Security chip

Discrete TPM 2.0, TCG Certified

## Fingerprint reader

Optional: Integrated on Power Button

## Battery

Integrated Li-ion 45Wh battery, supports Rapid Charge (quick charge 30min 50% / 2h 100%)

## Max battery life

MobileMark® 2014: 11 hr

## AC adapter

65W slim tip AC adapter

## Preload

Windows® 10 Home 64 or Windows 10 Pro 64

## Limited warranty

1-year depot repair service

## Environment

ENERGY STAR® 7.0; RoHS-compliant

Note: The specifications above may not be available in all regions.
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Included software: may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

Battery life: Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.