

Lenovo ThinkPad P17 Gen 2

Version: 3.0 | 05/22/2024

| | |
|----------------------|--------------------|
| Product Name | P17 |
| Product Display Name | ThinkPad P17 Gen 2 |
| Information Date | 24-Aug-21 |

SECTION I: SYSTEM OVERVIEW

| | |
|-------------|--|
| Description | The ThinkPad® P17 Gen 2 takes your productivity to the next level with the ultimate in professional power and the largest workspace available in a mobile workstation. |
|-------------|--|

CPU

| | |
|-------------------|--|
| Processor Support | Intel 11th gen Tiger Lake H Series Core i5, i7, i9, and Xeon |
| Socket Type | BGA |

Operating Systems

| | |
|-----------|--|
| Preloaded | Windows 10 Pro 64-bit for Workstations (20H2) Windows 10 Pro 64-bit (20H2) Windows 10 Home 64-bit (20H2) Windows 10 Single Language Home 64-bit (20H2) Ubuntu 64-bit (Version 20.04 LTS, running the 4.15.0-1039-oem kernel) No Operating System Windows 10 China Government Edition |
| Supported | Windows 10 Pro 64-bit for Workstations (20H2) Windows 10 Pro 64-bit (20H2) Windows 10 Home 64-bit (20H2) Windows 10 Single Language Home 64-bit (20H2) Ubuntu 64-bit (Version 20.04 LTS, running the 4.15.0-1039-oem kernel) Red Hat (RHEL) 8.4 No Operating System Windows 10 China Government Edition |

Memory

| | |
|----------------------|--|
| Number of DIMM Slots | 4 DIMM sockets: Top x2; Bot x2 |
| Channels | Single Channel w/ 1DIMM Dual Channel w/ 2DIMMs |
| Type | DDR4 SO-DIMM, ECC / non-ECC |
| ECC Support | Yes |
| Speed | Up to 3200 MHz on Non-ECC Memory Up to 3200 MHz on ECC Memory |
| Max DIMM Size | 32GB |
| Max System Memory | 128GB |
| Min System Memory | 8GB |
| Soldered Memory | None |

Storage

| | |
|--------------------------------------|---|
| Storage Slots | 3x M.2 2280-S3 |
| SATA | None |
| PCIe | Solid State Drive, 3x OPAL2 PCIe-NVMe M.2 2280-S3 – TLC |
| SAS | None |
| Interface | PCIe Gen 4 or Gen 3 |
| Security | OPAL2 for NVMe SSD |
| Optional Hard Disk Drive Controllers | None |

Video

| | |
|---------------------|---|
| Integrated Graphics | For Intel® i5-11500H vPro Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS For Intel® i7-11800H Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS For Intel® i7-11850H vPro Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS For Intel® i9-11950H vPro Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS For Intel® Xeon® W-11855M vPro Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS For Intel® Xeon® W-11955M vPro Processor Graphics Intel® UHD Graphics Utilized via “Hybrid Mode” in BIOS |
| Discrete Graphics | NVIDIA T1200, NVIDIA RTX A2000, NVIDIA RTX A3000, NVIDIA RTX A4000, NVIDIA RTX A5000 |
| Adapter | None |
| Bus Interface | PEG |

Display

| | |
|-------------|-----------|
| Resolutions | FHD / UHD |
|-------------|-----------|

Camera

| | |
|-------------------|--------------------------------|
| Resolution | HD 720p RGB / IR Camera Hybrid |
| Frames per Second | 30 fps |
| Focus | Fixed 50cm |
| Camera Interface | USB 2.0 |
| IR Camera | Yes |

Keyboard

| | |
|-----------------------|--|
| Number of Keys | US : 105 / UK : 106 / JP : 110 |
| Numpad | Yes |
| Size | 100% ISO |
| Function Key Features | Yes |
| Backlit | Yes |
| Keyboard size | Como 2020 Full size KB with NumPad (Top loading) |
| Key stroke | 1.8mm |
| Key pitch | 19.05 mm (Vertical & Horizontal) |
| Keyboard backlight | Optional |
| Keyboard thickness | 4.55mm |

TrackPad / Fingerprint Reader

| | |
|-----------------------------|-------------------------------------|
| TrackPoint Details | COMO TrackPoint module (t5.55mm) |
| Finger Print Reader Model | 8x8 FPR, MoC w/o LED Prometheus 8x8 |
| Multi-Touch | Yes |
| Resolution | 1000 ppi |
| TrackPad/TouchPad thickness | 0.8mm |
| TrackPad/TouchPad type | TouchPad |
| TrackPad size | 99mm x 58.4mm |
| TrackPad material/finish | Mylar surface |

I/O – Ports and Connectors

| | |
|-------------------|---|
| USB | 2x USB-A 3.2 Gen-1 (1x Powered) 1x USB-C |
| Thunderbolt | 2 x Thunderbolt 4 (USB Type-C) |
| HDMI | 1x HDMI (2.1/2.0), DP1.4 |
| Audio Combo Jack | 1x Microphone & Headphone Combo Jack (3.5mm) |
| Media Card Reader | Dedicated Media Card Reader (UHS-II) (MMC,SD,SDHC SDXC) |
| Smart Card Reader | Yes (optional) |
| Power Connector | DC-In |
| Docking Port | Docking Via Thunderbolt 4 / USB-C |
| VirtualLink | None |
| Network adapter | 2.5 Gbps Ethernet (RJ45) |

Power Connector

| | |
|-------|--------------------------------|
| Main | DC-In |
| USB-C | 2x Thunderbolt 4 (USB-C/DP/PD) |

Ethernet

| | |
|------------|---|
| Vendor | Intel |
| Count | x1 |
| EEPROM | BIOS/MEFW SPI ROM TBT FW SPI ROM VBIOS SPI ROM |
| Speeds | 10/100/1000/2500 Mbps |
| Functions | Wake On LAN MAC Address Pass Through PXE Boot Flash Over LAN |
| Connectors | RJ45 |

WWAN

| | |
|-------|---|
| Model | Quectel EM160R-GL 4G LTE CAT16 (Optional) |
|-------|---|

Near Field Communications

| | |
|-------|------|
| Model | None |
|-------|------|

Audio

| | |
|------------------------------------|--|
| Vendor | Realtek |
| Type | Intel High Definition Audio (2 channel) |
| Internal Speaker | 2 channel |
| Connectors | Microphone & Headphone Combo Jack (3.5mm) |
| Chipset | ALC3306 w/ Smart Amp |
| Number of Channels | 4-channel DAC, 4-channel ADC |
| Number of Bits/Audio Resolution | 16/20/24-bit PCM format |
| Sampling Rate (Recording/Playback) | 44.1K/48K/96K/192KHz sample rate |
| Signal to Noise Ratio | Mic In: 95dB FSA Headphone Out@32ohm: 100dB FSA |
| Analog Audio | None |
| Dolby Digital | Dolby ATMOS |
| Digital Out (S/PDIF) | No |
| Speaker Power Rating | 2W@4ohm/ch |

Power adapter

| | | |
|---------------|-------------------------|---------------------------|
| Type | Slim 170W AC Adapter | Slim 230W AC Adapter |
| Dimensions | 240cc (142 x 77 x 22mm) | 353cc (160 x 87 x 25.4mm) |
| Input Voltage | Max 475g | Max 815g |
| Disclaimers | 100-240V | 100-240V |

Security

| | |
|----------|-------------------|
| TPM | Version 2.0 |
| Asset ID | Yes |
| vPro | Intel vPro for WS |

Chassis Information

| | |
|-------------------|---|
| Format | Clamshell |
| Color | Midnight Black |
| Thermal Solutions | Internal Dual FAN, Intelligent Cooling |
| Dimensions | Length 16.38 inches 416 millimeters Width 11.06 inches 281 millimeters |

| | |
|--------|---|
| | Height 1.00 inches (front) 25.0mm (front) (Thinnest) 1.30 inches (rear) 33.25mm (rear) (Thickest) |
| Weight | with 6 cell 94WHr Battery, Min 7.85lbs/3.56kgs |

Packaging Parameters

| | |
|---------------|-------|
| Height (mm) | 341 |
| Height (inch) | 13.43 |
| Width (mm) | 118 |
| Width (inch) | 4.65 |
| Depth (mm) | 575 |
| Depth (inch) | 22.64 |
| Weight (kgs) | 5.3 |
| Weight (lbs) | 11.68 |

Security & Serviceability

| | |
|-----------------------------|---|
| Hardware Maintenance Manual | P17 Gen 2 HMM |
| Drivers & Software | P17 Gen 2 Drivers & Software |
| Self Healing BIOS | Yes |
| Access Panel | Removeable bottom cover |
| Number of Screws | See Hardware Maintenance Manual for Details |
| Swappable Components | Bottom cover, memory module, M.2 solid-state drive, speaker assembly, coin-cell battery, TrackPoint pointing cap, keyboard, WLAN Card, WWAN Card, Power Button Cable, Hinge Caps, LCD Unit, Chassis Assembly, Dummy Smart Card Reader, System Board, SIM Tray |
| Storage Slots | 3 slots |
| Memory | 4 SODIMM slots |
| Restore CD/DVD/USB Set | None, Restore Media available via Lenovo Customer Support Center |
| Cable Lock Support | Security-lock slot, Optional Kensington Cable Lock |
| Power-On Password | Yes |
| Hard Disk Password | Yes; User and Master hard disk password |
| Supervisor Password | Yes |
| NIC LEDs (integrated) | None |
| Security Chip | Yes (for TMP 2.0) |
| Access Panel Key Lock | Bottom Cover Tamper Detection |
| Boot Sequence Control | Yes |

Operating Environment

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|---------------------------------|--|
| Operating – Air Temperature | At altitudes up to 2438 m (8000 ft) – Operating: 5°C to 35°C (41°F to 95°F) |
| Non Operating – Air Temperature | At altitudes up to 2438 m (8000 ft) – Storage: 5°C to 43°C (41°F to 109°F) |
| Humidity | Operating: 8% to 95% at wet-bulb temperature 23°C (73°F) Storage: 5% to 95% at wet-bulb temperature 27°C (81°F) |
| Corrosive Gas | G1 |
| Particulates | P1 |

SECTION II: SUPPORTED COMPONENTS

Supported Components

| | |
|--------------------|--|
| Processor | Intel® Core™ i5-11500H vPro processor (2.9 GHz/6 Core/12M/vPro) Intel® Core™ i7-11800H processor (2.3 GHz/8 Core/24M) Intel® Core™ i7-11850H vPro processor (2.5 GHz/8 Core/24M/vPro) Intel® Core™ i9-11950H vPro processor (2.6 GHz/8 Core/24M/vPro) Intel® Xeon™ W-11855M vPro processor (3.2 GHz/6 Core/18M/vPro) Intel® Xeon™ W-11955M vPro processor (2.6 GHz/8 Core/24M/vPro) |
| Memory Support | DDR4 3200MHz SO-DIMM with non-ECC Memory DDR4 3200MHz SO-DIMM with ECC Memory |
| Chipset (PCH) | Mobile Intel® WM590 Chipset |
| Size of BIOS Flash | 32MB + 32MB (for backup) |
| Super I/O | None |
| Clock | Crystal |
| Audio | Realtek High Definition Audio |
| Ethernet | Intel® Ethernet Connection I225-LM for vPro, I225-V for non-vPro |

Memory

| | |
|-------------------------|---|
| System Capacity Options | 8GB 16GB 32GB 64GB 128GB |
| non-ECC | 8GB DDR4 3200MHz SoDIMM 16GB DDR4 3200MHz SoDIMM 32GB DDR4 3200MHz SoDIMM |
| Brand of non-ECC Memory | Samsung SK Hynix Micron Ramaxel |
| ECC | 8GB DDR4 3200MHz ECC SoDIMM 16GB DDR4 3200MHz ECC SoDIMM |

| | |
|-----------------------------|--|
| | 32GB DDR4 3200MHz ECC SoDIMM |
| Brand of ECC Memory | SK Hynix Samsung |
| Memory clock frequency(MHz) | 3200MHz with non-ECC Memory 3200MHz with ECC Memory |

Storage

| | |
|---|--|
| 2.5" SAS Hard Disk Drive (HDD) | None |
| 2.5" SATA Hard Disk Drive (HDD) | None |
| 2.5" SATA Solid State Drive (SSD) | None |
| M.2 (NGFF) PCIe Solid State Drive (SSD) | 256GB OPAL2 PCIe 3x4 TLC (M.2 2280-S3) 512GB OPAL2 PCIe 3x4 TLC (M.2 2280-S3) 1TB OPAL2 PCIe 3x4 (M.2 2280-S3) 512GB OPAL2 PCIe 4x4 TLC (M.2 2280-S3) 1TB OPAL2 PCIe 4x4 (M.2 2280-S3) 2TB OPAL2 PCIe 4x4 (M.2 2280-S3) |
| 2.5" PCIe Solid State Drive (SSD) | None |
| Brand of Drive | Samsung Western Digital Hynix Kioxia Micron |
| Intel Optane Storage Technology | None |
| RAID | Optional, Selectable in BIOS |
| RAID Level and Requirements | RAID-0/1 |

Removeable Media

| | |
|----------------------------------|--------|
| Media Card Reader Specifications | UHS-II |
|----------------------------------|--------|

SECTION III: Supported Component Detail

CPU Specifications Part 1

| | | | | | |
|-----|--|---|--|--|---|
| CPU | Intel® Core™ i5-11500H (2.9 GHz/6 Core/12M/vPro) | Intel® Core™ i7-11800H processor (2.3 GHz/8 Core/24M) | Intel® Core™ i7-11850H vPro processor (2.5 GHz/8 | Intel® Core™ i9-11950H vPro processor (2.6 GHz/8 | Intel® Xeon™ W-11855M vPro processor (3.2 GHz/6 |
|-----|--|---|--|--|---|

| | | | Core/24M/vPro) | Core/24M/vPro) | Core/18M/vPro) |
|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Integrated Graphics | Intel® UHD Graphics | Intel® UHD Graphics | Intel® UHD Graphics | Intel® UHD Graphics | Intel® UHD Graphics |
| # of Cores | 6 | 8 | 8 | 8 | 6 |
| # of Threads | 12 | 16 | 16 | 16 | 12 |
| Processor Base Frequency | 2.90 GHz | 2.30 GHz | 2.50 GHz | 2.60 GHz | 3.20 GHz |
| Max Turbo Frequency | 4.60 GHz | 4.60 GHz | 4.80 GHz | 5.00 GHz | 4.90 GHz |
| Cache | 12 MB | 24 MB | 24 MB | 24 MB | 18 MB |
| TDP | 35 – 45 W | 35 – 45 W | 35 – 45 W | 35 – 45 W | 35 – 45 W |

CPU Specifications Part 2

| | |
|--------------------------|--|
| CPU | Intel® Xeon™ W-11955M vPro processor (3.2 GHz/6 Core/18M/vPro) |
| Integrated Graphics | Intel® UHD Graphics |
| # of Cores | 8 |
| # of Threads | 16 |
| Processor Base Frequency | 2.60 GHz |
| Max Turbo Frequency | 5.00 GHz |
| Cache | 24 MB |
| TDP | 35 – 45 W |

Display Specifications

| | | |
|--------------------|--|---|
| Model | FHD | UHD Non-Touch |
| Resolution | FHD (1920 x 1080) | 4K UHD (3840 x 2160) |
| Diagonal | 17.3" | 17.3" |
| Aspect Ratio | 16:09 | 16:09 |
| Backlight | LED | LED |
| PPI | FHD : 141 | UHD : 282 |
| Active Area | FHD : 344.16mm x 193.59mm | UHD : 344.2176mm x 193.6224 |
| Refresh Rate | Max 60Hz | Max 60Hz |
| Contrast Ratio | FHD: 800:1 | UHD 1000:1 |
| Viewing Angle (*1) | FHD: 85/85/85/85 degree | UHD: 85/85/85/85 degree |
| Color gamut | FHD 100% sRGB | UHD 100% Adobe |
| Brightness | 300 nits | 500 nits |
| HDR | N/A | HDR400 Dolby Vision |
| Color Depth | FHD: Native 262K (RGB 6-bit data driver) | UHD: Native 16.7M (RGB 8-bit data driver) |
| Interface | FHD: eDP 1.2 | UHD: eDP 1.3 |

| | | |
|----------------------|--------------------|----------------------------------|
| Panel ID Recognition | EDID in BIOS Table | EDID in BIOS Table |
| Weight | FHD: 550g | UHD: 550g |
| Color Calibrator | None | X-Rite Pantone Color Calibration |
| Panel Technology | IPS, Anti-Glare | IPS, Anti-Glare |
| Touch Panel | None | None |

SSD Specifications

| | |
|---|---------------------|
| 2.5" SATA Solid State Drive (SSD) | N/A |
| M.2 (NGFF) PCIe Solid State Drive (SSD) | 3x M.2 2280-S3 PCIe |
| 2.5" PCIe Solid State Drive (SSD) | N/A |
| Intel Optane Storage Technology | N/A |

Solid State Storage Devices

| | | |
|---|---|---|
| Supported Types | M.2 | M.2 |
| Dimensions inches/centimeters (W x D x H) | 22.0 (+-0.15) x 80.0 (+-0.15) x 2.3 (max) | 22.0 (+-0.15) x 80.0 (+-0.15) x 2.3 (max) |
| Size | M.2 2280-S3 | M.2 2280-S3 |
| Interface Type | PCIe NVMe | PCIe NVMe |
| Read/Write IOPS Specifications | Read: 250K (512GB/1TB/2TB), 200K (256GB) Write: 240K (512GB/1TB/2TB), 190K (256GB) IOPS, 4K Random, 32 q depth, 4 threads | Read: 550K (1TB/2TB), 350K (512GB), 190K (256GB) Write: 400K (1TB/2TB), 370K (512GB), 200K (256GB) IOPS, 4K Random, 32 q depth, 8 threads |
| Bandwidth Performance | PCIe Gen3x4 (8Gb/S) | PCIe Gen4x4 (16Gb/S) |
| Power Consumption (Max) | 5.0W | 8.0W |
| Active(AVG) | 5.0W (Sequential read) | 8.0W (Sequential read) |
| Idle | 5mW (Low power state) | 5mW (Low power state) |
| Min MTBF | 2,000,000 (h) | 2,000,000 (h) |
| Min Sequential Read | 3000MB/s (512GB/1TB/2TB), 2900MB/s (256GB) | 6400MB/s (1TB/2TB), 6000MB/s (512GB), 5000MB/s (256GB) |
| Min Sequential Write | 1600MB/s (512GB/1TB/2TB), 900MB/s (256GB) | 5000MB/s (2TB), 3800MB/s (1TB), 3200MB/s (512GB), 1600MB/s (256GB) |
| Hardware Encryption | Yes | Yes for OPAL, No for Pyrite |

Discrete Graphics Adapter

| Laptop GPUs | NVIDIA T1200 with Max-P | NVIDIA RTX A2000 with Max-P | NVIDIA RTX A3000 with Max-P | NVIDIA RTX A4000 with Max-P | NVIDIA RTX A5000 with Max-P |
|---|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| NVIDIA CUDA Processing Cores | 1024 | 2560 | 4096 | 5120 | 6144 |
| NVIDIA RT Cores | N/A | 20 (2nd Gen) | 32 (2nd Gen) | 40 (2nd Gen) | 48 (2nd Gen) |
| Tensor Cores | N/A | 80 (3rd Gen) | 128 (3rd Gen) | 160 (3rd Gen) | 192 (3rd Gen) |
| GPU Memory | 4GB | 4GB | 6GB | 8GB | 16GB |
| Peak Memory Bandwidth | 192GB/s | 192GB/s | 264GB/s | 384GB/s | 448GB/s |
| Memory Type | GDDR6 | GDDR6 | GDDR6 | GDDR6 | GDDR6 |
| Memory Interface | 128-bit | 128-bit | 192-bit | 256-bit | 256-bit |
| TGP Max Power Consumption | 60W | 60W | 115W | 115W | 115W |
| DisplayPort | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Open GL | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| Shader Model | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| DirectX | 12.1 | 12 Ultimate | 12 Ultimate | 12 Ultimate | 12 Ultimate |
| PCIe Generation | 4 | 4 | 4 | 4 | 4 |
| Single Precision Floating-Point Performance | 3.7 | 9.3 | 12.8 | 17.8 | 21.7 |
| Tensor Performance | N/A | 74.7 | 102.2 | 142.5 | 174.0 |
| NVIDIA FXAA/TXAA Anti-Aliasing | Yes | Yes | Yes | Yes | Yes |
| NVIDIA RTX Desktop Manager | Yes | Yes | Yes | Yes | Yes |
| Vulkan Support | Yes | Yes | Yes | Yes | Yes |
| NVIDIA Optimus | Yes | Yes | Yes | Yes | Yes |
| 3rd Gen Max-Q Technology | Yes | Yes | Yes | Yes | Yes |
| NVENC/NVDEC | Yes | Yes | Yes | Yes | Yes |

WLAN

| | |
|--|---|
| Model | Typhoon Peak 2 Intel Wi-Fi 6E AX210 (Gig+) + BT5.2 |
| Antenna Diversity | Supported |
| MIMO | Supported |
| Radio ON/OFF Control | Supported |
| Connector interface | M.2 PCIe |
| Operating Temperature (Adapter Shield) | 0c to +80c |
| Humidity Non-Operating | 50%~90% Rh non condensing (at temperatures of 25c to 35c) |

| | |
|--------------------------|--|
| Operating Systems | Microsoft Windows 10, Linux |
| Wi-Fi Alliance | Wi-Fi CERTIFIED 6, Wi-Fi CERTIFIED a/b/g/n/ac, WMM, WMM-PowerSave, WPA3, Protected Management Frames, Wi-Fi Direct, Wi-Fi Agile Multiband |
| IEEE WLAN Standard | IEEE 802.11-2016 and select amendments (selected feature coverage) IEEE 802.11a, b, d, e, g, h, i, k, n, r, u, v, w, ac, ax; Fine Timing Measurement based on 802.11-2016, Wi-Fi Location R2 (802.11az) HW readiness |
| Roaming | Support seamless roaming between access points |
| Bluetooth | BT 5.2 |
| Authentication Protocols | 802.1X EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0 – MSCHAPv2 (EAP-SIM, EAP-AKA, EAP-AKA') |
| Encryption | 128-bit AES-CCMP, 256-bit AES-GCMP |
| Regulatory | For a list of country approvals, please contact your local Intel representatives |
| US Government | FIPS 140-2 |
| Product Safety | UL,C-UL,CB (IEC 60950-1) |

Battery

| | |
|-----------------------------|---|
| Dimension | L: 310mm*W: 63.9mm*T 11mm |
| Weight | Max 384.7g |
| Type (Chemistry and Cell) | Li-Polymer (3S2P), 6-cell |
| Voltage | 13.2V |
| Battery Life | Up to 8.3hrs (Condition: FHD/i5-11500H/8GB DIMM/1x 256GB SSD/T1200/Hybrid Graphics Mode/Better Battery Mode/MobileMark2018) |
| Battery Capacity | 94Wh |
| Charging Time | On Charge Time (0-100%) * 125 min Off Charge Time (0 – 80%) ** 59 min Off Charge Time (0 – 100%) ** 118 min |
| Operating Temperature Range | between 10°C (50°F) and 35°C (95°F) |
| Warranty | 1 Year/ 3 Year Available |
| Coin Cell Battery (Model) | CR2032 |

SECTION IV: BIOS / Certifications / Standards / Environmental

BIOS Specifications

| | |
|------------------------------|---|
| WMI Support | Yes, if it is BIOS Setup change by WMI. |
| ROM-Based Setup Utility (F1) | Yes |

| | |
|--|--|
| Replicated Setup | Yes, it supported with SRSETUP tool. |
| Boot Control | Yes, it means Boot order change. |
| Discrete Mode | Yes |
| Memory Change Alert | N/A |
| Thermal Alert | N/A |
| Asset Tag | Yes |
| System/Emergency ROM Flash Recovery with Video | N/A |
| Remote Wakeup/Remote Shutdown | Yes, if Remote wakeup is Wake on LAN from S4/S5. |
| Keyboard-less Operation | N/A |
| Per-port Control | Yes, if it is I/O port enable/disable by BIOS Setup. |
| Adaptive Cooling | Yes, if it is thermal & fan control. |
| Security | Yes, BIOS password / Hard disk password / Finger print |
| Intel(R) AMT (includes ASF 2.0) | Yes. If you select vPro model |
| Intel(R) TXT | Yes. If you select vPro model |
| Memory Modes | N/A |

EMC & Safety

| | |
|--------|--|
| EMC | <p>Published, Certified Existing Reports</p> <ul style="list-style-type: none"> EMC – Australia EMC – Belarus EMC – Canada EMC – China EMC – EU/EFTA EMC – Japan EMC – Kazakhstan EMC – New Zealand EMC – Russia EMC – South Korea EMC – Taiwan EMC – USA/Territories Not Applicable / Not Required EMC – Israel EMC – Moldova EMC – Serbia EMC – Turkey EMC – Uzbekistan EMC – Vietnam |
| Safety | <p>To access the latest User Guide and Safety and Warranty Guide, go to: https://support.lenovo.com Low Halogen Declaration of Conformance TNOT-2017-0040 Section 9 – Low Halogen Scorecard Izod Test – EPEAT Compliant Homologation PCRB Compliant In the following countries: Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bermuda, Bolivia, Botswana, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Cayman Islands, Central African Republic, Chad, China, Colombia, Comoros, Congo, Costa Rica, Djibouti, Dominican Republic, Egypt, El Salvador, Eritrea, Ethiopia, EU/EFTA, Fiji, Gabon, Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Haiti, Honduras, Hong Kong, India, Indonesia, Israel, Jamaica, Japan, Jordan,</p> |

| | |
|--|--|
| | Kazakhstan, Kenya, Kuwait, Laos, Lebanon, Liberia, Macau, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Namibia, Nepal, New Zealand, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Russia, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, South Africa, South Korea, Sri Lanka, Swaziland, Taiwan, Tajikistan, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, USA/Territories, Uzbekistan, Venezuela, Vietnam, Zambia, Zimbabwe, Brazil – Inmetro 170 Govt Bids, Guinea-Bissau, Lesotho |
|--|--|

Environmentals

| | |
|----------------------|--|
| Energy Star | ENERGY STAR® Version 8.0 For more information about ENERGY STAR, go to: https://www.energystar.gov |
| EPEAT | EPEAT Certification Available on select models |
| IT ECO declaration | The latest environmental information about Lenovo products is available at: https://www.lenovo.com/ecodeclaration |
| Hazardous Substances | The latest environmental information about Lenovo products is available at: https://www.lenovo.com/ecodeclaration European Union RoHS This Lenovo product, with included parts (cables, cords, and so on) meets the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("RoHS recast" or "RoHS 2"). For more information about Lenovo worldwide compliance on RoHS, go to: https://www.lenovo.com/rohs-communication |

Manageability

| | |
|---|---|
| Industry Standard Specifications | This product meets the following industry standard specifications for manageability functionality: |
| Remote Manageability Software Solutions | Lenovo ThinkManagement Console Microsoft System Center Configuration Manager LANDesk Management Suite for Lenovo Vantage Technologies (www.landesk.com/lenovo) |
| System Software Manager | Lenovo ThinkStation supports software management tools from the ThinkVantage System Update suite: System Update Update Retriever |
| Service, Support, and Warranty | On-site Warranty and Service: Three-years, limited warranty and service offering delivers on-site, next business-day service for parts and labor and includes free telephone support 8am to 5pm. Global coverage ensures that any product purchased in one country and transferred to another, non-restricted country will remain fully covered under the original warranty and service offering. |