



# HP Z2 Tower G5 Workstation (644C6UT)



## Overview

### Our most powerful entry workstation that redefines expectations.

We've engineered a whole new level of performance for entry workstations, so you can cut through BIM, rendering and visualization projects without missing a beat. And when your demands change, you have impressive expandability to upgrade.

### Your new benchmark for entry workstation power.

Unleash the full power of professional graphics and Intel® processors on your compute-heavy workloads. We've designed the system for zero throttling, so your components always run at top speeds without ever overheating or slowing down.

### We test it so you can trust it. 24/7.

We know you need performance you can rely on. That's why our products endure over 360K hours of rigorous testing, MIL-STD testing[1] and software certifications.

### Built to expand. Power to grow.

Need to swap graphics cards? Boost CPU power? Add specialized PCIe cards? Go for it. Our most expandable entry workstation is an investment that will last for years.

### HP's most secure workstation.

Advanced security features come standard on every Z2 Tower. System safeguards like self-healing BIOS help lock your device, data and identity down tight.

## Features

### Intel® Xeon® W processor

Get optimized performance whether your professional application utilizes high core count or high frequency with the Intel® Xeon® W processor.<sup>[2]</sup>

### NVIDIA® Quadro® Graphics

Experience high-end visualization and seamlessly render your biggest projects with the next generation NVIDIA® Quadro® T-Series graphics; Certified and supported for the apps you use every day.

### Security is your top priority

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses.

### Smaller, Functional Design

The stunning new design features front and rear ledges, so you can easily move your system from location to location.

---

*[1]Undergoes MIL-STD testing. MIL-STD testing is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Service.*

*[2] Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.*

## Specifications

<b>Form factor</b>	Tower
<b>Operating system</b>	Windows 11 Pro
<b>Processor family</b>	Intel® Xeon® W processor
<b>Processor</b>	Intel® Xeon® W-1250 (3.3 GHz base frequency, up to 4.7 GHz with Intel® Turbo Boost Technology, 12 MB L3 cache, 6 cores) <sup>[6,7]</sup>
<b>Chipset</b>	Intel® W480
<b>Memory</b>	16 GB DDR4-3200 MHz RAM (1 x 16 GB)
<b>Memory Slots</b>	4 DIMM
<b>Internal Storage</b>	512 GB HP Z Turbo Drive PCIe® NVMe™ TLC SSD
<b>Internal drive bays</b>	Two 3.5"; Two M.2 NVME 2280 SSD
<b>External drive bays</b>	One 5.25"
<b>Optical drive</b>	Not included
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	Intel® UHD Graphics P630
<b>Compatible displays</b>	All HP Z Displays and HP DreamColor Displays are supported.
<b>Audio</b>	Realtek ALC3205-VA2-CG, 2.0W internal mono speaker
<b>Minimum dimensions (W x D x H)</b>	35.6 x 16.9 x 38.5 cm (Standard tower orientation.)
<b>Minimum dimensions (W x D x H)</b>	14 x 6.7 x 15.2 in (Standard tower orientation.)
<b>Weight</b>	Starting at 7 kg (Exact weight depends on configuration.)
<b>Weight</b>	Starting at 15.43 lb (Exact weight depends on configuration.)
<b>Keyboard</b>	HP Wired Desktop 320K Keyboard
<b>Pointing device</b>	HP Wired 320M Mouse
<b>Ports</b>	1 headphone/microphone combo; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 2 SuperSpeed USB Type-A 5Gbps signaling rate
<b>Expansion slots</b>	1 PCIe 3 x4 (x16 connector); 1 PCIe 3 x16 (x16 connector); 1 M.2 2230 PCIe 3 x1; 2 M.2 2280 PCIe 3 x4; 2 PCIe® 3 x1 (x4 connector) (1 M.2 slot for WLAN and 2 M.2 2230/2280 slot for storage.)
<b>Ports</b>	1 audio-in; 1 audio-out; 1 RJ-45; 2 USB 2.0; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 SuperSpeed USB Type-A 10Gbps signaling rate
<b>Sustainable impact specifications</b>	Low halogen

**Security management**

HP Business PC Security Lock Kit; HP Keyed Cable Lock Kit; HP Solenoid Hood Lock and Sensor; HP UltraSlim Cable Lock Kit; HP Secure Erase; HP Sure Click; HP Sure Sense; HP Sure Start Gen6; HP Sure Run Gen3; HP Sure Recover Gen3; HP BIOSphere Gen6; HP Sure Admin; HP Client Security Manager Gen6<sup>[15,22,24,25,26,27,28,29,32,34]</sup>

**Software included**

HP PC Hardware Diagnostics UEFI; HP Performance Advisor; HP Support Assistant; HP PC Hardware Diagnostics Windows; ZCentral Remote Boost; HP Image Assistant; HP Manageability Integration Kit<sup>[12,16,21,23]</sup>

**UPC number**

(ABA) 196548065769; (ABC) 196548065745

## Additional specifications

<b>ECC memory</b>	non-ECC
<b>Graphics</b>	Discrete
<b>Graphics (discrete)</b>	NVIDIA® Quadro® T1000 (4 GB GDDR5 dedicated)
<b>Graphics card brand</b>	NVIDIA®
<b>Graphics card family</b>	Quadro®
<b>Graphics card form factor</b>	PCIe x16
<b>Graphics card memory size</b>	4
<b>Graphics card memory size uom</b>	GB
<b>Graphics card memory type</b>	GDDR5
<b>I/O Port location</b>	Front
<b>I/O Port location</b>	Rear
<b>Keyboard connectivity</b>	wired
<b>Legal tagline</b>	HP recommends Windows 11 Pro for business
<b>Memory and storage</b>	16 GB memory; 512 GB SSD storage
<b>Memory layout (slots &amp; size)</b>	1 x 16 GB
<b>Memory module type</b>	UDIMM
<b>Memory size</b>	16
<b>Memory size uom</b>	GB
<b>Memory speed</b>	3200
<b>Memory speed uom</b>	MHz
<b>Memory type</b>	DDR4
<b>Model Number</b>	T1000
<b>Number of memory slots</b>	1
<b>Processor Brand</b>	Intel®
<b>Processor base frequency</b>	3.3
<b>Processor cache</b>	12 MB L3
<b>Processor core</b>	6
<b>Processor family</b>	Xeon® W
<b>Processor frequency UOM</b>	GHz
<b>Processor frequency technology</b>	Intel® Turbo Boost Technology
<b>Processor maximum frequency</b>	4.7
<b>Processor maximum frequency uom</b>	GHz
<b>Processor model</b>	1250

<b>Processor threads</b>	12
<b>Product long name specifications</b>	HP Z2 Tower G5 Workstation, Windows 11 Pro, Intel® Xeon® W, 16GB RAM, 512GB SSD, NVIDIA® Quadro® T1000
<b>Security Software Licenses</b>	HP Wolf Pro Security Edition (1 year)
<b>Standard memory note</b>	Transfer rates up to 3200 MT/s.
<b>Storage brand 01</b>	HP Z Turbo Drive
<b>Storage capacity</b>	512
<b>Storage capacity uom 01</b>	GB
<b>Storage controller</b>	Integrated SATA (4 ports 6 Gb/s) with integrated RAID 0, 1, for PCIe SSDs supported. Requires identical hard drives (speeds, capacity, interface).
<b>Storage interface 01</b>	PCIe®
<b>Storage interface protocol 01</b>	NVMe™
<b>Storage memory technology 01</b>	TLC
<b>Storage type</b>	SSD
<b>Storage type 01</b>	SSD
<b>UNSPSC code</b>	43211515

[6] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost/> for more information.

[12] HP ZCentral Remote Boost does not come preinstalled on Z Workstations but can be downloaded and run on all Z desktop and laptops without license purchase. With non-Z sender devices, purchase of perpetual individual license or perpetual floating license per simultaneously executing versions and purchase of ZCentral Remote Boost Software Support is required. RGS requires Windows, RHEL (7 or 8), UBUNTU 18.04 LTS, or HP ThinPro 7operating systems. MacOS (10.13 or newer) operating system is only supported on the receiver side. Requires network access. The software is available for download at [hp.com/ZCentralRemoteBoost](http://hp.com/ZCentralRemoteBoost).

[15] HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.

[16] HP Performance Advisor Software - HP Performance Advisor is ready and waiting to help you get the most out of your HP Workstation from day one—and every day after. Learn more or download at: <https://www8.hp.com/us/en/workstations/performance-advisor.html>

[21] HP Support Assistant requires Windows and Internet access.

[22] HP BIOSphere Gen6 features may vary depending on the platform and configurations.

[23] HP Manageability Integration Kit can be downloaded from <http://www8.hp.com/us/en/ads/clientmanagement/overview.html>

[24]HP Client Security Manager Gen6 requires Windows and is available on the select HP PCs.

[25] HP Sure Click requires Windows 11 Pro or Windows 10 Pro or Enterprise. See [https://bit.ly/2PrLT6A\\_SureClick](https://bit.ly/2PrLT6A_SureClick) for complete details.

[26] HP Sure Start Gen 6 is available on select HP PCs and workstations. See product specifications for availability.

[27] HP Sure Run Gen3 is available on select Windows 11 or Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors

[28] HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

[29] Secure Erase - For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane

[32] HP Sure Sense requires Windows 11, Windows 10 Pro or Enterprise and supports Microsoft Internet Explorer, Google Chrome™, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.

[34] HP Sure Admin requires Windows 11 or Windows 10, HP BIOS, HP Manageability Integration Kit from <http://www.hp.com/go/clientmanagement> and HP Sure Admin Local Access Authenticator smartphone app from the Android or Apple store.

---

## Accessories

### Memory

★ : Recommended

#### DDR4 Memory

32GB (1x32GB) 3200 DDR4 ECC UDIMM	141H7AA ★
16GB (1x16GB) 3200 DDR4 ECC UDIMM	141H2AA ★
8GB (1x8GB) 3200 DDR4 NECC UDIMM	141J4AA ★
16GB (1x16GB) 3200 DDR4 ECC UDIMM	141H2AT
16GB (1x16GB) 3200 DDR4 NECC UDIMM	141H3AA
16GB (1x16GB) 3200 DDR4 NECC UDIMM	141H3AT
32GB (1x32GB) 3200 DDR4 NECC UDIMM	141H9AA
32GB (1x32GB) 3200 DDR4 NECC UDIMM	141H9AT
4GB (1x4GB) 3200 DDR4 NECC UDIMM	141J1AA
4GB (1x4GB) 3200 DDR4 NECC UDIMM	141J1AT
8GB (1x8GB) 3200 DDR4 ECC UDIMM	141J3AA
8GB (1x8GB) 3200 DDR4 ECC UDIMM	141J3AT
8GB (1x8GB) 3200 DDR4 NECC UDIMM	141J4AT

### Graphics Cards

#### Graphics Cards

AMD Radeon Pro W5500 8GB 4DP GFX	9GC16AA ★
AMD Radeon Pro W5700 8GB 5mDP+USBc GFX	9GC15AA ★
AMD Radeon Pro WX 3200 4GB (4)mDP GFX	6YT68AA ★
AMD Radeon Pro W6600 8GB GDDR6 4DP Graphics	340K5AA
AMD Radeon Pro WX 3200 4GB (4)mDP GFX	6YT68AT
NVIDIA Quadro P1000 4GB Graphics	1ME01AA
NVIDIA Quadro P1000 4GB Graphics	1ME01AT
NVIDIA Quadro P2200 5GB (4)DP GFX	6YT67AA
NVIDIA Quadro P2200 5GB (4)DP GFX	6YT67AT
NVIDIA Quadro P400 2GB Graphics	1ME43AA
NVIDIA Quadro P400 2GB Graphics	1ME43AT
NVIDIA Quadro P620 2GB Graphics Card	3ME25AA
NVIDIA Quadro P620 2GB Graphics Card	3ME25AT
NVIDIA Quadro RTX 4000 8GB (3)DP+USBc	5JV89AA

NVIDIA Quadro RTX 4000 8GB (3)DP+USBc	5JV89AT
NVIDIA Quadro RTX 5000 16GB (4)DP+USBc	5JH81AA
NVIDIA Quadro RTX 5000 16GB (4)DP+USBc	5JH81AT
NVIDIA Quadro RTX 6000 24GB (4)DP+USBc	5JH80AA
NVIDIA Quadro RTX 6000 24GB (4)DP+USBc	5JH80AT
NVIDIA Quadro T1000 4GB 4mDP Graphics	20X22AA
NVIDIA RTX A4000 16 GB 4DP Graphics	20X24AA
NVIDIA RTX A4000 16 GB 4DP Graphics	20X24AT
NVIDIA T400 2 GB GDDR6 LP Blower Fan 3mDP PCIe x16 Graphics	340K8AA
NVIDIA T600 4 GB GDDR6 LP Blower Fan 4mDP PCIe x16 Graphics	340K9AA

## Keyboards/Mice and Input Devices

### Keyboards

HP Wireless Premium Keyboard	Z9N41AA ★
HP USB Premium Keyboard	Z9N40AA
HP USB Premium Keyboard	Z9N40AT
HP Wired Desktop 320K Keyboard	9SR37AA
HP Wired Desktop 320K Keyboard	9SR37ET
HP Wired Desktop 320K Keyboard	9SR37UT
HP Wireless Premium Keyboard	Z9N41AT

### Mice

HP Wireless Premium Mouse	1JR31AA ★
HP Wired Desktop 320M Mouse	9VA80AA
HP Wired Desktop 320M Mouse	9VA80ET
HP Wired Desktop 320M Mouse	9VA80UT
HP Wireless Premium Mouse	1JR31UT

### Keyboard and Mouse Kits

HP Wired Desktop 320MK Mouse and Keyboard	9SR36AA
HP Wired Desktop 320MK Mouse and Keyboard	9SR36ET
HP Wired Desktop 320MK Mouse and Keyboard	9SR36UT

## PC Drives and Storage

### PC Solid State Drives

HP ZTurbo 2TB TLC Z2 G5 TWR/SFF SSDKit	141M1AA ★
HP ZTurbo 1TB TLC Z2 G5 TWR/SFF SSDKit	141L5AA ★
HP ZTurbo 256GB TLC Z2 G5 TWR/SFF SSDKit	141L7AA ★
HP 256GB SATA Solid State Drive	A3D26AA
HP 256GB SATA Solid State Drive	A3D26AT
HP 2TB PCIe NVME TLC M.2 Z2 G5 TWR/SFF SSD	35F73AA
HP 512GB SATA Solid State Drive	D8F30AA
HP 512GB SATA Solid State Drive	D8F30AT
HP Z Turbo Drive 2TB TLC Z8 G4 SSD Kit	2Y7W5AA
HP ZTurbo 256GB SED Z2 G5 TWR/SFF SSDKit	141L8AA
HP ZTurbo 512GB SED Z2 G5 TWR/SFF SSDKit	141M3AA
HP ZTurbo 512GB SED Z2 G5 TWR/SFF SSDKit	141M3AT
HP ZTurbo 512GB TLC Z2 G5 TWR/SFF SSDKit	141M5AA
HP ZTurbo 512GB TLC Z2 G5 TWR/SFF SSDKit	141M5AT

## PC SATA Hard Drives

2TB 7200RPM SATA 3.5in Enterprise	2Z274AA
8TB 7200RPM SATA 3.5in Enterprise	2Z273AA
HP 1TB Enterprise SATA 7200 HDD	W0R10AA
HP 1TB SATA 6Gb/s 7200 Hard Drive	LQ037AA
HP 1TB SATA 6Gb/s 7200 Hard Drive	LQ037AT
HP 4TB SATA 7200 Hard Drive	K4T76AA
HP 4TB SATA 7200 Hard Drive	K4T76AT
HP 500GB 7200rpm SATA SFF SED Hard Drive	D8N29AA
HP 500GB SATA 6Gb/s 7200 Hard Drive	LQ036AA
HP 500GB SATA 6Gb/s 7200 Hard Drive	LQ036AT
HP 6TB Enterprise SATA 7200 HDD	3DH90AA

## Removable Hard Drive Enclosure

HP 4-in-1 SFF (2.5in) HDD Carrier	B8K60AA
-----------------------------------	---------

## PC DVD-ROM Drives

HP Z2 TWR DVD-ROM 9.5mm Slim ODD	4L5K1AA
----------------------------------	---------

## PC DVD Drives

HP Z2 TWR DVD-Writer 9.5mm Slim ODD	4L5K0AA
-------------------------------------	---------

# PC Networking Adapters

## PC Fast Ethernet Adapters

Allied Telesis AT-2914SX/LC-901 1GB LC Fiber NIC

1C7Q2AA

## PC Controller/Controller Options

### PC Processor Cards

Aquantia NBASE-T 5GbE PCIe NIC

1PM63AA

Intel Ethernet I210-T1 GbE NIC

E0X95AA

Intel Ethernet I350-T2 2-Port 1Gb NIC

V4A91AA

Intel Ethernet I350-T4 4-Port 1Gb NIC

W8X25AA

## Expansion Solution and Controller Cards

### Port Adapters

HP 1GbE LAN Flex Port 2020

141J6AA

HP DP Flex Port 2020

141J7AA

HP Dual USB-A 3.2 Gen1 Flex 2020

141J8AA

HP Flex 1GbE Fiber LC Single Port

20J15AA

HP Front USB-C 3.2 Gen2 2020 TWR

141KOAA

HP HDMI Flex Port 2020

141K1AA

HP PCIe x1 Parallel Port Card

N1M40AA

HP PCIe x1 Parallel Port Card

N1M40AT

HP USB-C 3.2 Gen2 Alt Flex Port 2020

141K6AA

HP VGA Flex Port 2020

141K7AA

HP Z2 G5 2nd serial port adapter

141K8AA

HP Z2 G5 Internal Serial and PS/2 Port

141K9AA

## Cables/Cable Kits/Cable Adapters

### Audio and Video Cables

HP DisplayPort To VGA Adapter

AS615AA

HP DisplayPort To VGA Adapter

AS615AT

HP DisplayPort To VGA Adapter

F7W97AA

HP DisplayPort to DVI-D Adapter

FH973AA

HP DisplayPort to DVI-D Adapter

FH973AT

HP DisplayPort to HDMI True 4K Adapter

2JA63AA

## Cable Adapters

HP Single miniDP-to-DP Adapter Cable	2MY05AA
HP USB-C to DP Adapter	4SH08AA
HP USB-C to HDMI Adapter	4SH07AA
HP USB-C to VGA Adapter	4SH06AA

## Chassis and Chassis Accessories

### Brackets/Bezels/Panels

HP Dust Filter Z2 G5 Tower	141L2AA
HP Dust Filter bezel Z2 G5 Tower	141L3AA
HP Optical Bay HDD Mounting Bracket	NQ099AA

## Point of Sales System Options

### POS Display Accessories

HP L7010t 10.1-inch Retail Touch Monitor	T6N30AA
HP L7014 14-inch Retail Monitor	T6N31AA
HP L7014t 14-inch Retail Touch Monitor	T6N32AA
HP L7016t 15.6-inch Retail Touch Monitor	V1X13AA

## PC Accelerators

### PC IO Accelerators

HP Thunderbolt 3.0 PCIe Card Z2 Tower	141M7AA
---------------------------------------	---------

## Rack Brackets/Bezels/ Panels/Rails/ Trays/Mounting

### Rack Kits

HP Z2 Mini/Z2 Tower/Z4/Z6 Depth Adjustable Fixed Rail Rack Kit	2A8Y5AA
--	---------

## Batteries/Chargers/Adapters

### Power Cords

HP Z2 Power Cord Kit M	1N1D5AA
------------------------	---------

## Network Adapters

## Adapter Cards

Intel X550 10GBASE-T Dual Port NIC	1QL46AA
Intel X710-DA2 10GbE SFP+ DP NIC	1QL47AA

## Monitors

### Business Monitors

★ : Recommended

#### Z Displays

HP Z32 31.5-inch 4K UHD Display	1AA81A4 ★
HP DreamColor Z27x G2 Studio Display	2NJ08A4
HP DreamColor Z31x Studio Display	Z4Y82A4
HP Z24f G3 FHD Display	3G828AA
HP Z24n G3 WUXGA Display	1C4Z5AA
HP Z24u G3 WUXGA USB-C Display	1C4Z6AA
HP Z25xs G3 QHD USB-C DreamColor Display	1A9C9AA
HP Z27k G3 4K USB-C Display	1B9T0AA
HP Z27q G3 QHD Display	1C4Z7AA
HP Z27u G3 QHD Display	1B9X2AA
HP Z27xs G3 4K USB-C DreamColor Display	1A9M8AA
HP Z38c 37.5-inch Curved Display	Z4W65A4
HP Z43 42.5-inch 4K UHD Display	1AA85A4

#### E-Series

HP E22 G4 FHD Monitor	9VH72AA
HP E23 G4 FHD Monitor	9VF96AA
HP E24 G4 FHD Monitor	9VF99AA
HP E24 G4 FHD No Stand(Bulk2) Monitor	3R473AA
HP E24i G4 WUXGA Monitor	9VJ40AA
HP E24mv G4 FHD Conferencing Monitor	169L0AA
HP E24q G4 QHD Monitor	9VG12AA
HP E24t G4 FHD Touch Monitor	9VH85AA
HP E24u G4 FHD USB-C Monitor	189T0AA
HP E27 G4 FHD Monitor	9VG71AA
HP E27q G4 QHD Monitor	9VG82AA
HP E27u G4 QHD USB-C Monitor	189T3AA

#### EliteDisplays

HP EliteDisplay E190i 18.9-inch LED Backlit IPS Monitor	E4U30AA
HP EliteDisplay E233 23-inch Monitor	1FH46AA

HP EliteDisplay E243 23.8-inch Monitor	1FH47AA
HP EliteDisplay E243d 23.8-inch Docking Monitor	1TJ76AA
HP EliteDisplay E243d 23.8-inch Docking Monitor	7MP20AA
HP EliteDisplay E243m 23.8-inch Monitor	1FH48AA
HP EliteDisplay E273m 27-inch Monitor	1FH51AA
HP EliteDisplay S340c 34-inch Curved Monitor	V4G46AA

## Healthcare Edition Displays

HP Healthcare Edition HC241 Clinical Review Monitor	3ME68AA
HP Healthcare Edition HC241p Clinical Review Monitor	3ME69AA

## ProDisplays

HP Mini-in-One 24 Display	7AX23AA
---------------------------	---------

## P-Series

HP P22 G4 22 FHD Monitor	1A7E4AA
HP P22h G4 FHD Monitor	7UZ36AA
HP P22h G4 FHD Monitor	7UZ36AT
HP P24 G4 24 FHD Monitor	1A7E5AA
HP P24h G4 FHD Monitor	7VH44AA
HP P27h G4 FHD Monitor	7VH95AA

## Value Displays

HP V22b Monitor	2XM33AA
HP V24b Monitor	2XM34AA

## Software

### Remote Connectivity Software

★ : Recommended

#### Workstation Remote Connectivity Software

HP ZCentral Connect 2020 E-LTU	9TS59AAE	obsolete
HP ZCentral Remote Boost 2020 Floating E-LTU	9TS61AAE	
HP ZCentral Remote Boost 2020 Standard E-LTU	9TS60AAE	

### Disclaimer — Copyright

Intel, Pentium, the Intel logo, Intel Core, Thunderbolt, vPro, Optane, and Core Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Bluetooth is a trademark of its proprietor, used by HP Inc. under license. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. Adobe PDF is a trademark of Adobe Systems Incorporated. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. NVIDIA, the NVIDIA logo, Quadro, and GeForce are trademarks and/or registered trademarks of NVIDIA Corporation in the US. and other countries. Bluetooth is a trademark of its proprietor and used by HP Inc. under license. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. All other trademarks are the property of their respective owners.

© Copyright 2022 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Generated by Dynamic Collateral Tool – (ww-en) – Feb 17, 2022 4:28 PM UTC+0000