

Overview

HP Elite Slice G2 with Microsoft Teams Rooms

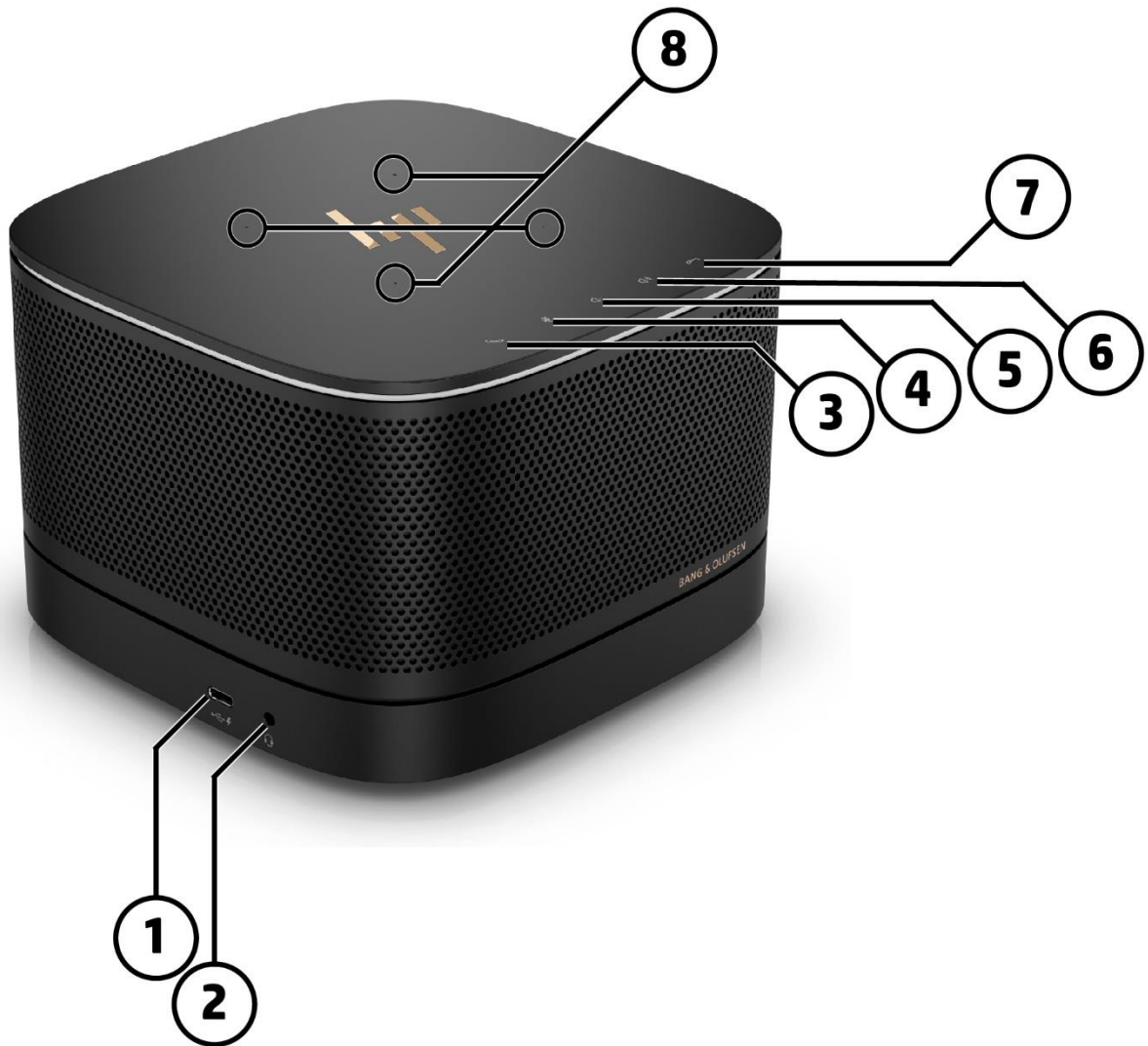


1. HP Center of Room Control
2. HP Elite Slice G2* platform
3. HP Video Ingest Module

*Audio equipment or speakers are required and sold separately.

Overview

HP Elite Slice G2 with Microsoft Teams Rooms



Side Ports/Collaboration buttons

- | | | | |
|----|---|----|-------------|
| 1. | USB Type-C™ 3.1 Gen 1 USB port | 5. | Volume down |
| 2. | Audio-out (headphone)/audio-in (microphone) | 6. | Volume up |
| 3. | Call | 7. | Hang up |
| 4. | Mute | 8. | Microphones |

Overview

HP Elite Slice G2 with Microsoft Teams Rooms



Back Connectors

- | | |
|---|----------------------------------|
| 1. Power button | 5. 2 USB Type A 3.1 Gen 1 ports |
| 2. Power connector | 6. Dual-Mode DisplayPort™ (DP++) |
| 3. RJ-45 (network) jack | 7. HDMI port |
| 4. USB Type-C™ 3.1 Gen 1 USB port (60 W input, DisplayPort™ Alternate Mode) | 8. UltraSlim cable lock slot |

Features

At A Glance

- Teams Rooms/Skype Rooms Systems conferencing solution built on Windows IoT 64 Enterprise
- Designed for small and medium rooms with any 3rd party USB AV accessories needed
- Includes HP Audio featuring side firing speakers and up-facing mics. Capacitive touch keys located on top for Call or Answer/ Mute/Volume Up/ Volume Down/ Hang up/End or Reject support.
- Center of Room Control Display provides easy management of the meeting to start/add people/share contact/end meeting functions without a separate PC
- Video Ingest Module is included so that meeting attendees in the room can easily share content thru an HDMI cable input
- HP Sure Start 3.0 with Dynamic Protection
- New HP Cable and Port Cover adapter secures the ports, prevents tampering, and provides cable management
- Windows 10 IoT 64 Enterprise to have a dedicated OS to run the conferencing software
- UEFI BIOS developed and engineered by HP
- Intel® Q170 chipset supporting Intel® Peripheral Control Hub for 7th Gen Core™ Processors, featuring integrated Intel HD Graphics 630 and Intel® vPro™ Technology
- Intel® Ethernet Connection I219LM GbE LOM integrated network connection (recommended)
- Supports Intel® AC Wireless with vPro™ Technology
- DDR4-2400 (up to 32GB) Synchronous Dynamic Random-Access Memory (SDRAM)
- Dual-independent monitor support via HDMI and digital DisplayPort™ video interfaces
 - Dual HDMI ports supported with the HP DisplayPort to HDMI True 4K Adapter
- High efficiency energy saving power supply
- Low halogen
- Protected by HP Services, including limited warranties up to 3-3-3 (terms and conditions vary by country; certain restrictions and exclusions apply); Care Packs available with up to 5 years Next Business Day Onsite Hardware Support
- VESA Plate (Optional)

***NOTE:** Available on HP Elite products equipped with Intel® 7th generation processors.

NOTE: See important legal disclosures for all listed specs in their respective features sections.

Features

OPERATING SYSTEMS AND TOPOLOGY REQUIREMENTS

Preinstalled

Windows

10 IoT 64 Enterprise CBB¹

1. Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>

Microsoft Teams Rooms/Skype Room Systems IT Topology Pre-Requisites (setup must be one of the these three):

- 1. Online Deployment (o365) - Skype for Business Online with Exchange Online. *Active Directory Online
- 2. On Premise Deployment - Skype for Business Server 2015 On-Premises with Exchange 2013 SP1+ or later On-Prem. *Active Directory On-Prem
- 3. Hybrid Deployment - Skype For Business 2015 On-Premise with Exchange Online/ Skype for Business 2015 Online with Exchange 2013 SP1+ On-Prem. *Active Directory On-Prem

Note1: Microsoft Teams Rooms/Skype Room Systems does not support Lync Server 2013

Note2: Preparation of the environment to enable Teams Rooms/SRS

- Microsoft Teams Rooms/Skype Room Systems needs to be assigned a "User account" in Active Directory, Exchange, and Skype for Business. The account is used to access its meeting calendar and establish Skype for Business connectivity. People can book this account by scheduling a meeting with it. Microsoft Teams Rooms/Skype Room Systems will be able to join that meeting and provide various features to the meeting attendees. Without a user account, none of these features will work. The user account & infrastructure must be correctly configured to allow Microsoft Teams Rooms/Skype Room Systems to validate the user account and reach appropriate Microsoft services. For more information on configuration & licenses required: <https://docs.microsoft.com/en-us/microsoftteams/room-systems/requirements>
- A Microsoft Teams Rooms/Skype Room Systems client appliance PC with all required software installed
- For additional information on configuration & supported topologies: <https://docs.microsoft.com/en-us/microsoftteams/room-systems/room-systems>

Features

PROCESSORS

7th Generation Intel® Core™ processors

Intel® Core™ i7-7700T with Intel® HD Graphics 630 Up to 3.8 GHz Max. Turbo Frequency (2.9 GHz base frequency) 8 MB cache, 4 cores, 8 threads, supports Intel® vPro™ Technology

Intel® Core™ i5-7500T with Intel® HD Graphics 630, Up to 3.3 GHz Max. Turbo Frequency (2.7 GHz base frequency) 6 MB cache, 4 cores, 4 threads, supports Intel® vPro™ Technology

GRAPHICS

Integrated
Intel® HD Graphics 630 with GT2 support⁵

5. HD content required to view HD images.

MEMORY

Both slots are customer accessible / upgradeable, Supports Dual Channel Memory

Type	Maximum	# of Slots
DDR4-2400 (Transfer rates up to 2400 MT/s)	32 GB capacity	2 DIMM

Configurations

8 GB DDR4-2400 SODIMM (2x4GB) (Dual Channel)²⁰

20. 8 GB DDR4-2400 SDRAM: up to 32 GB thru option kit(s).

STORAGE / DRIVES

Solid State Drives M.2 NVMe⁶

256 GB PCIe NVMe M.2 Solid State Drive

128 GB PCIe NVMe M.2 Solid State Drive

SATA Solid State Drives 2.5"⁶

256 GB SSD TLC SATA Drive

128 GB SSD TLC SATA Drive

6. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.

NETWORKING

LAN

Wired Intel® i219LM GbE LOM

WLAN (optional and must be configured at purchase)⁷

Intel® Dual Band Wireless-AC 8260 802.11ac 2x2 +Bluetooth® 4.2 vPro™

Intel® Dual Band Wireless-AC 7265 802.11ac 2x2 +Bluetooth® 4.2 (Non-vPro)

7. Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited.

Features

AUDIO / MULTIMEDIA

Conexant CX7501
1x Universal audio jack
Four speakers with dual passive radiator stereo sound system
HP Audio Module 2.0
Four Digital Microphones

KEYBOARDS AND POINTING DEVICES (OPTIONAL)

Keyboards⁸

HP Business Slim USB Keyboard (China Only)
HP Business Slim USB Keyboard
HP Wired Desktop 320K Keyboard

Mice⁸

HP USB Optical Mouse
HP Mouse Pad
HP USB Mouse (China only)
HP Wired Desktop 320M Mouse

[8. Keyboards and mice are sold separately or as an optional feature.](#)

PORTS

External I/O Ports

1 Universal audio jack (with re-tasking) connector
1 USB Type-C™ (USB 3.1 Gen 1, 15W output) connector
1 USB Type-A (USB 3.1, charging) connector
1 USB Type-A (USB 3.1, S4/S5 wake) connector
1 USB Type-C™ (Alternate Mode DP, USB 3.1 Gen 1, 15W output, 60W input) connector
1 DisplayPort™ connector
1 HDMI connector (optional HP DisplayPort™)
1 RJ-45 connector
1 DC-in 7.4mm barrel

Internal I/O Ports

1. M.2 nVME
1 SATA

Features

SLOTS

Integrated

1 M.2 2230 PCIe for WLAN

1 M.2 2280 PCIe for NVMe SSD

MODULES

Included

HP Cable and Port cover

HP Center of Room Control^{9,10}

HP Video Ingest Module

Optional

VESA Mount¹¹

Wireless Display Module

9. Dimensions: Width (X) 301.75mm or 11.88 in; Height(Y) 219.75mm or 8.65 in; Depth (Z) 80.8mm or 3.17 in; Weight: 1040 grams or 2.3 lbs

10. 31.2 cm (12.3") diagonal FHD LCD touch screen (1920 x 1280)

11. Only can be purchased as an optional feature at time of sale

SOFTWARE COMPONENTS AND APPLICATIONS WITH WINDOWS

BIOS

Absolute Persistence Module¹²

Software

Microsoft Teams Rooms/Skype Room Systems

HP Connection Optimizer

HP Notifications

12. Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit:

<http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

Features

SECURITY MANAGEMENT

TPM 2.0 Embedded Security Chip shipped with Windows 10 (Common Criteria EAL4+ Certified)(FIPS 140-2 Level 2 Certified)
HP Sure Start 3.0*

***NOTE:** Available on HP Elite products equipped with Intel® 7th generation processors.

POWER SUPPLY

90W AC adapter¹⁴
Up to 85% efficient

14. All power supplies are not available in every region.

DIMENSIONS AND WEIGHT (CONFIGURED WITH 1 HDD)

Chassis (H x W x D)	6.5 x 6.5 x 4.4 in (165 x 165 x 111mm)
Chassis with Video Ingest	6.5 x 6.5 x 5.39 in (165 x 165 x 137mm)
Chassis with Optional Video Ingest and Optional Vesa Plate	6.5 x 6.5 x 5.56 in (165 x 165 x 141mm)
System Weight (without optional devices)	3.36 lb / 1.52 kg

PACKAGING DIMENSIONS AND WEIGHT

Dimensions	23.5 x 10.75 x 8 in (596.9 x 273.05 x 203.2 mm)
Weight	14.71 lb / 6.67 kg

COLOR

Sparkle black color

Features

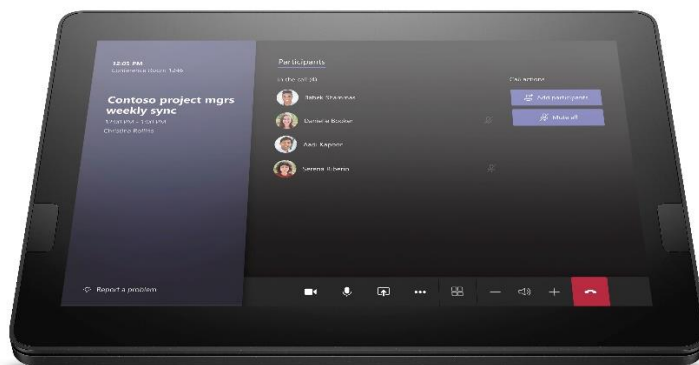
HP VIDEO INGEST MODULE



Functionality

- 1080 Resolution support
- 60Hz refresh
- 1 x HDMI 1.4 input port
- Works in MS SRS with Present option (button)
- Display input to local display and meeting

HP CENTER OF ROOM CONTROL



Functionality

- See full Room Calendar for scheduled calls
- Initiate ad-hoc calls, dial out, or invite participants
- Toggle Skype views with Gallery, content, maximize 2x LDF for conferencing
- Fully replace the phone in the conference room
- Tool-less Type-C cable installation with stand cover module

Display

- 12.3" diagonal screen
- Type-C interface
- Dual orientation
- 1440 x 960 resolution
- 3:2 aspect ratio
- 10-point touch capable

Orientations

- 25 degrees horizontal
- 48 degrees horizontal

Sensor

- Pyro-electric IR-Detectors

Features

PORT COVER



Functionality

- Tamper-proofing of cables from the back of Slice
- Extends Power, 2 USB Type-A, RJ45, DisplayPort, and HDMI cables for connections under the table
- Clean single condensed cable for single group of cables extended from Slice
- Separate Type-C cable for easy movement of Center of Room Control display on the table
- Cover to hide back connections to Slice
- Cable Lengths:

Cable Type	Length
Power, 2 USB Type-A, HDMI, DisplayPort, RJ45	1.0m
Type-C	1.5m

WIRELESS DISPLAY MODULE (OPTIONAL)



Specs

- Only supported with HDMI connector
- 1080p HD resolution
- Only supported on table top
- Transmitter and Receiver paired at the factory
- Pair button included in case needed later
- Light status included to show paired devices
- 60Ghz band is used – signal is blocked by walls and confined to conference room
- Wireless Display Module is not support in all countries

Features

SERVICE AND SUPPORT

On-site Warranty: Protected by an HP standard three-year (3-3-3) or one-year (1-1-1) limited warranty (varies by region). Certain restrictions and exclusions apply. Limited warranty delivers next business day service for parts and labor and includes Complimentary Limited Technical Support. One-year onsite and labor are not available in all countries. Service offers terms up to 5 years by choosing an optional HP Care Pack. To choose the right level of service for your HP product, visit HP Care Pack Central: <http://www.hp.com/go/cpc>

NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.

NOTE 2: On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider, and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.

NOTE 3: Technical support applies only to HP-configured and third-party HP qualified hardware and software.

COUNTRY OF ORIGIN

China

Technical Specifications - Audio

HIGH DEFINITION AUDIO

Audio by Bang & Olufsen	
Type	Four speakers with dual passive radiator stereo sound system
HD Stereo Codec	1x Universal audio jack (w/ re-tasking)
Audio I/O Ports	High Definition Audio
Internal Speaker Amplifier	TI TAS5754M
Sampling	Conexant CX7501
Analog Audio	1x Universal audio Jack
# of Channels	Yes – Uses OS soft wavetable
Internal Speaker	Yes – four speakers
DAC Sampling Rates	44.1 kHz/48 kHz/96 kHz
ADC Sampling Rates	44.1 kHz/48 kHz/96 kHz
Audio Distance	<ul style="list-style-type: none"> 360° 4-mic array with 5 meter/16 feet typical microphone pickup area 360° quad array (4 speakers), 4x2W amplifier power, 90 dB SPL at 1.0 m maximum output

Technical Specifications - Graphics

GRAPHICS

Intel® HD Graphics 630 (integrated)			
DisplayPort™ 1.2	Multimode capable; supports HDCP, DisplayPort™Audio (2 streams), HBR2 link rates and Multi-Stream Technology for a maximum of 3 displays (including the integrated panel)		
Memory	The BIOS has options for selecting the dedicated memory size of 128MB, 256MB or 512MB. Additional memory is allocated for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide an optimal balance between graphics and system memory use.		
Maximum Graphics Memory	Microsoft Windows 7	Windows 8.1	Windows 10
	Up to 1.7GB	Up to 1.8GB	>4 GB
	Note: the actual amount of maximum graphics memory can be less than the amounts listed above depending upon your computer's configuration.		
Maximum Color Depth	32 bits/pixel		
Graphics/Video API Support	6th Generation Core™ processors: <ul style="list-style-type: none"> Next Generation Intel® Clear Video Technology HD Support is a collection of video playback and enhancement features that improve the end user's viewing experience <ul style="list-style-type: none"> Encode/transcode HD content Playback of high definition content including Blu-ray Disc Superior image quality with sharper, more colorful images DirectX Video Acceleration (DXVA) support for accelerating video processing <ul style="list-style-type: none"> Full AVC/VC1/MPEG2/HEVC HW Decode Advanced Scheduler 2.0, 1.0 Windows 7, Windows 8.1, Windows 10, Linux OS Support DirectX 12.1 OpenGL 4.4 Open CL 1.2 (Intel® HD Graphics 510) Open CL 1.2/2.0 (Intel® HD Graphics 530) 		

Technical Specifications - Graphics

Supported Display Resolutions and Refresh Rates

Note: other resolutions may be available but are not recommended as they may not have been tested and qualified by HP. For All in One platforms, resolutions higher than the integrated panel resolution are not supported on the integrated panel.

Resolution	Refresh Rate	DisplayPort™ 1.2	HDMI	Standard
640 x 480	60, 75, 85	X	X	VESA DMT, CVT 0.31M3
720 x 400	70	X	X	IBM VGA
800 x 600	60, 75, 85	X	X	VESA DMT, CVT 0.48M3
1024 x 768	60, 75, 85	X	X	VESA DMT, CVT 0.79M3
1152 x 864	60, 75, 85	X	X	VESA DMT, CVT 0.83MA
1280 x 720	60, 75, 85	X	X	VESA DMT, CVT 0.92M9, CEA-770.3
1280 x 768	60, 60RB, 75, 85	X	X	VESA DMT, CVT 0.98M9/0.98M9-R
1280 x 800	60, 75, 85	X	X	VESA DMT
1280 x 960	60, 75, 85	X	X	VESA DMT
1280 x 1024	60, 75, 85	X	X	VESA DMT, CVT 1.31M4
1366 x 768	60, 60RB	X	X	VESA DMT
1440 x 900	60, 60RB	X	X	VESA DMT
1600 x 900	60, 60RB, 75, 85	X	X	VESA DMT
1680 x 1050	60, 60RB, 75	X	X	VESA DMT, CVT 1.76MA/1.76MA-R
1920 x 1080	60	X	X	VESA DMT, CVT 2.07M9, SMPTE 274M
1920 x 1200	60, 60RB, 75, 85	X	X	DMT, CVT 2.30MA/2.30MA-R
1600 x 1200	60, 75, 85	X	X	VESA DMT, 1.92M3
1920 x 1440	60, 75, 85	X	X	VESA DMT, CVT 2.76M3
2048 x 1536	60, 75	X	X	CVT 3.15M3
2560 x 1440	59.951	X	X	CVT 3.69M9-R
2560 x 1600	60, 60RB	X	X	VESA DMT, CVT 4.10MA/4.10MA-R
3440 x 1440	60	X	X	VESA DMT, CVT 0.31M3
3440 x 1440	75, 85			VESA DMT, CVT 0.31M3
3840 x 2160	24	X	X	CVT-RBv1/v2 (8.29M9-R), SMPTE 274M
3840 x 2160	25	X	X	CVT-RBv1/v2 (8.29M9-R), SMPTE 274M
3840 x 2160	30	X	X	CVT-RBv1/v2 (8.29M9-R), SMPTE 274M
3840 x 2160	50		X	CVT-RBv1/v2 (8.29M9-R), SMPTE 274M

Technical Specifications - Graphics

3840 x 2160	60		X	CVT-RBv1/v2 (8.29M9-R), SMPTE 274M
4096 x 2160	24	X	X	CVT-RBv1/v2 (8.85M-R), SMPTE 274M
4096 x 2160	25	X	X	CVT-RBv1/v2 (8.85M-R), SMPTE 274M
4096 x 2160	30	X	X	CVT-RBv1/v2 (8.85M-R), SMPTE 274M
4096 x 2160	50		X	CVT-RBv1/v2 (8.85M-R), SMPTE 274M
4096 x 2160	60		X	CVT-RBv1/v2 (8.85M-R), SMPTE 274M
1920 x 1080	60	X	X	VESA (SMPTE 274M)
1920 x 1080	50	X	X	SMPTE 274M
1920 x 1080	30	X	X	SMPTE 274M
1920 x 1080	24	X	X	SMPTE 274M
1280 x 720	60	X	X	VESA (CEA-770.3)
1280 x 720	50	X	X	SMPTE 296M
720 x 480	60	X	X	MHL (CEA-770.2)
720 x 576	50	X	X	ITU-R BT.1358
640 x 480	60	X	X	CEA (VESA DMT)

Technical Specifications - Storage

STORAGE

128GB SATA 2.5" (Non-SED) Solid State Drive		
Unformatted Capacity	128GB	
Architecture	TLC NAND Flash	
Interface	SATA 3.2 (6.0 Gb/s)	
Form Factor	2.5 inch	
Dimensions (W x D x H)	6.98 x 10.05 x 0.7 cm	
Weight	31g	
Bandwidth Performance	Sustained Sequential Read:	Up to 510 MB/s
	Sustained Sequential Write:	Up to 330 MB/s
	Random Read:	Up to 38K IOPs
	Random Write:	Up to 70K IOPs
Power	DC power requirement:	5 VDC 5%-100 mV ripple p-p
	Total power consumption:	50mW (active); 20mW (idle)
Useful Drive Life	72TB written, up to 40GB/day for 5 years	
Environmental (all conditions, non-condensing)	Operating Temperature:	32° to 158° F (0° to 70° C)
	Relative Humidity:	5% to 95%
	Shock:	1,500 G/0.5 ms
NOTE: For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.		

Technical Specifications - Storage

256GB SATA 2.5" (Non-SED) Solid State Drive		
Unformatted Capacity	256GB	
Architecture	TLC NAND Flash	
Interface	SATA 3.2 (6.0 Gb/s)	
Form Factor	2.5 inch	
Dimensions (W x D x H)	6.98 x 10.05 x 0.7 cm	
Weight	31g	
Bandwidth Performance	Sustained Sequential Read:	Up to 510 MB/s
	Sustained Sequential Write:	Up to 330 MB/s
	Random Read:	Up to 38K IOPs
	Random Write:	Up to 70K IOPs
Power	DC power requirement:	5 VDC 5%-100 mV ripple p-p
	Total power consumption:	50mW (active); 20mW (idle)
Useful Drive Life	72TB written, up to 40GB/day for 5 years	
Environmental (all conditions, non-condensing)	Operating Temperature:	32° to 158° F (0° to 70° C)
	Relative Humidity:	5% to 95%
	Shock:	1,500 G/0.5 ms
NOTE: For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.		

Technical Specifications - Storage

128GB M.2 2280 PCIe NVMe SSD

Drive Weight	< 10g
Capacity	128GB
Height	2.38mm
Length	80mm
Width	22mm
Interface	PCIe Gen3
Performance	Up to Random Read/Write = 60K/50K IOPS
Maximum Sequential Read	Up to 1400MB/s
Maximum Sequential Write	Up to 395MB/s
Logical Blocks	250,069,680
Operating Temperature	0° to 70°C (32° to 158°F) [ambient temp]
Features	APST; ASPM L1.2; NVME spec 1.2

NOTE:For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

256GB M.2 2280 PCIe NVMe SSD

Drive Weight	< 10g
Capacity	256GB
Height	2.38mm
Length	80mm
Width	22mm
Interface	PCIe Gen3
Performance	Up to Random Read/Write = 120K/170K IOPS
Maximum Sequential Read	Up to 1600MB/s
Maximum Sequential Write	Up to 780MB/s
Logical Blocks	500,118,192
Operating Temperature	0° to 70°C (32° to 158°F) [ambient temp]
Features	APST; ASPM L1.2; NVME spec 1.2

NOTE:For hard drives and solid state drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB (for Windows 10) of system disk is reserved for the system recovery software.

Technical Specifications – Networking

NETWORKING

Intel 8260 802.11a/b/g/n/ac (2x2) WiFi and Bluetooth® 4.2 Combo vPro		
	Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac
	Interoperability	Wi-Fi® certified
	Frequency Band	802.11b/g/n <ul style="list-style-type: none"> 2.402 – 2.482 GHz 802.11a/n <ul style="list-style-type: none"> 4.9 – 4.95 GHz (Japan) 5.15 – 5.25 GHz 5.25 – 5.35 GHz 5.47 – 5.725 GHz 5.825 – 5.850 GHz
	Data Rates	<ul style="list-style-type: none"> 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz) 802.11ac : MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, and 80MHz)
	Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
	Security¹	<ul style="list-style-type: none"> IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only AES-CCMP: 128 bit in hardware 802.1x authentication WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES. WPA2 certification IEEE 802.11i Cisco Certified Extensions, all versions through CCX4 and CCX Lite WAPI
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power²	<ul style="list-style-type: none"> 802.11b : +16dBm minimum 802.11g : +14dBm minimum 802.11a : +14dBm minimum 802.11n HT20(2.4GHz) : +13dBm minimum 802.11n HT40(2.4GHz) : +13dBm minimum 802.11n HT20(5GHz) : +12dBm minimum 802.11n HT40(5GHz) : +12dBm minimum 802.11ac 80MHz(5GHz) : +11dBm minimum
	Power Consumption	<ul style="list-style-type: none"> Transmit mode 2.0 W Receive mode 1.6 W Idle mode (PSP) 180 mW (WLAN Associated) Idle mode 50 mW (WLAN unassociated) Connected Standby 10mW Radio disabled 8 mW

Technical Specifications – Networking

	Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode		
	Receiver Sensitivity³	802.11b, 1Mbps : -93.5dBm maximum 802.11b, 11Mbps : -84dBm maximum 802.11a/g, 6Mbps : -86dBm maximum 802.11a/g, 54Mbps : -72dBm maximum 802.11n, MCS07 : -67dBm maximum 802.11n, MCS15 : -64dBm maximum 802.11ac, MCS0 : -84dBm maximum 802.11ac, MCS9 : -59dBm maximum		
	Antenna type	High efficiency antenna with spatial diversity, mounted in the display enclosure Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth® communications		
	Form Factor	PCI-Express M.2 MiniCard		
	Dimensions	Type 2230 : 2.3 x 22.0 x 30.0 mm		
	Weight	Type 2230 : 2.8g		
	Operating Voltage	3.3v +/- 9%		
	Temperature	Operating Non-operating	14° to 158° F (–10° to 70° C) –40° to 176° F (–40° to 80° C)	
	Humidity	Operating Non-operating	10% to 90% (non-condensing) 5% to 95% (non-condensing)	
	Altitude	Operating Non-operating	0 to 10,000 ft (3,048 m) 0 to 50,000 ft (15,240 m)	
		LED Activity	LED Amber – Radio OFF; LED White – Radio ON	
	HP Integrated Module with Bluetooth 4.0/4.1/4.2 Wireless Technology			
	Bluetooth® Specification	4.0/4.1/4.2 Compliant		
	Frequency Band	2402 to 2480 MHz		
	Number of Available Channels	Legacy : 0~79 (1 MHz/CH) BLE : 0~39 (2 MHz/CH)		
	Data Rates and Throughput	Legacy : 3 Mbps data rate; throughput up to 2.17 Mbps BLE : 1 Mbps data rate; throughput up to 0.2 Mbps Legacy : Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Legacy : Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric (3-DH5) or 864 kbps symmetric (3-EV5)		
	Transmit Power	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of + 4 dBm for BR and EDR.		
	Power Consumption	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW		
	Electrical Interface	USB 2.0 compliant		
	Bluetooth® Software Supported Link Topology	Microsoft Windows Bluetooth® Software		
	Power Management	Microsoft Windows ACPI, and USB Bus Support		
	Certifications	FCC (47 CFR) Part 15C, Section 15.247 & 15.249		
	Power Management Certifications	ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark		
	Bluetooth® Profiles Supported	BT4.1-ESR 5/6/7 Compliance LE Link Layer Ping		

Technical Specifications – Networking

		LE Dual Mode LE Link Layer LE Low Duty Cycle Directed Advertising LE L2CAP Connection Oriented Channels Train Nudging & Interlaced Scan BT4.2 ESR08 Compliance LE Secure Connection- Basic/Full LE Privacy 1.2 –Link Layer Privacy LE Privacy 1.2 –Extended Scanner Filter Policies LE Data Packet Length Extension FAX Profile (FAX) Basic Imaging Profile (BIP)2 Headset Profile (HSP) Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)
--	--	--

Intel 7265 802.11ac 2x2 DualBand Combo PCIe x1 Card

	Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac
	Interoperability	Wi-Fi® certified
	Frequency Band	802.11b/g/n <ul style="list-style-type: none"> 2.402 – 2.482 GHz Note: The FCC has declared as of January 1, 2015 products that utilize passive scanning on channel 12/13 and are capable of transmitting must fully comply with requirements of 15.247 or otherwise disable those channels. 802.11a/n <ul style="list-style-type: none"> 4.9 – 4.95 GHz (Japan) 5.15 – 5.25 GHz 5.25 – 5.35 GHz 5.47 – 5.725 GHz 5.825 – 5.850 GHz Note: Indonesia no support this band)
	Data Rates	<ul style="list-style-type: none"> 802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: MCS 0 ~ MCS 15, (20MHz, and 40MHz) 802.11ac : MCS0 ~ MCS9, (1SS, and 2SS) (20MHz, 40MHz, and 80MHz)
	Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
	Security¹	<ul style="list-style-type: none"> IEEE and WiFi compliant 64 / 128 bit WEP encryption for a/b/g mode only AES-CCMP: 128 bit in hardware 802.1x authentication WPA, WPA2: 802.1x. WPA-PSK, WPA2-PSK, TKIP, and AES. WPA2 certification IEEE 802.11i

Technical Specifications – Networking

		<ul style="list-style-type: none"> • Cisco Certified Extensions, all versions through CCX4 and CCX Lite • WAPI
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power²	<ul style="list-style-type: none"> • 802.11b : +16dBm minimum • 802.11g : +14dBm minimum • 802.11a : +14dBm minimum • 802.11n HT20(2.4GHz) : +13dBm minimum • 802.11n HT40(2.4GHz) : +13dBm minimum • 802.11n HT20(5GHz) : +12dBm minimum • 802.11n HT40(5GHz) : +12dBm minimum • 802.11ac 80MHz(5GHz) : +11dBm minimum
	Power Consumption	Transmit: 2.0 W (max) Receive: 1.6 W (max) Idle mode (PSP): 180 mW (WLAN Associated) Idle mode: 60 mW (WLAN unassociated) Radio disabled: 30 mW
	Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
	Receiver Sensitivity³	802.11b, 1Mbps : -94dBm maximum 802.11b, 11Mbps : -86dBm maximum 802.11g, 6Mbps : -88dBm maximum 802.11g, 54Mbps : -74dBm maximum 802.11a, 6Mbps : -86dBm maximum 802.11a, 54Mbps : -72dBm maximum 802.11n, MCS07 : -69dBm maximum 802.11n, MCS15 : -66dBm maximum 802.11ac, 1SS, MCS-0 : -86dBm maximum 802.11ac, 1SS, MCS-9 : -61dBm maximum 802.11ac, 2SS, MCS-0 : -83dBm maximum 802.11ac, 2SS, MCS-9 : -58dBm maximum
	Antenna type	High efficiency antenna with spatial diversity, mounted in the display enclosure Two embedded dual band 2.4/5 GHz antennas are provided to the card to support WLAN MIMO communications and Bluetooth® communications
	Form Factor	PCI-Express M.2 MiniCard
	Dimensions	Type 2230 : 2.3 x 22.0 x 30.0 mm Or Type 1630 : 2.3 x 16.0 x 30.0 mm
	Weight	Type 2230 : 2.8g Or Type 1630 : 2g
	Operating Voltage	3.3v +/- 9%
	Temperature	Operating 14° to 158° F (–10° to 70° C) Non-operating –40° to 176° F (–40° to 80° C)
	Humidity	Operating 10% to 90% (non-condensing) Non-operating 5% to 95% (non-condensing)
	Altitude	Operating 0 to 10,000 ft (3,048 m) Non-operating 0 to 50,000 ft (15,240 m)
	LED Activity	LED Amber – Radio OFF; LED White – Radio ON
	1. Check latest software/driver release for updates on supported security features.	

Technical Specifications – Networking

	2. Maximum output power may vary by country according to local regulations.			
	3. Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).			
HP Integrated Module with Bluetooth® 4.0+EDR Wireless Technology				
	Bluetooth® Specification	4.0+EDR Compliant		
	Frequency Band	2402 to 2480 MHz		
	Number of Available Channels	79 (1 MHz) available channels		
	Data Rates and Throughput	3 Mbps data rate; throughput up to 2.17 Mbps		
		Synchronous Connection Oriented links up to 3, 64 kbps, voice channels		
		Asynchronous Connection Less links 2178.1 kbps/177.1 kbps asymmetric or 1306.9 kbps symmetric		
	Transmit Power	The Bluetooth component shall operate as a Class II Bluetooth device with a maximum transmit power of +4 dBm for BR and EDR.		
	Receiver Sensitivity	Modulation	0.01% BER	0.001% BER
		GFSK	-80 dBm	-70 dBm
		π/4-DQPSK	-80 dBm	-70 dBm
		8DPSK	-80 dBm	-70 dBm
	Power Consumption	Peak (Tx) 330 mW Peak (Rx) 230 mW Selective Suspend 17 mW		
	Range	Up to 33 ft (10 m)		
	Electrical Interface	USB 2.0 compliant		
	Bluetooth® Software Supported Link Topology	Microsoft Windows Bluetooth® Software		
	Electrical Interface Bluetooth® Software Supported Security	Point to Point, Multipoint Pico Nets up to 7 slaves Full support of Bluetooth® Security Provisions		
	Power Management Power Management Certifications	Microsoft Windows ACPI, and USB Bus Support Self-configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff		
	Security	All necessary regulatory approvals for supported countries, including:		
	Certifications Bluetooth® Profiles Supported	FCC (47 CFR) Part 15C, Section 15.247 & 15.249		
	Power Management Certifications	ETS 300 328, ETS 300 826		
Low Voltage Directive IEC950				
Certifications Bluetooth® Profiles Supported	UL, CSA, and CE Mark			
	Serial Port Profile (SPP) ¹			
	Service Discovery Application Profile (SDAP)			
	Dial-Up Networking (DUN) ^{1,2}			
	Generic Object Exchange Profile (GOEP) ^{1,2}			
	Object Push Profile (OPP) ^{1,2}			
	File Transfer Profile (FTP)			
	Synchronization Profile (SYNC)			
	Hard Copy Cable Replacement (HCRP) ^{1,2}			
	Personal Area Networking Profile (PAN) ^{1,2}			
	Human Interface Device Profile (HID) ^{1,2}			
	FAX Profile (FAX)			
	Basic Imaging Profile (BIP) ²			
	Headset Profile (HSP)			

Technical Specifications – Networking

		Hands Free Profile (HFP) Advanced Audio Distribution Profile (A2DP)
--	--	--

Technical Specifications – Input/Output Devices

INPUT / OUTPUT DEVICES

HP Wired Desktop 320K Keyboard	
Dimensions (H x L x W)	16.77 x 4.36 x 0.65 in (426.2 x 110.9 x 16.7 mm)
Weight	14.57 oz (413g)
Cable length	1800 mm
Keys	104, 105, 107, 109 layout (depending on country)
Operating voltage	5V
Power consumption	50mA - 100 mA
Interface	USB
Switch life	10M
Switch type	Plunger
Operating temperature	10°C to 50°C
Non-operating temperature	30°C to 65°C
Operating humidity	10°C to 90°C
Non-operating humidity	0°C to 90°C
Sustainability	Greater than 50% post-consumer recycled plastic content and low halogen PCBA
System required	Windows 10 (64 and 32 bit), (UWP) RS4 and above
Approvals	FCC ICES CULus CE GS EAC Ukraine India BIS KCC RCM BSMI VCCI
Kit contents	Keyboard, QSP, Warranty Card, Product Notice

Technical Specifications – Input/Output Devices

HP USB Business Slim USB Keyboard		
Physical characteristics	Keys	104, 105, 106, 107, 109 layout (depending upon country)
	Dimensions (L x W x H)	171.97 x 68.35 x 8.27 in (436.8± 1.5 x 137.6± 1.0 x 21.0± 1.0 cm)
	Weight	1.32 lb (0.6± 0.08 kg)
Electrical	Operating voltage	+ 4.4 – 5.25VDC
	Power consumption	50-mA maximum (with 5 VDC power supplied and three LEDs ON)
	System interface	USB Type A plug connector
	ESD	Contact Discharge: 2, 4,6,8KV Air Discharge: 2, 4, 8,10,12.5KV
	EMI - RFI	Conforms to FCC rules for a Class B computing device
	Microsoft® PC 99 - 2001	Functionally compliant
Mechanical	Keycaps	Low-profile design
	Switch actuation	60±12.5g nominal peak force with tactile feedback
	Switch life	10 million keystrokes (Life tester)
	Switch type	Contamination-resistant switch membrane
	Key-leveling mechanisms	For all double-wide and greater-length keys
	Cable length	6 ft (1.8 m)
	Microsoft PC 99 - 2001	Mechanically compliant
Environmental	Acoustics	43-dBA maximum sound pressure level
	Operating temperature	50° to 122° F (10° to 50° C)
	Non-operating temperature	-22° to 140° F (-30° to 60° C)
	Operating humidity	10% to 90% (non-condensing at ambient)
	Non-operating humidity	20% to 80% (non-condensing at ambient)

Technical Specifications – Input/Output Devices

	Operating shock	40 g, six surfaces
	Non-operating shock	80 g, six surfaces
	Operating vibration	2-g peak acceleration
	Non-operating vibration	4-g peak acceleration
	Drop (out of box)	26 in (66 cm) on carpet, six-drop sequence
	Drop (in box)	30 in (76.2 cm) on concrete, 16-drop sequence
Approvals	UL, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick, KC	
Ergonomic compliance	ANSI HFS 100, ISO 9241-4, and TUVGS	
Kit contents	Keyboard	Installation Guide
	Warranty Card	Safety and Comfort Guide

HP Wired Desktop 320M Mouse	
Dimensions (H x L x W)	4.08 x 2.49 x 1.39 in (103.8 x 63.4 x 35.5 mm)
Weight	2.67 oz (75.8 g)
Dots per inch (DPI)	1000
Tracking type	Optical Red Sensor
Connectivity	USB
Cable length	1800 mm
System requirements	Windows 10 (64 bit and 32 bit) (UWP) RS4 and above
Approvals	FCC ICES CULus CE GS EAC Ukraine India BIS KCC RCM BSMI VCCI
Sustainability	Low halogen PCBA.
Kit contents	Mouse, QSP, Warranty Card, Product Notice

Technical Specifications – Input/Output Devices

HP USB Mouse		
Dimensions (H x L x W)	2.5 x 4.5 x 1.5 in (63.5 x 114.3 x 38.1 mm)	
Weight	0.22 lb (99.79 g)	
Color	Black	
Connector	USB	
Mechanical	Resolution	800 DPI sensitivity
	Buttons	Two primary buttons and clickable scroll wheel

After Market Options

AFTER MARKET OPTIONS

Memory	Part Number
HP 4GB DDR4-2400 SODIMM	Z9H55AA
HP 8GB DDR4-2400 SODIMM	Z9H56AA
HP 16GB DDR4-2400 SODIMM	Z9H53AA
HP 16GB DDR4-2666 SODIMM	3TK84AA
HP 4GB DDR4-2666 SODIMM	3TK86AA
HP 8GB DDR4-2666 SODIMM	3TK88AA
Storage	
HP 256GB SATA TLC Non-SED Solid State Drive	P1N68AA
HP PCIe NVME TLC 256GB SSD M.2 Drive	1CA51AA
Other	
HP ODD Module	X8U73AA
HP VESA Plate (not recommend under the table)	X8U74AA
HP (Bulk) Elite Slice Sata Storage Drive Screws Kit	Z5U26AA
HP DisplayPort Cable Kit	VN567AA
HP Desktop Mini 90W Power Supply Kit	L4R65AA
Pointing Devices	
HP USB Mouse	QY777AA
HP 1000dpi Laser Mouse	QY778AT
HP Desktop Wired 320M Mouse	9VA80AA
Keyboards	
HP USB Business Slim Keyboard	N3R87AA
HP Wireless Business Slim Keyboard and Mouse	N3R88AA
HP Desktop Wired 320K Keyboard	9SR37AA

Summary of Changes

Date of change:	Version History:		Description of change:
June 21, 2018	V1 to V2	Update	Typology requirements added to Operating system section
October 2, 2018	V2 to V3	Update	Wireless display module added
November 9, 2018	V3 to V4	Update	General re-arrangement
January 16, 2018	V4 to V5	Update	Audio codec corrected
May 15, 2019	V5 to V6	Update	Name changed to HP Elite Slice G2 with Microsoft Teams Rooms
July 1, 2019	V6 to V7	Update	Operating Systems and Topology requirements section updated
July 18, 2019	V7 to V8	Update	Footnote general re-arrange At a glance updated CPU 7400T removed and 7700T added WLAN removed CoRC image updated
August 26, 2019	V8 to V9	Update	Software and security sections as CoRC image and EPEAT references updated
August 28, 2019	V9 to V10	Update	Call out n.2 in page 1 updated
December 9, 2019	V10 to V11	Update	Microphones added to the call outs section image in page 2
February 11, 2020	V11 to V12	Update	Supported Display Resolutions and Refresh Rates table
February 26, 2020	V12 to V13	Update	Pages 1 and 10 images updated
May 27, 2020	V13 to V14	Update	Intel® Dual Band Wireless-AC 7265 added and Dimensions and weight updated
June 15, 2020	V14 to V15	Removed	Active Health (black box flight recorder) from SECURITY MANAGEMENT section
July 16, 2020	V15 to V16	Update	EPEAT® statement and disclaimer updated
October 10, 2020	V16 to V17	Update	Energy Star/EPEAT references removed 16 GB DDR4-2400 SODIMM (2x8GB) (Dual Channel) removed from Memory section Cable Lengths added to Port Cover features Microphone pickup range and 360 degree quad array (4 speakers) specs added to High Definition Audio section HP Desktop Mini 90W Power Supply Kit added to AMO section
April 21, 2021	V17 to V18	Update	Storage section corrections / HP 320k Keyboard and mouse added to document

© Copyright 2021 HP Development Company, L.P. All rights reserved.

The information contained herein is subject to change without notice. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Bluetooth® is a trademark of its proprietor, used by HP, Inc. under license. USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum Intel, Core and vPro are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.