Overview

HP 245 14 inch G9 Notebook PC

1. Internal Dual Digital Microphone
2. Webcam LED
3. Webcam

4. Touchpad
5. Touchpad Buttons

Left

6. Power Indicator LED
7. Hard Drive Indicator LED
8. SuperSpeed USB Type-C® 5Gbps signaling rate1 (Data Transfer Only) [1]
9. Mini Security Lock Slot (Lock sold in select countries)
10. Power Button

1. SuperSpeed USB 20Gbps is not available

QuickSpecs

Overview

1. Power Connector
2. RJ-45 / Ethernet Port
3. HDMI Port (Cable Sold Separately)

1. SuperSpeed USB 20Gbps is not available.

Right

4. SuperSpeed USB Type-A 5Gbps signaling rate[1] port
5. SuperSpeed USB Type-A 5Gbps signaling rate[1] port
6. Audio Combo Jack
7. Fingerprint Reader (Select Models)

QuickSpecs

Overview

AT A GLANCE

- Preinstalled with Windows 11 Pro, Window Home or FreeDOS
- Choice of powerful AMD Ryzen™ APU processors
- Choice of 35.56 cm (14") diagonal HD and Ultra Wide Viewing Angle FHD 400 nit display
- Fast and dual channel DDR4 SODIMM memory up to 32 GB
- Optimize your video calls with an HD camera and temporal noise reduction that adjusts the lighting to your environment.
- Enhanced security features including discrete TPM 2.0 (select model) and optional Fingerprint reader
- Weight with basic configurations starting at 3.25 lb / 1.47 kg
- Choice of Solid State Drives up to 1 TB, Hard Drive up to 1 TB and Dual storage is the optional on select model
- Support wireless options for connectivity on the go including gigabit-speed up to Wi-Fi® 6
- Supports fast charging (50% in 45 minutes) with no impact on battery recharge cycles
- Battery life up to 10 hours 30 mins
- Full size, optional backlit keyboard and clickpad with Precision Touchpad Supported certified

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

Technical Specifications

PRODUCT NAME

HP 245 14 inch G9 Notebook PC

OPERATING SYSTEM

Preinstalled   Windows 11 Pro [1]
Windows 11 Pro Education[1]
Windows 11 Home – HP recommends Windows 11 Pro for business [1]
Windows 11 Home Single Language – HP recommends Windows 11 Pro for business [1,2]
Windows 11 Home Education – HP recommends Windows 11 Pro for business [1]
FreeDOS

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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.

2. This computer is preinstalled with Windows 11 Home Single Language.

PROCESSORS

AMD Ryzen™ 7 5825U APU with Radeon™ (2.00 GHz base frequency, up to Standard, 16 MB L3 cache, 8 cores) [3,4,5]
AMD Ryzen™ 5 5625U APU with Radeon™ (2.30 GHz base frequency, up to Standard, 16 MB L3 cache, 6 cores) [3,4,5]
AMD Ryzen™ 3 5425U APU with Radeon™ (2.70 GHz base frequency, up to Standard, 8 MB L3 cache, 4 cores) [3,4,5]

Processor Family
AMD Ryzen™ 7 Mobile Processors[6]
AMD Ryzen™ 5 Mobile Processors[6]
AMD Ryzen™ 3 Mobile Processors[6]

3. 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. AMD's numbering is not a measurement of clock speed.

4. Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

5. Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.

6. In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 drivers on http://www.support.hp.com.

QuickSpecs

Technical Specifications

CHIPSET

Chipset is integrated with processor.

GRAPHICS

Integrated
AMD Radeon™ Graphics

Supports
Support HD decode, DX12, HDMI 1.4b [7]

7. HD content required to view HD images.

DISPLAY

Non-Touch
35.6 cm (14") diagonal FHD UWVA eDP + PSR anti-glare Low Blue Light, narrow bezel bent, 400 nits, 100% sRGB (1920 x 1080) [7,8,9]
35.6 cm (14") diagonal FHD UWVA edp anti-glare, narrow bezel bent, 250 nits, 45% NTSC (1920x1080) [7,8,9]
35.6 cm (14") diagonal HD SVA eDP anti-glare, narrow bezel bent, 250 nits, 45% NTSC (1366 x 768) [7,8,9]

HDMI
Port supports resolutions up to 1920 x 1080 external resolution @60 Hz

Display Size
14" diagonal
35.6 cm (14") diagonal

7. HD content required to view HD images.
8. Sold separately or as an optional feature.
9.Resolutions are dependent upon monitor capability, and resolution and color depth settings.

STORAGE AND DRIVES

Primary Storage
1 TB 5400 rpm SATA [10]
500 GB 7200 rpm SATA [10]
500 GB 5400 rpm SATA [10]

Primary M.2 Storage
128 GB PCIe® NVMe™ M.2 SSD [10]
256 GB PCIe® NVMe™ M.2 SSD [10]
512 GB PCIe® NVMe™ M.2 SSD [10]
1 TB PCIe® NVMe™ M.2 SSD [10]

Dual Storage
128 GB M.2 PCIe TLC Solid State Drive; 1TB 5400 rpm SATA [10]

Technical Specifications

256 GB PCIe Value Solid State Drive; 1TB 5400 rpm SATA [10]

10. For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 11) is reserved for system recovery software.

MEMORY

Maximum Memory
32 GB DDR4-3200 SDRAM [11,12]

Memory
32 GB DDR4-3200 SDRAM (2x16GB) [11,12]
16 GB DDR4-3200 SDRAM (1x16GB) [11,12]
16 GB DDR4-3200 SDRAM (2x8GB) [11,12]
12 GB DDR4-3200 SDRAM (1x8GB+1x4GB) [11,12]
8 GB DDR4-3200 SDRAM (1x8GB) [11,12]
8 GB DDR4-3200 SDRAM (2x4GB) [11,12]
4 GB DDR4-3200 SDRAM (1x4GB) [11,12]

Memory Slots
2 SODIMM
All slots are customer non-accessible / non-upgradeable
Supports Dual Channel Memory

11. All slots are non-accessible / non-upgradeable.
12. Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.

Technical Specifications

NETWORKING/COMMUNICATIONS

WLAN

Realtek RTL8822CE 802.11ac 2x2 Wi-Fi® + Bluetooth® 5[13]

Realtek RTL8821CE 802.11a/b/g/n/ac (1x1) Wi-Fi® with Bluetooth® 4.2 Combo[13]

Realtek RTL8852BE 802.11ax 2x2 and Bluetooth® 5.2 combo[13]

Miracast

Compatible with Miracast-certified devices (For Win11) [14]

Ethernet

Integrated 10/100/1000 GbE [15]

13. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs.
14. Miracast is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.
15. The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

AUDIO/MULTIMEDIA

Audio

2 Integrated stereo speakers

Integrated microphone

Speaker Power

2W/4ohm

Camera

720p HD camera with Temporal Noise Reduction[7,8]

7. HD content required to view HD images.
8. Sold separately or as an optional feature.

Technical Specifications

KEYBOARDS/POINTING DEVICES/BUTTONS & FUNCTION KEYS

Keyboard

Full Size Textured island-style Keyboard and optional Backlit [8]

Pointing Device

Touchpad with multi-touch gesture support (PTP certified)

Function Keys

F1 - Open " How to get help in Windows 11" webpage

F2 - Brightness Down

F3 - Brightness Up

F4 - Display Switching

F5 - Blank

F6 - Mute

F7 - Volume Down

F8 -Volume Up

F9 - Previous

F10 - Play/Pause

F11 - Next

F12 - Airplane mode

8. Sold separately or as an optional feature.

Technical Specifications

SOFTWARE AND SECURITY

Software
MYOffice
MyHP
HP QuickDrop[16]
HP Privacy Settings
HP SUPPORT ASSISTANT [17]
HP Audio Switch
HP Connection Optimizer
HP PC Hardware Diagnostics
HP Smart Health
HP Smart[18]

Manageability Features
Touchpoint Customizer for Consumer

Security Management
McAfee Security (30 days free trial as default)[19]
Express VPN (30 days free trial)
LastPass password manager
Discrete TPM 2.0 (select model) / Firmware TPM 2.0 [20]
Fingerprint Reader [21]

16. HP Quick Drop requires Internet access and Windows 10 and higher PC preinstalled with HP QuickDrop app and either an Android device (phone or tablet) running Android 7 or higher with the Android HP QuickDrop app, and /or an iOS device (phone or tablet) running iOS 12 or higher with the iOS HP QuickDrop app.
17.HP Support Assistant requires Windows and Internet access.
18. HP Smart Support automatically collects the telemetry necessary upon initial boot of the product to deliver device-level configuration data and health insights and is available preinstalled on select products, thru HP Factory Configuration Services; or it can be downloaded. For more information about how to enable HP Smart Support or for download, please visit http://www.hp.com/smart-support.
19. 30-day McAfee® LiveSafe™ trial included. Internet access required and not included. Subscription required after expiration. See http://www.McAfee.com for more details.
20. Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).
21. HP Fingerprint sensor is an optional feature that must be configured at purchase.

Technical Specifications

POWER

Power Supply
HP Smart 65 W EM External AC power adapter [22]
HP Smart 45 W External AC power adapter[22]

Battery
HP Long Life 3-cell, 41 Wh Li-ion Polymer [23,24]

Power Cord
1M (3.28 feet) length power cord

Battery Life
Up to 10 hours 30 mins [25]

Battery Weight
0.18 kg
0.39 lb

22. Availability may vary by country.
23. Battery is internal and not replaceable by customer. Serviceable by warranty.
24. Actual battery Watt-hours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors.
25. Windows MM18 battery life will vary depending on various factors including product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See http://www.bapco.com for additional details.

WEIGHTS & DIMENSIONS

Product Weight
Starting at 3.25 lb [26]
Starting at 1.47 kg [26]

Product Dimensions (W x D x H)
12.76 x 8.89 x 0.78 in
32.4 x 22.59 x 1.99 cm

26. Weight will vary by configuration. Does not include power adapter.

Technical Specifications

PORTS/SLOTS

Ports

2 SuperSpeed USB Type-A 5Gbps signaling rate[27]

1 SuperSpeed USB Type-C® 5Gbps signaling rate (Data Transfer Only)[27]

1 HDMI v1.4b [28]

1 RJ-45

1 AC Power

1 Headphone/microphone combo jack

27. SuperSpeed USB 20Gbps is not available.

28. HDMI cable sold separately.

Technical Specifications

SERVICE AND SUPPORT

HP Services offers 1-year or 3-year limited warranties and 90 day software limited warranty options depending on country. Batteries have a default one year limited warranty except for Long Life batteries which will have same 1-year or 3-year limited warranty as the platform. Refer to http://www.hp.com/support/batterywarranty/ for additional battery information. On-site service and extended coverage is also available. HP Care Pack Services are optional extended service contracts that go beyond the standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: http://www.hp.com/go/cpc.[29]

29. HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit http://www.hp.com/go/cpc. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

Technical Specifications

SYSTEM UNIT

Stand-Alone Power Requirements (AC Power)

Nominal Operating Voltage	19.5 V
Average Operating Power	5.6 W
Integrated graphics	Yes
Discrete Graphics	N/A
Max Operating Power	UMA < 45W

Temperature

Operating	32° to 95° F (0° to 35° C) (not writing optical) 41° to 95° F (5° to 35° C) (writing optical)
Non-operating	-4° to 140° F (-20° to 60° C)

Relative Humidity

Operating	10% to 90%, non-condensing
Non-operating	5% to 95%

Shock

Operating	40 G, 2 ms duration, half-sine
Non-operating	240 G, 2 ms duration, half-sine

Random Vibration

Operating	1.043 grams
Non-operating	3.5 grams

Altitude (unpressurized)

Operating	-15 m to 3048 m (-50 ft to 10000 ft)
Non-operating	-15 m to 12192 m (-50 ft to 40000 ft)

Planned Industry Standard Certifications

Regulatory Model Number	TPN-I135
UL	Yes
CSA	No
FCC Compliance	Yes
ENERGY STAR®	Yes[30]
EPEAT®	Yes, EPEAT® Silver in the United States [31]
ICES	Yes
Australia /	Yes
NZ A-Tick Compliance	Yes
CCC	Yes
Japan VCCI Compliance	Yes
KC	Yes
BSMI	Yes
CE Marking Compliance	Yes
CU/EAC	Yes
CIT	N/A
Saudi Arabian Compliance (ICCP)	Yes
SABS	Yes
UKRSERTCOMPUTER	Yes

QuickSpecs

Technical Specifications

30. Configurations of the HP 245 G9 Notebook PC that are ENERGY STAR® qualified are identified as HP 245 G9 Notebook PC ENERGY STAR on HP websites and on http://www.energystar.gov.

31. Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit http://www.epeat.net for more information.

DISPLAYS

Note: All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

1. Actual brightness will be lower with touchscreen or HP Sure View.

Panel LCD 14-in FHD (1920x1080) Anti-Glare WLED UWVA 45percent cg 250nits eDP NWBZ slim		
Outline Dimensions (W x H)	316.170 x 197.980 max.
Active Area	309.37 x 174.02
Weight	<285g max.
Diagonal Size	14.0"
Thickness	3.0mm max.
Interface	eDP 1.2
Surface Treatment	Anti-glare (AG)
Touch Enabled	No
Contrast Ratio	600:1 (typ)
Refresh Rate	60Hz
Brightness	250nit typ.
Pixel Resolution	1920 x 1080 (FHD)
Format	WLED
Backlight	RGB
Color Gamut Coverage	NTSC 45%
Color Depth	6bits
Viewing Angle	UWVA 85/85/85/85
Low Blue Light	No
Power Consumption (W, EBL@ 150nits max/ 200nits max)	<2.52W max./ No define

Panel LCD 14-in HD (1366x768) Anti-Glare WLED SVA 45percent cg 250nits eDP NWBZ ultraslim		
Outline Dimensions (W x H)	316.200x198.040max. (w/PCB)
Active Area	309.4 x 173.95
Weight	285g Max
Diagonal Size	14"
Thickness	3.0mm max.
Interface	eDP 1.2
Surface Treatment	Anti-Glare
Touch Enabled	No
Contrast Ratio	300:1 (typ)
Refresh Rate	60Hz
Brightness	250nits
Pixel Resolution	1366 x 768 (HD)
Format	WLED
Backlight	RGB

Technical Specifications

Color Gamut Coverage	NTSC 45%
Color Depth	6bits
Viewing Angle	45/45/15/30
Low Blue Light	No
Power Consumption (W, EBL@ 150nits max/ 200nits max)	<2.52W max./ <2.86W max.

14.0 in FHD (1920 x 1080) Anti-Glare UWVA Low Blue Light sRGB NWBZ 400 eDP 1.4+PSR2 100 flat LCD Panel	Outline Dimensions (W x H)	316.170 x 196.880 (max) (w/PCB)
	Active Area	309.370 x 174.020 mm (typ.)
	Weight	295 g (max)
	Diagonal Size	14.0 (inch)
	Thickness	3.0 mm (max)
	Interface	eDP 1.4 (2 lane)
	Surface Treatment	Anti-Glare
	Touch Enabled	No
	Contrast Ratio	1000:1 (typical)
	Refresh Rate	60Hz
	Brightness	400 nits (typ.)
	Pixel Resolution	1920 x 1080 (FHD)
	Format	WLED
	Backlight	RGB
	Color Gamut Coverage	sRGB 100%
	Color Depth	[bits/color] 8
	Viewing Angle	UWVA 89/89/89/89
	Low Blue Light	Yes
	Power Consumption (W, EBL@ 150nits max/ 200nits max)	2.1 (max)/ 2.7 (max)

Technical Specifications

STORAGE AND DRIVES

For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 11) is reserved for system recovery software.

HDD 1TB 5400RPM 7mm SATA		
	Drive Weight	0.21 lbs (95 g)
	Rotation speed	5400rpm
	NAND Type	up to 128MB
	Height	0.28 in (7 mm)
	Width	2.75 in (69.85 mm)
	Weight	ATA-8, SATA 3.0
	Interface	600MB/s (Interface)
	Maximum Sequential Read	Single Track: 1.5ms
		Agerage: 13ms
		Maximum: 32ms
	Maximum Sequential Write	1,953,525,168
	Logical Blocks	0° to 60°C [case temp]
	Operating Temperature	ATA Security
	Features	S.M.A.R.T., NCQ, Ultra DMA

HDD 500GB 5400RPM 7mm SATA		
	Drive Weight	0.21 lbs (95 g)
	Rotation speed	5400rpm
	Cache Buffer	up to 128MB
	NAND Type/Size	N/A
	Height	0.28 in (7 mm)
	Width	2.75 in (69.85 mm)
	Interface	ATA-8, SATA 3.0
	Transfer Rate	600MB/s (Interface)
	Seek Time	Single Track: 1.5ms
		Agerage: 13ms
		Maximum: 32ms
	Logical Blocks	976,773,168
	Operating Temperature	0° to 60°C [case temp]
	Security Features	ATA Security
	Features	S.M.A.R.T., NCQ, Ultra DMA

HDD 500GB 7200RPM 7mm SATA		
	Drive Weight	0.21 lbs (95 g)
	Rotation speed	7200rpm
	Cache Buffer	up to 128MB
	Height	0.28 in (7 mm)
	Width	2.75 in (69.85 mm)
	Interface	ATA-8, SATA 3.0
	Transfer Rate	600MB/s (Interface)
	Seek Time	Single Track: 1.5ms
		Agerage: 13ms
		Maximum: 32ms

Technical Specifications

	Logical Blocks	976,773,168
	Operating Temperature	0° to 60°C [case temp]
	Security Features	ATA Security
	Features	S.M.A.R.T., NCQ, Ultra DMA

64GB eMMC 5.x	**Form Factor**	eMMC
	Capacity	64GB
	NAND Type	MLC/TLC
	Height	1.4mm
	Width	11.5x13mm
	Weight	0.2g
	Interface	MMC protocal
	Maximum Sequential Read	Update to 250MB/s
	Maximum Sequential Write	Update to 70MB/s
	Logical Blocks	64GB(62,537,072,640 Bytes)
	Operating Temperature	0 to 70
	Features	HS400

SSD 128GB 2280 PCIe-3x2 Three Layer Cell	**Form Factor**	M.2 2280
	Capacity	128GB
	NAND Type	TLC
	Height	0.09 in (2.3 mm)
	Width	0.87 in (22 mm)
	Interface	PCIe NVMe Gen3X4
	Maximum Sequential Read	up to 1600MB/s ±20%
	Maximum Sequential Write	up to 900MB/s ±20%
	Logical Blocks	250,069,680
	Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
	Features	Pyrite

SSD 1TB 2280 PCIe NVMe Value	**Form Factor**	M.2 2280
	Capacity	1TB
	NAND Type	Value
	Height	0.09 in (2.3 mm)
	Width	0.87 in (22 mm)
	Interface	PCIe NVMe
	Maximum Sequential Read	up to 2300MB/s ±20%
	Maximum Sequential Write	up to 2000MB/s ±20%
	Logical Blocks	2,000,409,264
	Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
	Features	Pyrite

Technical Specifications

SSD 256GB 2280 PCIe NVMe Value

Form Factor	M.2 2280
Capacity	256GB
NAND Type	Value
Height	0.09 in (2.3 mm)
Width	0.87 in (22 mm)
Weight	0.02 lb (10 g)
Interface	PCIe NVMe
Maximum Sequential Read	up to 2300MB/s ±20%
Maximum Sequential Write	up to 1280MB/s ±20%
Logical Blocks	500,118,192
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
Features	Pyrite

SSD 512GB 2280 PCIe NVMe Value

Form Factor	M.2 2280
Capacity	512GB
NAND Type	Value
Height	0.09 in (2.3 mm)
Width	0.87 in (22 mm)
Interface	PCIe NVMe
Maximum Sequential Read	up to 2300MB/s ±20%
Maximum Sequential Write	up to 1400MB/s ±20%
Logical Blocks	1,000,215,216
Operating Temperature	32° to 158°F (0° to 70°C) [ambient temp]
Features	Pyrite

QuickSpecs

Technical Specifications

NETWORKING/COMMUNICATIONS

Realtek 802.11a/b/g/n/ac (1x1) Wi-Fi® and Bluetooth® 4.2 Combo [1]	Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v
	Interoperability	Wi-Fi certified modules

	Frequency Band	•802.11b/g/n
		  2.402 – 2.482 GHz
		•802.11a/n/ac
		  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	• 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: max 150Mbps • 802.11ac : max 433.3Mbps
	Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
	Security[3]	• IEEE and WiFi certified 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 • WPA3 certification • IEEE 802.11i • WAPI
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power[2]	• 802.11b : +14dBm minimum • 802.11g : +12dBm minimum • 802.11a : +12dBm minimum • 802.11n HT20(2.4GHz) : +12dBm minimum • 802.11n HT40(2.4GHz) : +12dBm minimum • 802.11n HT20(5GHz) : +10dBm minimum • 802.11n HT40(5GHz) : +10dBm minimum • 802.11ac VHT80(5GHz) : +10dBm minimum
	Power Consumption	• Transmit mode 2.0 W • Receive mode 1.6 W • Idle mode (PSP) 180 mW (WLAN Associated)

Technical Specifications

	• Idle mode 50 mW (WLAN unassociated) • Connected Standby 10mW • Radio disabled 8 mW	
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode	
Receiver Sensitivity[4]	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. One embedded dual band 2.4/5 GHz antenna is provided to the card to support WLAN 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 OFF − 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.

1. Wi-Fi 5 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 5 (802.11 ac) is backwards compatible with prior 802.11 specs.
2. The FCC has declared as of September 1, 2014 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.
3. 1. Check latest software/driver release for updates on supported security features.
4. 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).

Technical Specifications

Realtek RTL8852BE 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2 (802.11ax 2x2, supporting gigabit data rate) [1]

Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11ax IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v
Interoperability	Wi-Fi certified modules
Frequency Band	•802.11b/g/n/ax 2.402 – 2.482 GHz •802.11a/n/ac/ax 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	•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: max 300Mbps •802.11ac: max 866.7Mbps • 802.11ax: max 1201Mbps
Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM, 1024QAM
Security [3]	•IEEE and WiFi certified 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 •WPA3 certification •IEEE 802.11i •WAPI
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
Roaming	IEEE 802.11 compliant roaming between access points
Output Power [2]	• 802.11b: +18.5dBm minimum • 802.11g: +17.5dBm minimum • 802.11a: +18.5dBm minimum • 802.11n HT20(2.4GHz): +15.5dBm minimum • 802.11n HT40(2.4GHz): +14.5dBm minimum • 802.11n HT20(5GHz): +15.5dBm minimum • 802.11n HT40(5GHz): +14.5dBm minimum • 802.11ac VHT80(5GHz): +11.5dBm minimum • 802.11ax HE40(2.4GHz): +10dBm minimum • 802.11ax HE80(5GHz): +10dBm minimum
Power Consumption	•Transmit mode:2.5 W •Receive mode:2 W

Technical Specifications

	•Idle mode (PSP)180 mW(WLAN Associated) •Idle mode:50 mW(WLAN unassociated) •Connected Standby/Modern Standby: 10mW •Radio disabled: 8 mW	
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode	
Receiver Sensitivity[4]	•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 •802.11ax, MCS11(HE40): -57dBm maximum •802.11ax, MCS11(HE80): -54dBm 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	1. Type 2230: 2.3 x 22.0 x 30.0 mm 2. Type 1216: 1.67 x 12.0 x 16.0 mm	
Weight	1. Type 2230: 2.8g 2. Type 126: 1.3g	
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 Off – Radio ON	

HP Integrated Module with Bluetooth 4.0/4.1/4.2/5.0/5.1/5.2 Wireless Technology

Bluetooth Specification	4.0/4.1/4.2/5.0/5.1/5.2 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.

1. Wi-Fi 6 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs.
2. The FCC has declared as of September 1, 2014 products that utilize passive scanning on channel 12/13 and are capable of

Technical Specifications

transmitting must fully comply with requirements of 15.247 or otherwise disable those channels.
3. Check latest software/driver release for updates on supported security features.
4. 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).

Realtek RTL8822CE 802.11ac 2x2 Wi-Fi® + Bluetooth® 5	**Wireless LAN Standards**	IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11n IEEE 802.11ac IEEE 802.11d IEEE 802.11e IEEE 802.11h IEEE 802.11i IEEE 802.11k IEEE 802.11r IEEE 802.11v
	Interoperability	Wi-Fi certified modules
	Frequency Band	•802.11b/g/n 2.402 – 2.482 GHz •802.11a/n/ac 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	• 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: max 300Mbps • 802.11ac : max 866.7Mbps
	Modulation	Direct Sequence Spread Spectrum BPSK, QPSK, CCK, 16-QAM, 64-QAM, 256-QAM
	Security3	• IEEE and WiFi certified 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 • WPA3 certification • IEEE 802.11i • WAPI
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points
	Output Power2	• 802.11b : +18.5dBm minimum • 802.11g : +17.5dBm minimum • 802.11a : +18.5dBm minimum • 802.11n HT20(2.4GHz) : +15.5dBm minimum • 802.11n HT40(2.4GHz) : +14.5dBm minimum • 802.11n HT20(5GHz) : +15.5dBm minimum • 802.11n HT40(5GHz) : +14.5dBm minimum • 802.11ac VHT80(5GHz) : +11.5dBm minimum

Technical Specifications

Power Consumption	• 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/Modern Standby: 10mW • Radio disabled: 8 mW
Power Management	ACPI and PCI Express compliant power management 802.11 compliant power saving mode
Receiver Sensitivity4	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	1. Type 2230 : 2.3 x 22.0 x 30.0 mm 2. Type 1216: 1.67 x 12.0 x 16.0 mm
Weight	1. Type 2230 : 2.8g 2. Type 126: 1.3g
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 Off – Radio ON	

HP Integrated Module with Bluetooth 4.0/4.1/4.2/5.0 Wireless Technology

Bluetooth Specification	4.0/4.1/4.2/5.0 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.

1. Wi-Fi 5 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 5 (802.11 ac) is backwards compatible with prior 802.11 specs.

Technical Specifications

2. The FCC has declared as of September 1, 2014 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.
3. Check latest software/driver release for updates on supported security features.
4. 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).

Realtek RTK8111HSH 10/100/1000 Integrated NIC	Ethernet Features	10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) 1000 Mbit/s operation (1000BASE-T; IEEE 802.3ab; IEEE 8023 clauses 40) Auto-Negotiation (Automatic Speed Selection) Full Duplex Operation at all Speeds, Half Duplex operation at 10 and 100 Mbit/s
	Power Management	ACPI compliant – multiple power modes Situation-sensitive features reduce power consumption Advanced link down power saving for reducing link down power consumption
	Performance Features	TCP/IP/UDP Checksum Offload (configurable) Protocol Offload (ARP & NS) Large send offload and Giant send offload Receiving Side Scaling Jumbo Frame 9K
	Manageability	Wake-on-LAN from modern standby or sleep state (Magic Packet and Microsoft Wake-Up Frame); Wake-on-LAN from off (Magic Packet only) (MSC is supported on selected model) PXE 2.1 Remote Boot Statistics Gathering (SNMP MIB II, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite Virtual Cable Doctor for Ethernet cable status

QuickSpecs

Technical Specifications

POWER

1. Actual battery Watt-hours (Wh) will vary from design capacity. Battery capacity will naturally decrease with shelf life, time, usage, environment, temperature, system configuration, loaded apps, features, power management settings and other factors.

HP 65W Smart AC adapter	Dimensions (H x W x D)	90x51x28.5mm	
	Weight	230g +/- 10g (Not including power cord. Power cord varies by country.)	
	Input	100 to 240 VAC	
		Input Efficiency	88.0 % at 115 VAC and 89.0 % at 230VAC
		Input frequency range	48 ~ 63 Hz
		Input AC current	Max. 1.7 A at 90 VAC
	Output	Output power	65W
		DC output	19.5V
		Hold-up time	5ms at 115 Vac input
		Output current limit	<11.0A Over voltage protection- 29V max automatic shutdown
	Connector	4.5mm Barrel Type, 3 pin/grounded, mates with interchangeable cords	
	Environmental Design	Operating temperature	32°F to 95°F (0° to 35°C)
		Non-operating (storage) temperature	-4°F to 185°F (-20° to 85°C)
		Altitude	1 to 16,400 ft (0 to 5,000m)
		Humidity	20% to 95%
		Storage Humidity	10% to 95%
	EMI and Safety Certifications	Eg: *CE Mark - full compliance with LVD and EMC directives * Worldwide safety standards - IEC60950-1 and/or IEC62368-1, EN60950-1 and/or EN62368-1, UL60950-1 and/or UL62368-1 , Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55032 Class B, FCC Class B, CISPR32 Class B, CCC, NOM-001 NYCE. * MTBF - over 200,000 hours at 25°C ambient condition.	

HP 45W Smart AC adapter	Dimensions	95x40x26.5mm	
	Weight	200g +/- 10g (Not including power cord. Power cord varies by country.)	
	Input	100 to 240 VAC	
		Input Efficiency	88.0 % at 115 VAC and 89.0 % at 230VAC
		Input frequency range	48 ~ 63 Hz
		Input AC current	Max. 1.4 A at 90 VA
	Output	Output power	45W
		DC output	19.5V
		Hold-up time	5ms at 115 Vac input
		Output current limit	<8.0A Over voltage protection- 29V max automatic shutdown
	Connector	4.5mm Barrel Type, 3 pin/grounded, mates with interchangeable cords	
	Environmental Design	Operating temperature	32°F to 95°F (0°to 35°C)
		Non-operating (storage) temperature	-4°F to 185°F (-20°to 85°C)
		Altitude	1 to 16,400 ft (0 to 5,000m)

Technical Specifications

		Humidity	20% to 95%
		Storage Humidity	10% to 95%
	EMI and Safety Certifications	Eg: *CE Mark - full compliance with LVD and EMC directives * Worldwide safety standards - IEC60950-1 and/or IEC62368-1, EN60950-1 and/or EN62368-1, UL60950-1 and/or UL62368-1 , Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55032 Class B, FCC Class B, CISPR32 Class B, CCC, NOM-001 NYCE. * MTBF - over 200,000 hours at 25°C ambient condition.	

HP 65W EM Smart AC adapter	Dimensions	102x55x30mm	
	Weight	250g +/- 10g (Not including power cord. Power cord varies by country.)	
	Input	100 to 240 VAC	
		Input Efficiency	88.0 % at 115 VAC and 89.0 % at 230VAC
		Input frequency range	48 ~ 63 Hz
		Input AC current	Max. 1.7 A at 90 VAC
	Output	Output power	65W
		DC output	19.5V
		Hold-up time	5ms at 115 Vac input
		Output current limit	<11.0A Over voltage protection- 29V max automatic shutdown
	Connector	4.5mm Barrel Type, 3 pin/grounded, mates with interchangeable cords	
	Environmental Design	Operating temperature	32ºFto 95ºF (0ºto 35ºC)
		Non-operating (storage) temperature	-4ºFto 185ºF (-20ºto 85ºC)
		Altitude	1 to 16,400 ft (0 to 5,000m)
		Humidity	20% to 95
		Storage Humidity	10% to 95%
	EMI and Safety Certifications	Eg: *CE Mark - full compliance with LVD and EMC directives * Worldwide safety standards - IEC60950-1 and/or IEC62368-1, EN60950-1 and/or EN62368-1, UL60950-1 and/or UL62368-1 , Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55032 Class B, FCC Class B, CISPR32 Class B, CCC, NOM-001 NYCE. * MTBF - over 200,000 hours at 25°C ambient condition.	

Technical Specifications

HP 3-cell Long Life Li-Ion (41 Wh[1])

Dimensions (H x W x L)	6.0 x 186.85 x 90.2 mm (0.23 x 7.29 x 3.52 inch)
Weight	0.175 Kg (0.385 lb)
Cells/Type	3cell lithium-Ion Polymer cell 515974
Energy	
Voltage	11.34V/11.28V
Amp-hour capacity	3.62Ah/3.635Ah
Watt-hour capacity	48Wh
Temperature	
Operating (Charging)	32˚ to 113˚ F (0˚ to 45˚ C)
Operating (Discharging)	14˚ to 122˚ F (-10˚ to 60˚ C)
Fuel Gauge LED	N/A
Warranty	1-year
Optional Travel Battery Available	No

Technical Specifications

AUDIO

HD Stereo Codec	Realtek ALC3247
Audio I/O Ports	One Headset Combo-Jack connector support CTIA spec.
Internal Speaker Amplifier	2W class D stereo amplifier for the internal speaker only. External speakers must be powered.
Multi-streaming Capable	Playback multi-streaming can be enabled in the audio control panel to allow independent audio streams to be sent to/from the Combo jack or integrated speaker.
Sampling	Independent sampling rates for DAC's and ADC's; supports resolutions from 16 to 24-bit; 44.1 kHz to 48 kHz for DAC and ADC.
Wavetable Syntheses	Yes - Uses OS soft wavetable
Analog Audio	Yes.
# of Channels on Line-Out	0
Internal Speaker	Yes

FINGERPRINT READER

Sensor vendor	Elan eFSA80ST touch sensor
Sensor type	Capacitive
DPI resolution	508 DPI
Scan area	80 x 80 pixels
False Rejection Rate	FRR (False Reject Rate) / FAR (False Acceptance Rate): FRR ~ 2% @ 1:50K FAR
False Acceptance Rate	
Mobile Voltage Operation	2.65V to 3.6V
Operating Temperature	32° to 95° F (0° to 35° C)
Current Consumption Image	50mA peak
Low Latency Wait For Finger	<900 uA
Capture Rate	20cm/sec
ESD Resistance	IEC 61000-4-2 (+15KV)
Detection Matrix	508 dpi / 4x4mm sensor area

COUNTRY OF ORIGIN

China

QuickSpecs

Options and Accessories (sold separately and availability may vary by country)

Category	Description	Part Number
Audio/Video	HP Wired USB-A Stereo Headset	428K6AA
	HP Wired 3.5mm Stereo Headset	428K7AA
	HP 500 BT Headset	53L34AA
	HP 365 BT Speaker	567D3AA
Cases	HP Prelude Backpack 15.6	1E7D6AA
	HP Prelude Top Load 15.6	1E7D7AA
	HP Prelude Pro Recycle Backpack	1X644AA
	HP Prelude Pro Recycle Top Load	1X645AA
	HP Prelude Pro Recycle Backpack	1X644AA
	HP Prelude Pro Recycle Top Load	1X645AA
	HP Executive 14.1 Slim Topload	6KD04AA
	HP Executive 15.6 Backpack	6KD07AA
	HP Executive 15.6 Top Load	6KD06AA
	HP Renew Business 14.1" Bag	3E5F9AA
	HP Renew Business 17.3" Backpack	3E2U5AA
	HP Renew Business 14.1" Sleeve	3E2U7AA
	HP Renew Business 15.6" Bag	3E5F8AA
	HP Renew Business 17.3" Bag	3E2U6AA
	HP Renew Business 14.1" Sleeve	3E2U7AA
Hub	HP USB-C to USB-A Hub	Z6A00AA
Adapter	HP USB 3.0 to Gigabit Adapter	N7P47AA
	HP USB-C to RJ45 Adapter	V7W66AA
	HP USB-C to USB 3.0 Adapter	N2Z63AA
	HP USB-C to RJ45 Adapter G2	4Z527AA
	HP USB 3.0 to Gig RJ45 Adapter G2	4Z7Z7AA
Keyboard/Combo	HP 975 USB+BT Dual-Mode Wireless Keyboard	3Z726AA
	HP 655 Wireless Keyboard and Mouse Combo	4R009AA
	HP 225 Wired Mouse and Keyboard Combo	286J4AA
	HP 235 Wireless Mouse and Keyboard Combo	1Y4D0AA
Mouse	HP USB Premium Wireless Mouse	1JR31AA
	HP 435 Multi-Device Wireless Mouse	3B4Q5AA
	HP Creator USB-A+Bluetooth 935 Wireless Mouse Black	1D0K8AA
	HP USB-A+Bluetooth Travel Bluetooth Mouse	6SP30AA
	HP 235 Slim Wireless Mouse	4E407AA
Power	HP 65W Smart AC Adapter	H6Y89AA
Commodity	HP USB DVD-Writer EXT ODD	F2B56AA

Summary of Changes

Date of change	Version History		Description of change
	V1 to V2		