



# OMEN by HP Laptop 17-cb1008nu (2Y9R2EA)

## Overview



### Big rig power. Compact design.

Stunning desktop-grade power in a sleek, portable design keeps you playing your best wherever gaming takes you. Take on the most demanding AAA game titles with NVIDIA® graphics and an Intel® Core™ processor[1]. Immerse yourself in smooth gameplay on a narrow-bezel display with fast refresh rates.



### Desktop-grade performance

Get the power of a desktop in your laptop. With an Intel® Core™ processor[1], NVIDIA® graphics, and accelerated storage, nothing holds you back.



### Designed for power

The OMEN 17 Laptop's sleek, modern design is engineered to produce desktop-grade power. With an advanced thermal cooling solution and single-panel access to internals for easy upgradability, nothing stops you from playing at your best.



### Fast, fluid gameplay

Crisp gameplay is crucial if you want to play at your best. With a high resolution and refresh rate, on-screen visuals are swift and smooth, while a narrow bezel display delivers edge-to-edge immersion.

## Features



### NVIDIA® GeForce® RTX 2070 SUPER™ graphics

Experience the future of gaming with incredible realism. With breakthrough ray tracing technology powered by NVIDIA® Turing™ architecture, enjoy smooth gaming and incredible visuals.

### Dual storage configurations

By including both an SSD drive for the operating system and a traditional hard drive you get the benefits of both worlds—fast boot up times, snappy responsiveness, and larger storage capacity.

6 GB

### DDR4 RAM

Designed to run more efficiently and more reliably at faster speeds, DDR4 is the future of RAM. With its higher bandwidth, everything from multi-tasking to playing games gets a performance boost.

300Hz

### 300Hz FHD anti-glare

Reduce frustrating lag and image ghosting with a lightning-fast 300Hz refresh rate and 1080p Full High Definition resolution for smooth, crisp gameplay.<sup>[2]</sup>



### Dragon Red backlit keyboard

Illuminate your entire keyboard in Dragon Red, or highlight WASD in white for instant recognition. And with full-size directional arrow keys, you won't have to worry about a disastrous misclick.

SSD

### PCIe SSD storage

Boot up in seconds with lightning fast speed with up to 256 GB PCIe SSD storage.

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*[1] 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.*

*[2] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary, either higher or lower.*

## Specifications

<b>Operating system</b>	FreeDOS
<b>Product color</b>	Shadow black cover and base, shadow black aluminum keyboard frame
<b>Processor family</b>	10th Generation Intel® Core™ i7 processor
<b>Processor</b>	Intel® Core™ i7-10870H (2.2 GHz base frequency, up to 5.0 GHz with Intel® Turbo Boost Technology, 16 MB L3 cache, 8 cores) <sup>[6,7]</sup>
<b>Chipset</b>	Intel® HM470
<b>Memory</b>	16 GB DDR4-2933 SDRAM (2 x 8 GB)
<b>Internal Storage</b>	256 GB PCIe® NVMe™ M.2 SSD
<b>Hard drive (2nd)</b>	1 TB 7200 rpm SATA HDD
<b>Product design</b>	Sandblasted hairline brush keyboard frame
<b>Optical drive</b>	Optical drive not included
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	Intel® UHD Graphics
<b>Display</b>	43.9 cm (17.3") diagonal, FHD (1920 x 1080), 144 Hz, 7 ms response time, IPS, anti-glare, 300 nits, 100% sRGB
<b>Display</b>	17.3" diagonal, FHD (1920 x 1080), 144 Hz, 7 ms response time, IPS, anti-glare, 300 nits, 100% sRGB
<b>Display size (diagonal)</b>	43.9 cm (17.3")
<b>Display size (diagonal)</b>	17.3"
<b>Audio features</b>	Audio by Bang & Olufsen; DTS:X® Ultra; OMEN Audio Control Support DTS:X® Ultra; Dual speakers; HP Audio Boost 2.0
<b>Minimum dimensions (W x D x H)</b>	40.5 x 28.5 x 2.99 cm <i>(Dimensions vary by configuration)</i>
<b>Minimum dimensions (W x D x H)</b>	15.94 x 11.22 x 1.18 in
<b>Weight</b>	Starting at 3.23 kg <i>(Weight varies by configuration)</i>
<b>Weight</b>	Starting at 7.12 lb
<b>Keyboard</b>	Full-size, 1-zone dragon red backlit, shadow black keyboard with numeric keypad and 26-Key Rollover Anti-Ghosting Key technology
<b>Pointing device</b>	Touchpad with multi-touch gesture support; Precision Touchpad Support
<b>Input devices</b>	Accelerometer
<b>Webcam</b>	HP Wide Vision 720p HD camera with integrated dual array digital microphones

**Ports** 1 Thunderbolt™ 3 (40Gbps signaling rate) with SuperSpeed USB Type-C® 10Gbps signaling rate (DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 Mini DisplayPort™; 1 HDMI 2.0a; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo; 1 microphone<sup>[19]</sup>

**Expansion slots** 1 multi-format SD media card reader

**Package dimensions (W x D x H)** 6.9 x 59.8 x 34.5 cm

**Package weight** 4.7 kg

**Network interface** Integrated 10/100/1000 GbE LAN

**Wireless** Intel® Wi-Fi 6 AX201 (2x2) and Bluetooth® 5 combo (Supporting Gigabit file transfer speeds)

**Power supply type** 230 W Smart AC power adapter

**Battery type** 4-cell, 70 Wh Li-ion polymer

**Battery life** Up to 3 hours and 15 minutes<sup>[3]</sup>

**Battery recharge time** Supports battery fast charge: approximately 50% in 45 minutes<sup>[5]</sup>

**Battery weight** 10.12 oz

**Battery weight** 287 g

**UPC number** 195697094347

## Additional specifications

<b>Battery capacity</b>	70
<b>Battery capacity uom</b>	Wh
<b>Battery cells number</b>	4
<b>Battery life</b>	Long Life
<b>Battery life video playback</b>	Up to 3 hours and 15 minutes
<b>Battery type</b>	Li-ion polymer
<b>Brightness</b>	300 nits
<b>Color</b>	Shadow black
<b>Color gamut</b>	100% sRGB
<b>Display</b>	43.9 cm (17.3") diagonal FHD display
<b>Display</b>	17.3" diagonal FHD display
<b>Display brightness</b>	300
<b>Display brightness uom</b>	nits
<b>Display panel technology</b>	IPS
<b>Display refresh rate</b>	144
<b>Display refresh rate uom</b>	Hz
<b>Display resolution (pixels)</b>	1920 x 1080
<b>Display resolution standard</b>	FHD
<b>Display response time</b>	7
<b>Display response time uom</b>	ms
<b>Display size (diagonal) uom</b>	"
<b>Display size (diagonal, imperial)</b>	17.3
<b>Display size (diagonal, metric)</b>	43.9
<b>Display size (diagonal, metric) uom</b>	cm
<b>Display surface treatment</b>	anti-glare
<b>ECC memory</b>	No
<b>Fingerprint reader</b>	Fingerprint reader not available
<b>Graphics</b>	Discrete
<b>Graphics (discrete)</b>	NVIDIA® GeForce® RTX 2070 SUPER™ (8 GB GDDR6 dedicated)
<b>Graphics card brand</b>	NVIDIA®
<b>Graphics card family</b>	GeForce®
<b>Graphics card memory size</b>	8
<b>Graphics card memory size uom</b>	GB

<b>Graphics card memory type</b>	GDDR6
<b>MDA key selling point</b>	Windows 10 Home or other operating systems available
<b>Memory and storage</b>	16 GB memory; 1 TB HDD storage; 256 GB SSD storage
<b>Memory layout (slots &amp; size)</b>	2 x 8 GB
<b>Memory module type</b>	DIMM
<b>Memory size</b>	16
<b>Memory size uom</b>	GB
<b>Memory speed</b>	2933
<b>Memory speed uom</b>	MHz
<b>Memory type</b>	DDR4
<b>Model Number</b>	RTX 2070 SUPER™
<b>Number of User-accessible Memory Slots</b>	2
<b>Number of memory slots</b>	2
<b>Package depth, imperial (extended size)</b>	23.54
<b>Package depth, metric (extended size)</b>	59.8
<b>Package dimensions (W x D x H)</b>	2.71 x 23.54 x 13.58 in
<b>Package height, imperial (extended size)</b>	13.58
<b>Package height, metric (extended size)</b>	34.5
<b>Package weight</b>	10.38 lbs
<b>Package width, imperial (extended size)</b>	2.71
<b>Package width, metric (extended size)</b>	6.9
<b>Packaging unit of measure (imperial)</b>	in
<b>Packaging unit of measure (metric)</b>	cm
<b>Processor Brand</b>	Intel®
<b>Processor base frequency</b>	2.2
<b>Processor base frequency uom</b>	GHz
<b>Processor cache</b>	16 MB L3
<b>Processor core</b>	8
<b>Processor family</b>	Core™ i7
<b>Processor frequency technology</b>	Intel® Turbo Boost Technology

<b>Processor generation</b>	10th Generation
<b>Processor maximum frequency</b>	5.0
<b>Processor maximum frequency uom</b>	GHz
<b>Processor model</b>	10870H
<b>Processor speed</b>	2.2 GHz
<b>Processor threads</b>	16
<b>Product brand name</b>	HP
<b>Storage capacity 01</b>	256
<b>Storage capacity 02</b>	1
<b>Storage capacity uom 01</b>	GB
<b>Storage capacity uom 02</b>	TB
<b>Storage form factor 01</b>	M.2
<b>Storage interface 01</b>	PCIe®
<b>Storage interface 02</b>	SATA
<b>Storage interface protocol 01</b>	NVMe™
<b>Storage speed 02</b>	7200
<b>Storage speed uom 02</b>	rpm
<b>Storage type</b>	SSD; HDD
<b>Storage type 01</b>	SSD
<b>Storage type 02</b>	HDD
<b>Touchscreen</b>	No
<b>UNSPSC code</b>	43211503
<b>Wireless Model</b>	Wi-Fi 6 AX201
<b>Wireless antenna</b>	2x2
<b>Wireless standard</b>	Wi-Fi 6
<b>Wireless supplier</b>	Intel®

[3] Windows 10 MobileMark 18 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 <https://bapco.com/products/mobilemark-2018/> for additional details.

[5] Recharges your battery up to 50% within 45 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller capacity battery charger. After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to System tolerance. Available on select HP products. See <http://store.hp.com> for a full list of product features.

[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.*

*[19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.*

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## Accessories

### Cases and Covers

★ : Recommended

#### Cases

OMEN Transceptor 17 Duffel Bag	7MT82AA ★
HP 17.3 Signature Slim Topload Case	TOE19AA
HP 17.3 Value Topload Case	TOE18AA

#### Covers

OMEN Transceptor Pouch	3J047AA ★
HP Carry Sleeve 17	3XD37AA
HP Carry Sleeve 17	3XD38AA
OMEN Transceptor 17 Sleeve	3J045AA

#### Backpacks

HP 17.3 in OMEN Gaming Backpack	K5Q03AA
HP Pavilion Gaming Backpack 300	6EU56AA
HP Pavilion Gaming Backpack 500	6EU58AA
OMEN X by HP Transceptor Backpack	3KJ69AA
OMEN by HP Gaming Backpack	4YJ80AA

### Keyboards/Mice and Input Devices

#### Mice

OMEN by HP Outpost Mousepad	6CM14AA ★
OMEN by HP Photon Wireless Mouse	6CL96AA ★
OMEN by HP Mouse Pad 300	1MY15AA ★
OMEN by HP Reactor Mouse	2VP02AA ★
OMEN Vector Mouse	8BC53AA ★
OMEN by HP Mouse Pad 100	1MY14AA ★
HP Bluetooth Travel Mouse	6SP25AA
HP Bluetooth® Mouse 250	6CR73AA
HP Bluetooth® Mouse Z5000	2HW67AA
HP Dual Mode Mouse	6CR71AA
HP ENVY Rechargeable Mouse 500	2LX92AA

HP ENVY Rechargeable Mouse 500	2WX69AA	
HP Elite Presenter Mouse	3YF38AA	
HP Pavilion Gaming Mouse 200	5JS07AA	
HP Pavilion Gaming Mouse 300	4PH30AA	
HP Pavilion Gaming Mouse 300	4PH31AA	
HP Pavilion Gaming Mouse Pad 300	4PZ84AA	
HP Pavilion Gaming Mouse Pad 400	5JH72AA	
HP Retractable Wired Mouse 100	6GJ71AA	
HP Spectre Rechargeable Mouse 700	3NZ70AA	
HP Spectre Rechargeable Mouse 700	3NZ71AA	
HP Spectre Rechargeable Mouse 700	4YH33AA	obsolete
HP Spectre Rechargeable Mouse 700	4YH34AA	
HP Spectre Rechargeable Mouse 700	5VD59AA	
HP USB 3 Button Optical Mouse	KY619AA	
HP Wired Mouse 100	6VY96AA	
HP Wired Mouse 1000	4QM14AA	
HP Wireless Mouse 200	2HU82AA	
HP Wireless Mouse 200	2HU83AA	
HP Wireless Mouse 200	2HU84AA	
HP Wireless Mouse 200	2HU85AA	
HP Wireless Mouse 200	2VY31AA	
HP Wireless Mouse 200	2VY33AA	
HP Wireless Mouse 200	X6W31AA	
HP Wireless Mouse 201	3XA55AA	
HP Wireless Mouse 220	3FV66AA	
HP Wireless Mouse 220	7KX10AA	
HP Wireless Mouse 220	7KX11AA	
HP Wireless Mouse 220	7KX12AA	
HP Wireless Mouse 220 with Pouch	6JA61AA	
HP Wireless Mouse 220 with Pouch	6JA62AA	
HP Wireless Mouse 220 with Pouch	6JA63AA	
HP Wireless Mouse 250	3FV67AA	
HP Wireless Mouse X200	6VY95AA	
HP Wireless Mouse Z3700	4VY82AA	
HP Wireless Mouse Z3700	6SD49AA	
HP Wireless Mouse Z3700	7UH85AA	

HP Wireless Mouse Z3700	7UH86AA	
HP Wireless Mouse Z3700	7UH87AA	
HP Wireless Mouse Z3700	7UH88AA	
HP Wireless Mouse Z3700	7UH89AA	
HP Wireless Mouse Z4000	H5N61AA	
HP Wireless Silent 280M Mouse	19U64AA	
HP X1000 Mouse	H2C21AA	
HP X1500 Mouse	H4K66AA	
HP X220 Backlit Gaming Mouse	8DX48AA	
HP X3000 Wireless Mouse	H2C22AA	
HP X4000b Bluetooth Mouse	H3T51AA	obsolete
HP X4500 Wireless (Black) Mouse	H2W16AA	
HP X4500 Wireless (Metal Black) Mouse	H2W26AA	
HP X500 Wired Mouse	E5C12AA	
HP X500 Wired Mouse	E5E76AA	
HP X900 Wired Mouse	V1S46AA	
HP Z3200 Black Wireless Mouse	JOE44AA	
HP Z3200 White Wireless Mouse	E5J19AA	
HP Z3700 Black Wireless Mouse	VOL79AA	
HP Z3700 Blue Wireless Mouse	VOL81AA	
HP Z3700 Camo Wireless Mouse	171D7AA	
HP Z3700 Ceramic White Wireless Mouse	171D8AA	
HP Z3700 Forest Teal Wireless Mouse	171D9AA	
HP Z3700 Gold Wireless Mouse	X7Q43AA	
HP Z3700 Red Wireless Mouse	VOL82AA	
HP Z3700 Silver Wireless Mouse	X7Q44AA	
HP Z3700 White Wireless Mouse	VOL80AA	
HP Z5000 Bluetooth Mouse	E5C13AA	
HP Z5000 Dark Ash Silver Wireless Mouse	W2Q00AA	
HP x4000 Wireless Mouse (Winter Blue) with Laser Sensor	H1D34AA	obsolete
HP x4000 Wireless Mouse with Laser Sensor	A0X35AA	
OMEN Vector Essential Mouse	8BC52AA	
OMEN Vector Wireless Mouse	2B349AA	
OMEN by HP Hard Mouse Pad 200	2VP01AA	
OMEN by HP Mouse 400	3ML38AA	
OMEN by HP Mouse 600	1KF75AA	

OMEN by HP Mouse Pad 200

3ML37AA

OMEN by HP Reactor Mouse

7ZF19AA

## Keyboards

OMEN by HP Sequencer Keyboard

2VN99AA ★

OMEN by HP Encoder Keyboard

6YW76AA ★

HP Dual Mode Keyboard 1000

18J71AA

HP K1500 Keyboard

H3C52AA

HP K1500 Keyboard

J8F16AA

HP K2500 Wireless Keyboard

E5E77AA

HP K2500 Wireless Keyboard

E5E78AA

HP Keyboard 100

2UN30AA

HP Pavilion Gaming Keyboard 550

9LY71AA

HP Pavilion Gaming Keyboard 800

5JS06AA

HP Pavilion Wired Keyboard 300

4CE96AA

HP Pavilion Wireless Keyboard 400

4XL88AA

HP Pavilion Wireless Keyboard 600

4CE98AA

HP Pavilion Wireless Keyboard 600

4CF02AA

HP Wireless Elite v2 Keyboard

QB467AA

OMEN Spacer Wireless TKL Keyboard

9BU31AA

OMEN by HP Encoder Keyboard

6YW75AA

OMEN by HP Keyboard 1100

1MY13AA

## Keyboard and Mouse Kits

HP 230 Wireless Mouse and Keyboard Combo

18H24AA

HP C2500 Desktop

H3C53AA

HP C2500 Desktop

J8F15AA

HP C2600 Keyboard and Mouse Combo

J2X04AA

HP C2710 Combo Keyboard

M7P30AA

HP C6020 Wireless Desktop

P1F56AA

HP Gaming Kit

4VC46AA

HP Pavilion Keyboard and Mouse 200

9DF28AA

HP Pavilion Wired Keyboard and Mouse 400

4CE97AA

HP Pavilion Wireless Keyboard and Mouse 800

4CE99AA

HP Pavilion Wireless Keyboard and Mouse 800

4CF00AA

HP Wired Keyboard and Mouse 160

6HD76AA

HP Wireless Classic v2 Desktop	V4L73AA
HP Wireless Elite v2 Desktop Keyboard (USB Wireless Nano Receiver with Mouse)	QB355AA
HP Wireless Keyboard and Mouse 250	6JU16AA
HP Wireless Keyboard and Mouse 300	3ML04AA

## Audio/Multimedia and Communication Devices

### Headsets

OMEN Blast Headset	<b>1A858AA</b> ★
HP Bluetooth Headset 400	2ZW81AA
HP Bluetooth Headset 500	2J875AA
HP Earbuds Black Headset 150	X7B04AA
HP H2800 Black Headset	J8F10AA
HP In-Ear Headphone 100	1KF55AA
HP In-Ear Headphone 100	1KF56AA
HP In-Ear Headset 150	2AP91AA
HP In-Ear Headset 150	2AP92AA
HP In-Ear Headset 150	2AP93AA
HP On-Ear Headphone 200	2VB08AA
HP Pavilion Gaming Headset 400	4BX31AA
HP Pavilion Gaming Headset 600	4BX33AA
HP Stereo Headset H2800	2AP94AA
HP Stereo Headset H2800	2AP95AA
HP X1000 Wireless Gaming Headset	7HC42AA
HP X1000 Wireless Gaming Headset	7HC43AA
OMEN by HP Headset 800	1KF76AA
OMEN by HP Mindframe Prime Headset	6MF35AA
OMEN by HP Mindframe Prime Headset	6MF36AA
Omen X by HP Mindframe Headset	3XT27AA

### Headphones

OMEN Dyad Earbuds	<b>8JE67AA</b> ★
HP Wireless Earbuds G2	169H9AA

### Speakers

HP Black Bluetooth Speaker 350	2D802AA
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HP Black Bluetooth Speaker 360	2D799AA
HP Blue Bluetooth Speaker 350	2D803AA
HP Blue Bluetooth Speaker 360	2D800AA
HP Gaming Speakers X1000	8PB07AA
HP Silver Bluetooth Speaker 350	2D804AA
HP Silver Bluetooth Speaker 360	2D801AA

## Networking Products

### Switches/Hubs/Routers/Converters/Repeaters

HP ENVY USB-C Hub	5LX63AA
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## Graphics Cards

### Graphics Connectors/Adapters

HP HDMI to VGA Cable Adapter	X1B84AA
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## Batteries/Chargers/Adapters

### Power Adapters

HP Pavilion USB-C™ to HDMI 2.0 Adapter	2PC54AA
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## Cables/Cable Kits/Cable Adapters

### Cable Adapters

HP Spectre USB-C Travel Dock	2SR85AA
HP USB Type-C to RJ45 Adapter	V8Y76AA
HP USB-C Dock	YOK80AA
HP USB-C to HDMI 2.0	1WC36UT
HP USB-C to Multi-port Hub	1BG94AA
HP USB-C to RJ45 Adapter	V7W66AA
HP USB-C to USB-A Hub	Z6A00UT
HP USB-C to USB-A Hub	Z8W90AA
HP USB-C to VGA Display Adapter	P7Z54AA

## Docking and Port Replicators

### Docking Stations

HP Thunderbolt Dock 120W with HDMI Adapter
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6HP48AA
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HP USB-C Dock G5
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26D32AA
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HP USB-C Dock G5
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5TW10AA
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## PC Drives and Storage

### PC DVD+RW Drives

HP USB External DVDRW Drive
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F6V97AA
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