HP

HP ZBook 15u G3 Intel® Core™ i5 i5-6200U Mobile workstation 39.6 cm (15.6") Full HD 8 GB DDR4-SDRAM 256 GB SSD AMD FirePro W4190M FreeDOS Black

Brand : HP   **Product family:** ZBook   **Product code:** T7V79ES

Product name : 15u G3

Intel Core i5-6200U (2.3GHz, Cache 3MB, 2 Cores), 15.6" Full HD (1920 x 1080), 8GB DDR4-SDRAM 2133MHz (1 x 8), 256GB SSD, Intel HD Graphics 520 + AMD FirePro W4190M (2GB, GDDR5), WLAN 802.11b/g/n/a/ac, Bluetooth 4.0, FreeDOS
HP ZBook 15u G3. Product type: Mobile workstation, Form factor: Clamshell. Processor family: Intel® Core™ i5, Processor model: i5-6200U, Processor frequency: 2.3 GHz. Display diagonal: 39.6 cm (15.6"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 8 GB, Internal memory type: DDR4-SDRAM. Total storage capacity: 256 GB, Storage media: SSD. On-board graphics card model: Intel® HD Graphics 520. Operating system installed: FreeDOS. Product colour: Black

Design

Product type *	Mobile workstation
Product colour *	Black
Form factor *	Clamshell
Country of origin	China

Display

Display diagonal *	39.6 cm (15.6")
Display resolution *	1920 x 1080 pixels
Touchscreen *	✗
HD type	Full HD
LED backlight	✔
Native aspect ratio	16:9
Display surface	Matt

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Core™ i5
Processor generation	6th gen Intel® Core™ i5
Processor model *	i5-6200U
Processor cores	2
Processor threads	4
Processor boost frequency	2.8 GHz
Processor frequency *	2.3 GHz
System bus rate	4 GT/s
Processor cache	3 MB
Processor cache type	Smart Cache
Processor socket	LGA 1356 (Socket B2)
Processor lithography	14 nm
Processor operating modes	64-bit
Processor series	Intel Core i5-6200 series
Processor codename	Skylake
Bus type	QPI
Stepping	D1
Thermal Design Power (TDP)	15 W
Configurable TDP-up frequency	2.4 GHz
Configurable TDP-up	25 W

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-C ports quantity *	1
Ethernet LAN (RJ-45) ports	1
DisplayPorts quantity	1
DVI port	✗
VGA (D-Sub) ports quantity	1
Combo headphone/mic port	✔
Docking connector	✔

Keyboard

Pointing device	Touchpad
Numeric keypad *	✔

Software

Operating system installed *	FreeDOS

Processor special features

Intel® Wireless Display (Intel® WiDi)	✔
Intel® My WiFi Technology (Intel® MWT)	✔
Intel® Smart Response Technology	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Turbo Boost Technology	2.0
Intel® Small Business Advantage (Intel® SBA)	✔
Enhanced Intel SpeedStep Technology	✔
Intel® Clear Video HD Technology (Intel® CVT HD)	✔
Intel Clear Video Technology	✔
Intel® InTru™ 3D Technology	✔
Intel® Insider™	✔
Intel® Quick Sync Video Technology	✔

Processor

Configurable TDP-down	7.5 W
Configurable TDP-down frequency	0.8 GHz
Tjunction	100 °C
Maximum number of PCI Express lanes	12
PCI Express slots version	3.0
PCI Express configurations	1x4, 4x1
ECC supported by processor	✗

Memory

Internal memory *	8 GB
Internal memory type	DDR4-SDRAM
Memory clock speed	2133 MHz
Memory form factor	SO-DIMM
Memory layout (slots x size)	1 x 8 GB
Memory slots	2x SO-DIMM
Maximum internal memory *	32 GB

Storage

Total storage capacity *	256 GB
Storage media *	SSD
Total SSDs capacity	256 GB
Number of SSDs installed	1
SSD capacity	256 GB
Optical drive type *	✗
Card reader integrated	✔
Compatible memory cards	SD, SDHC, SDXC

Graphics

Discrete graphics card model *	AMD FirePro W4190M
Discrete graphics card memory	2 GB
Discrete graphics memory type	GDDR5
On-board graphics card *	✔
Discrete graphics card *	✔
On-board graphics card family	Intel® HD Graphics
On-board graphics card model *	Intel® HD Graphics 520
On-board graphics card base frequency	300 MHz
On-board graphics card dynamic frequency (max)	1000 MHz
Maximum on-board graphics card memory	1.74 GB
On-board graphics card DirectX version	12.0
On-board graphics card OpenGL version	4.4
On-board graphics card ID	1916
Number of discrete graphics cards installed	1

Audio

Speakers manufacturer	Bang & Olufsen
Built-in microphone	✔

Camera

Front camera	✔

Network

Wi-Fi	✔
Wi-Fi standards	802.11b, 802.11g, Wi-Fi 4 (802.11n), 802.11a, Wi-Fi 5 (802.11ac)
Ethernet LAN	✔
Bluetooth	✔

Processor special features

Intel Flex Memory Access	✔
Intel® Smart Cache	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Intel Trusted Execution Technology	✗
Intel Enhanced Halt State	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel TSX-NI	✗
Intel Stable Image Platform Program (SIPP)	✗
Intel® OS Guard	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✔
Intel 64	✔
Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Processor package size	42 X 24 mm
Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0
Processor code	SR2EY
CPU configuration (max)	1
Embedded options available	✗
Graphics & IMC lithography	14 nm
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Identity Protection Technology version	1.00
Intel Smart Response Technology version	1.00
Intel Stable Image Platform Program (SIPP) version	0.00
Intel Secure Key Technology version	1.00
Intel Small Business Advantage (SBA) version	1.00
Intel TSX-NI version	1.00
Intel Virtualization Technology (VT-x)	✔
Processor ARK ID	88193
Conflict-Free processor	✔

Battery

Battery technology	Lithium-Ion (Li-Ion)
Number of battery cells	3
Battery capacity *	46 Wh

Power

AC adapter power	65 W
DC-in jack	✔

Weight & dimensions

Width	383.3 mm
Depth	258 mm
Height	20 mm
Weight *	1.9 kg

Packaging content

AC adapter included *	✔

Network		Other features	
Bluetooth version	4.0	3D	✘
Ports & interfaces		SIM card support	✔
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2		