

## HP ZBook 15 G3 i7-6820HQ Mobile workstation 39.6 cm (15.6") Intel® Core™ i7 16 GB DDR4-SDRAM 512 GB SSD NVIDIA® Quadro® M2000M Windows 7 Professional Black

**Brand**: HP **Product family:** ZBook Product code: T7V59EA-OPG

Product name: 15 G3

Intel Core i7-6820HQ (2.7GHz, 8MB), 15.6" UHD DreamColor UWVA IPS anti-glare + PSR LED (3840 X 2160), 16GB (2 x 8GB) DDR4 SDRAM, 512GB HP Z Turbo Drive PCIe SSD, NVIDIA Quadro M2000M, 802.11ac, Bluetooth 4.2, webcam, Windows 7 Professional 64 / Windows 10 Pro 64 HP ZBook 15 G3. Product type: Mobile workstation, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor: i7-6820HQ, Processor frequency: 2.7 GHz. Display diagonal: 39.6 cm (15.6"), Display resolution: 3840 x 2160 pixels. Internal memory: 16 GB, Internal memory type: DDR4-SDRAM. Total storage capacity: 512 GB, Storage media: SSD. On-board graphics card model: Intel® HD Graphics 530, Discrete graphics card model: NVIDIA® Quadro® M2000M. Operating system installed: Windows 7 Professional. Product colour: Black









Design		Ports & interfaces	
Product type * Product colour * Form factor * Country of origin	Mobile workstation Black Clamshell China	VGA (D-Sub) ports quantity Thunderbolt 3 ports quantity Combo headphone/mic port Charging port type	1 2 ✓ DC-in jack
Display		Keyboard	
Display diagonal * Display resolution * Touch screen *	39.6 cm (15.6") 3840 x 2160 pixels	Pointing device Numeric keypad * Spill-resistant keyboard	Touchpad ✓
LED backlight	<b>√</b>	Software	
Native aspect ratio	16:9	Operating system architecture	64-bit
Processor		Recovery operating system	Windows 10 Pro
Processor manufacturer *	Intel	Operating system installed *	Windows 7 Professional
Processor generation	6th gen Intel® Core™ i7	Processor special features	
Processor * Processor frequency * Processor boost frequency Processor family * Processor number of cores Processor threads System bus data transfer rate Processor cache Processor cache type Processor socket Processor lithography Processor operating modes	i7-6820HQ ssor frequency * ssor boost frequency ssor family * ssor number of cores ssor threads m bus data transfer rate ssor cache ssor cache ssor cache type ssor socket ssor lithography  i7-6820HQ 2.7 GHz slower 17 slower 3.6 GHz i7 ssor of Hz i7 ssor of Hz i7 ssor of Hz i7 ssor of Hz i8 sor of Hz i7 ssor of Hz i8 sor of Hz i7 ssor o	Intel Wireless Display (WiDi) Technology Intel My WiFi Technology Intel ® Smart Response Technology Intel Identity Protection Technology Intel Hyper-Threading Technology Intel Turbo Boost Technology Intel® Small Business Advantage (Intel® SBA) Enhanced Intel SpeedStep Technology Intel Clear Video HD Technology	<ul> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
Processor series	Intel Core i7-6800 Mobile Series	Intel Clear Video Technology	✓
Processor codename	Skylake	Intel® InTru™ 3D Technology	✓
Bus type	DMI3	Intel® Insider™	✓
Stepping	R0	Intel® Quick Sync Video Technology	√ √
Motherboard chipset	Intel CM236	Intel Flex Memory Access	✓
Thermal Design Power (TDP)	45 W	Intel AES New Instructions	1
Configurable TDP-down	35 W	Intel Trusted Execution Technology	✓
Tjunction	100 °C	Intel Enhanced Halt State	✓
Maximum number of PCI Express lanes	16	Intel VT-x with Extended Page Tables (EPT)	✓

		B	
Processor		Processor special features	
PCI Express slots version	3.0	Intel® Secure Key	<b>V</b>
PCI Express configurations	1x16, 2x8, 1x8+2x4	Intel TSX-NI	<b>✓</b>
ECC supported by processor	×	Intel Stable Image Platform Program (SIPP)	✓
Memory		Intel® OS Guard	✓
Internal memory *	16 GB	Intel Software Guard Extensions	1
Internal memory type	DDR4-SDRAM	(Intel SGX)	*
Memory clock speed	2133 MHz	Intel Clear Video Technology for MID	<b>V</b>
Memory layout (slots x size)	2 x 8 GB	Intel 64 Execute Disable Bit	<b>*</b>
Memory slots  Maximum internal memory *	4x SO-DIMM 64 GB	Idle States	1
,	04 GB	Thermal Monitoring Technologies	<b>,</b>
Storage		Processor package size	42 x 28 mm
Total storage capacity *	512 GB	Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0
Storage media *	SSD 513 CB	Processor code	SR2FU
Total SSDs capacity  Number of SSDs installed	512 GB 1	CPU configuration (max)	1
Solid-state drive capacity	512 GB	Embedded options available	×
Solid-state drive interfaces	PCI Express	Graphics & IMC lithography	14 nm
Optical drive type *	×	Intel Virtualization Technology for	✓
Card reader integrated	7	Directed I/O (VT-d) Intel Identity Protection Technology	
Compatible memory cards	SD, SDHC, SDXC	version	1.00
Graphics		Intel Smart Response Technology version	1.00
Discrete graphics card model * On-board graphics card *	NVIDIA® Quadro® M2000M ✓	Intel Stable Image Platform Program (SIPP) version	1.00
Discrete graphics card *	,	Intel Secure Key Technology version	1.00
On-board graphics card family	Intel® HD Graphics	Intel Small Business Advantage	
On-board graphics card model *	Intel® HD Graphics 530	(SBA) version	1.00
On-board graphics card base	350 MHz	Intel TSX-NI version	1.00
frequency	330 MH 12	Intel Virtualization Technology (VT-	✓
On-board graphics card dynamic frequency (max)	1050 MHz	x) Processor ARK ID	88970
Maximum on-board graphics card		Conflict-Free processor	<b>√</b>
memory	1.7 GB	Battery	•
On-board graphics card DirectX version	12.0	Battery technology	Lithium Polymor (LiPo)
On-board graphics card OpenGL		Number of battery cells	Lithium Polymer (LiPo) 9
version	4.4	Battery capacity *	90 Wh
On-board graphics card ID	0x191B		
Discrete graphics card memory	4 GB	Energy Management	450.00
Discrete graphics memory type	GDDR5	AC adapter power	150 W
Audio		Security	
Number of built-in speakers	2	Cable lock slot	✓
Speakers manufacturer	Bang & Olufsen	Trusted Platform Module (TPM)	✓
Built-in microphone	✓	Password protection	✓
Camera		Password protection type	Power on
Front camera	1	Sustainability	
Network	•	Sustainability certificates	ENERGY STAR
	,	Weight & Dimensions	
Wi-Fi Wi-Fi standards	√ Wi.Fi 5 (802 11ac)	Width	386 mm
Ethernet LAN connection	Wi-Fi 5 (802.11ac) ✓	Depth	264 mm
Ethernet LAN data rates	10,100,1000 Mbit/s	Height	26 mm
Bluetooth	✓	Weight *	2.59 kg
Bluetooth version	4.2		
Ports & interfaces			
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	3		
	1		
HDMI ports quantity *	1		
1 100 2			

