HP

HP Z420 Intel® Xeon® E5 Family E5-1620V2 8 GB DDR3-SDRAM 1 TB HDD Windows 7 Professional Mini Tower Workstation Black

Brand : HP

Product code: WM592EA

Product name : Z420

Intel Xeon E5-1620 v2 (3.7GHz, 10MB cache, 4 cores), Convertible Minitower, Intel C602, 8GB 1600MHz DDR3 ECC, 1TB 7200 rpm SATA III, DVD SuperMulti, Ethernet, 600W, Windows 7 Professional 64-bit/Windows 8 Pro 64-bit
HP Z420. Processor frequency: 3,7 GHz, Processor family: Intel® Xeon® E5 Family, Processor model: E5-1620V2. Internal memory: 8 GB, Internal memory type: DDR3-SDRAM, Memory clock speed: 1600 MHz. Total storage capacity: 1 TB, Storage media: HDD, Optical drive type: DVD Super Multi. Operating system installed: Windows 7 Professional, Operating system architecture: 64-bit. Power supply: 600 W. Chassis type: Mini Tower. Product type: Workstation. Product colour: Black

Processor

Processor manufacturer *	Intel
Processor family *	Intel® Xeon® E5 Family
Processor model *	E5-1620V2
Processor cores	4
Processor threads	8
Processor boost frequency	3,9 GHz
Processor frequency *	3,7 GHz
Processor socket	LGA 2011 (Socket R)
Processor cache	10 MB
Processor cache type	Smart Cache
Bus type	QPI
FSB Parity	✗
Processor lithography	22 nm
Processor operating modes	64-bit
Processor series	Intel Xeon E5-1600 v2
Processor codename	Ivy Bridge EP
Thermal Design Power (TDP)	130 W
Tcase	70 °C
PCI Express slots version	3.0
Maximum number of PCI Express lanes	40
PCI Express configurations	x4, x8, x16
Number of processors installed	1
Maximum internal memory supported by processor	256 GB

Performance

Audio system	HDA
Product type *	Workstation

Software

Operating system architecture	64-bit
Recovery operating system	Windows 8 Pro
Operating system installed *	Windows 7 Professional

Processor special features

Intel® Wireless Display (Intel® WiDi)	✗
Intel 64	✔
Enhanced Intel SpeedStep Technology	✔
Embedded options available	✗
Intel® InTru™ 3D Technology	✗
Intel® Insider™	✗
Intel® Clear Video HD Technology (Intel® CVT HD)	✗
Intel Clear Video Technology	✗
Intel VT-x with Extended Page Tables (EPT)	✔
Intel TSX-NI	✗
Idle States	✔
Thermal Monitoring Technologies	✔
Intel® AES New Instructions (Intel® AES-NI)	✔

Processor

Memory types supported by processor	DDR3-SDRAM
Memory clock speeds supported by processor	800,1066,1333,1600,1866 MHz
Memory bandwidth supported by processor (max)	59,7 GB/s
ECC supported by processor	✔

Memory

Internal memory *	8 GB
Internal memory type	DDR3-SDRAM
Memory layout (slots x size)	4 x 2 GB
Memory slots	8x DIMM
Memory clock speed	1600 MHz
ECC	✔
Memory channels	Quad-channel

Storage

Total storage capacity *	1 TB
Storage media *	HDD
Optical drive type *	DVD Super Multi
Total HDDs capacity	1 TB
Number of HDDs installed	1
HDD capacity	1 TB
HDD speed	7200 RPM
HDD size	3.5"
Card reader integrated	✔

Graphics

On-board graphics card *	✘
Discrete graphics card model *	Not available
On-board graphics card model *	Not available

Network

Ethernet LAN *	✔
Wi-Fi *	✘

Ports & interfaces

USB 2.0 ports quantity *	5
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	4
PS/2 ports quantity	2
Firewire (IEEE 1394) ports	2
Ethernet LAN (RJ-45) ports	1
Microphone in	✔
Headphone outputs	1
Line-out	✔
Line-in	✔

Expansion slots

PCI Express x4 (Gen 2.x) slots	1
PCI Express x8 (Gen 3.x) slots	1
PCI Express x16 (Gen 3.x) slots	2
PCI slots	1

Design

Chassis type *	Mini Tower
Water cooling system	✘
Number of 3.5" bays	3
Number of 5.25" bays	3
Product colour *	Black
Country of origin	China

Processor special features

Intel® Secure Key	✔
Intel® OS Guard	✔
Intel Trusted Execution Technology	✔
Execute Disable Bit	✔
Intel FDI Technology	✘
Intel Flex Memory Access	✘
Intel Fast Memory Access	✘
Intel® Smart Cache	✔
Intel Enhanced Halt State	✔
Intel Demand Based Switching	✔
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✘
Processor package size	52.5 x 45.0 mm
Supported instruction sets	AVX
Scalability	1S
CPU configuration (max)	1
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Identity Protection Technology version	0,00
Intel Secure Key Technology version	1,00
Intel Virtualization Technology (VT-x)	✔
Intel TSX-NI version	0,00
Intel Dual Display Capable Technology	✘
Intel Rapid Storage Technology	✘
Processor ARK ID	75779
Intel® Turbo Boost Technology	2.0
Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Quick Sync Video Technology	✘
Intel® My WiFi Technology (Intel® MWT)	✘
Intel® Identity Protection Technology (Intel® IPT)	✘
Intel® Anti-Theft Technology (Intel® AT)	✘
Conflict-Free processor	✘

Power

Power supply *	600 W
Power supply input voltage	100 - 240 V
Power supply input frequency	50 - 60 Hz

Weight & dimensions

Width *	177,8 mm
Depth *	445,2 mm
Height *	447,6 mm
Weight *	12,5 kg

Packaging content

Mouse included	✘
Keyboard included	✔

Display

Display included *	✘

Other features

Optical drives quantity	1

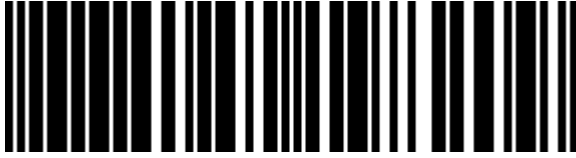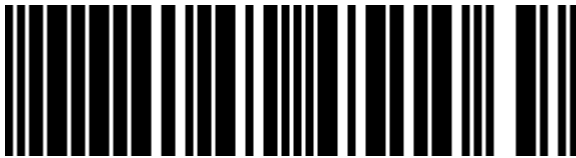| **Performance**	
Motherboard chipset	Intel® C602

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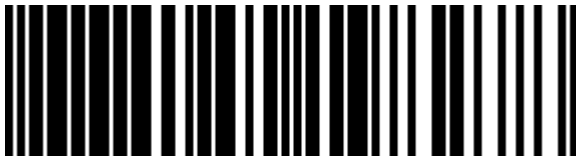|	
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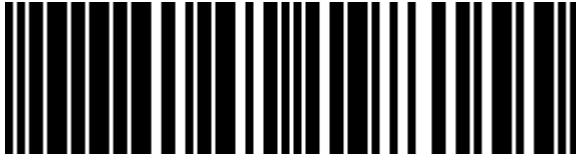
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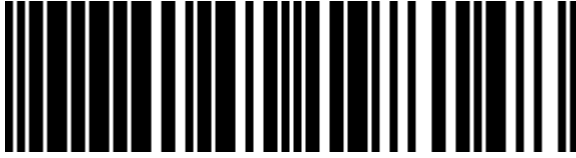
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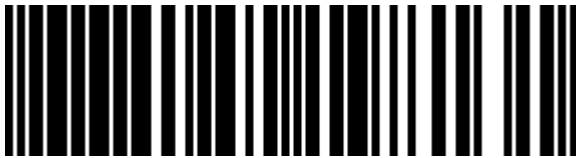
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