

HP Z220 i7-3770 Mini Tower Intel® Core™ i7 4 GB DDR3-SDRAM 500 GB HDD Windows 8 Pro Workstation Black

Brand : HP Product code: E2A92LT

Product name: Z220

Intel Core i7-3770 3.4/3.9 GHz, 4GB DDR3 RAM, 500GB SATA HDD, Intel HD Graphics 4000, DVD±RW, Gigabit Ethernet, RAID, Windows 8 Pro 64-bit/Windows 7 Professional 64-bit
HP Z220. Processor frequency: 3.4 GHz, Processor family: Intel® Core™ i7, Processor model: i7-3770.
Internal memory: 4 GB, Internal memory type: DDR3-SDRAM. Total storage capacity: 500 GB, Storage media: HDD, Optical drive type: DVD Super Multi DL. On-board graphics card model: Intel® HD Graphics 4000. Operating system installed: Windows 8 Pro, Operating system architecture: 64-bit. Power supply: 400 W. Chassis type: Mini Tower. Product type: Workstation. Product colour: Black











Processor		Design	
Processor manufacturer *	Intel	Country of origin	China
Processor generation	3rd gen Intel® Core™ i7	Performance	
Processor model *	i7-3770	Motherboard chipset	Intel® C216
Processor family *	Intel® Core™ i7	Product type *	Workstation
Processor cores	4	,,	
Processor frequency *	3.4 GHz	Software	
Processor boost frequency	3.9 GHz	Operating system installed *	Windows 8 Pro
Processor socket	LGA 1155 (Socket H2)	Operating system architecture	64-bit
Processor cache	8 MB	Recovery operating system	Windows 7 Professional
Processor cache type	Smart Cache	Processor special features	
Processor threads	8	Intel® Small Business Advantage	
System bus rate	5 GT/s	(Intel® SBA)	X
Bus type	DMI	Intel® Wireless Display (Intel®	√
FSB Parity	×	WiDi)	•
Processor lithography	22 nm	Intel 64	✓
Processor operating modes	64-bit	Enhanced Intel SpeedStep	✓
Processor series	Intel Core i7-3700 Desktop series	Technology	,
Processor codename	Ivy Bridge	Embedded options available	V
Thermal Design Power (TDP)	77 W	Intel® InTru™ 3D Technology	V
Tcase	67.4 °C	Intel® Insider™	√
Tjunction	105 °C	Intel® Clear Video HD Technology (Intel® CVT HD)	✓
PCI Express slots version	3.0	Intel Clear Video Technology	×
PCI Express configurations	1x8, 1x16, 2x4, 2x8	Intel VT-x with Extended Page	
Number of processors installed	1	Tables (EPT)	✓

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Processor		Processor special features	
Stepping	E1	Intel TSX-NI	×
CPU multiplier (bus/core ratio)	34	Idle States	V
Maximum internal memory supported by processor	32 GB	Thermal Monitoring Technologies Intel® AES New Instructions (Intel®	√
Memory types supported by processor	DDR3-SDRAM	AES-NI) Intel® Secure Key	
Memory clock speeds supported by	1333,1600 MHz	Intel Trusted Execution Technology	,
processor	1333,1000 MHZ	Execute Disable Bit	·
Memory bandwidth supported by processor (max)	25.6 GB/s	Intel FDI Technology	v
ECC supported by processor	×	Intel Flex Memory Access	✓
Memory	-	Intel Fast Memory Access	✓
•	4.CD	Intel Enhanced Halt State	✓
Internal memory *	4 GB 32 GB	Intel Demand Based Switching	×
Maximum internal memory * Internal memory type	DDR3-SDRAM	Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT	×
Memory slots	4x DIMM	for MID)	^
Memory channels	Dual-channel	Processor package size	37.5 x 37.5 mm
•		Supported instruction sets	AVX, SSE4.1, SSE4.2
Storage	,	CPU configuration (max)	1
Card reader integrated	√ 500 CD	Graphics & IMC lithography	22 nm
Total storage capacity * Storage media *	500 GB HDD	Thermal solution specification	PCG 2011D
Optical drive type *	DVD Super Multi DL	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Number of HDDs installed HDD capacity	1 500 GB	Intel Identity Protection Technology version	1.00
HDD interface	SATA	Intel Secure Key Technology version	1.00
RAID support RAID levels	√ 0, 1	Intel Virtualization Technology (VT-x)	✓
	0, 1	Intel TSX-NI version	0.00
Graphics Discrete graphics card model *	Not available	Intel Dual Display Capable Technology	×
On-board graphics card *	1	Intel Rapid Storage Technology	×
On-board graphics card family	Intel® HD Graphics	Processor ARK ID	65719
On-board graphics card model *	Intel® HD Graphics 4000	Intel® Smart Response Technology	X
On-board graphics card base	650 MHz	Intel® Rapid Start Technology	X
frequency On heard graphics card dynamic		Intel® Turbo Boost Technology	2.0
On-board graphics card dynamic frequency (max)	1150 MHz	Intel Smart Connect Technology Intel® Hyper Threading Technology	×
Number of displays supported (on- board graphics)	3	(Intel® HT Technology) Intel® Quick Sync Video Technology	4
On-board graphics card ID	0x162	Intel® My WiFi Technology (Intel®	
Network		MWT)	×
Ethernet LAN data rates	✓ 10,100,1000 Mbit/s	Intel® Identity Protection Technology (Intel® IPT)	✓
Ethernet LAN data rates Cabling technology	10/100/1000 Mbit/s 10/100/1000Base-T(X)	Intel® Anti-Theft Technology (Intel® AT)	✓
Wi-Fi *	×	Conflict-Free processor	✓
Ports & interfaces		Power	
USB 2.0 ports quantity *	5	Power supply *	400 W
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	4	Power supply input voltage	110 - 220 V
DVI port	1	Weight & dimensions	
DisplayPorts quantity	1	Width *	178 mm
PS/2 ports quantity	2	Depth *	455 mm
Ethernet LAN (RJ-45) ports	1	Height *	447 mm
Microphone in	✓	Weight *	11.6 kg
Headphone outputs	1	Packaging content	
Line-out	√	Display included *	×
Line-in	√	Mouse included	X
DC-in jack	√	Keyboard included	×
Expansion slots		Features	
PCI Express x1 slots	2	Images Type Map	×
PCI Express x8 slots	1		_

Other features **Expansion slots** PCI Express x16 slots 2 Optical drives quantity 1 2 PCI slots Design Chassis type * Mini Tower Placement supported Vertical Water cooling system Number of 3.5" bays 3 Number of 5.25" bays 3 Product colour * Black

