

HP Z230 SFF Intel® Xeon® E3 V3 Family E3-1225V3 4 GB DDR3-SDRAM 500 GB HDD Windows 7 Professional Workstation Black

Brand: HP Product code: D1P35AV

Product name: Z230 SFF

Intel Xeon E3-1225v3 3.2GHz, 4GB DDR3 1600MHz, 500GB 7200 rpm SATA, Intel HD Graphics P4600, DVD SuperMulti, Windows 7 Pro 64-bit/Windows 8 Pro 64-bit

HP Z230 SFF. Processor frequency: 3.2 GHz, Processor family: Intel® Xeon® E3 V3 Family, Processor model: E3-1225V3. Internal memory: 4 GB, Internal memory type: DDR3-SDRAM, Memory clock speed: 1600 MHz. Total storage capacity: 500 GB, Storage media: HDD, Optical drive type: DVD Super Multi. On-board graphics card model: Intel® HD Graphics P4600. Operating system installed: Windows 7 Professional, Operating system architecture: 64-bit. Power supply: 240 W. Chassis type: SFF. Product type: Workstation





Processor		Design	
Processor manufacturer *	Intel	Country of origin	China
Processor family *	Intel® Xeon® E3 V3 Family	Performance	
Processor model *	E3-1225V3	Motherboard chipset	Intel® C226
Processor cores	4	Product type *	Workstation
Processor threads	4	,	Workstation
Processor boost frequency	3.6 GHz	Software	
Processor frequency *	3.2 GHz	Operating system architecture	64-bit
Processor socket	LGA 1150 (Socket H3)	Recovery operating system	Windows 8 Pro
Processor cache	8 MB	Operating system installed *	Windows 7 Professional
Processor cache type	Smart Cache	Processor special features	
Bus type	QPI	Intel® Wireless Display (Intel®	
FSB Parity	×	WiDi)	×
Processor lithography	22 nm	Intel 64	✓
Processor operating modes	64-bit	Enhanced Intel SpeedStep	,
Processor series	Intel Xeon E3-1200 v3	Technology	/
Processor codename	Haswell	Embedded options available	✓
Thermal Design Power (TDP)	84 W	Intel® InTru™ 3D Technology	✓
PCI Express slots version	3.0	Intel® Insider™	×
Maximum number of PCI Express lanes	16	Intel® Clear Video HD Technology (Intel® CVT HD)	·
PCI Express configurations	1x16, 2x8, 1x8+2x4	Intel Clear Video Technology	×
Number of processors installed	1	3,	^
Number of QPI links	1	Intel VT-x with Extended Page Tables (EPT)	✓
Stepping	C0	Intel TSX-NI	/
Maximum internal memory supported by processor	32 GB	Idle States	✓
Memory types supported by	DDR3-SDRAM	Thermal Monitoring Technologies	✓
processor Memory clock speeds supported by	1333.1600 MHz	Intel Stable Image Platform Program (SIPP)	✓
processor	1555,1000 PH IZ	Intel® AES New Instructions (Intel®	
Memory bandwidth supported by processor (max)	25.6 GB/s	AES-NI) Intel® Secure Key	*
ECC supported by processor	✓	intere secure key	•

Memory		Processor special features	
Internal memory *	4 GB	Intel® OS Guard	✓
Maximum internal memory *	32 GB	Intel Trusted Execution Technology	✓
Internal memory type	DDR3-SDRAM	Execute Disable Bit	✓
Memory layout (slots x size)	2 x 2 GB 4x DIMM	Intel FDI Technology	✓
Memory slots Memory clock speed	1600 MHz	Intel Flex Memory Access	✓
ECC	1000 MHZ	Intel Fast Memory Access	✓
Memory channels	Dual-channel	Intel® Smart Cache	/
•	Duai-Criannei	Intel Enhanced Halt State	·
Storage		Intel Demand Based Switching	X
Total storage capacity *	500 GB	Intel® Clear Video Technology for	
Storage media *	HDD	Mobile Internet Devices (Intel CVT	×
Optical drive type * Number of HDDs installed	DVD Super Multi 1	for MID)	
HDD capacity	500 GB	Processor package size	37.5 x 37.5 mm
HDD interface	SATA	Supported instruction sets Processor code	AVX 2.0, SSE4.1, SSE4.2
HDD speed	7200 RPM	Scalability	SR14U 1S
·		CPU configuration (max)	1
Graphics		Graphics & IMC lithography	22 nm
On-board graphics card *	•	Thermal solution specification	PCG 2013D
Discrete graphics card model *	Not available	Intel Virtualization Technology for	
On-board graphics card family	Intel® HD Graphics	Directed I/O (VT-d)	✓
On-board graphics card model * On-board graphics card base	Intel® HD Graphics P4600 350 MHz	Intel Identity Protection Technology version	1.00
frequency On-board graphics card dynamic	1200 MHz	Intel Stable Image Platform Program (SIPP) version	1.00
frequency (max) Number of displays supported (on-		Intel Secure Key Technology version	1.00
board graphics)	3	Intel Virtualization Technology (VT-x)	✓
Network		Intel TSX-NI version	1.00
Ethernet LAN *	✓	Intel Dual Display Capable Technology	✓
Ethernet LAN data rates	10,100,1000 Mbit/s	Intel Rapid Storage Technology	x
Cabling technology	10/100/1000Base-T(X)	Processor ARK ID	75461
Ports & interfaces		Intel® Turbo Boost Technology	2.0
USB 2.0 ports quantity *	6	Intel® Hyper Threading Technology	×
USB 3.2 Gen 1 (3.1 Gen 1) Type-A	4	(Intel® HT Technology)	*
ports quantity *		Intel® Quick Sync Video Technology	✓
DVI port	×	Intel® My WiFi Technology (Intel®	×
PS/2 ports quantity	2	MWT) Intel® Identity Protection	
Ethernet LAN (RJ-45) ports	1	Technology (Intel® IPT)	✓
Microphone in	✓	Intel® Anti-Theft Technology	✓
Headphone outputs	1	(Intel® AT)	•
Line-out	•	Conflict-Free processor	×
Line-in	•	Power	
Serial ports quantity	1	Power supply *	240 W
Expansion slots		Weight & dimensions	
PCI Express x1 (Gen 2.x) slots	1	Width *	337 mm
PCI Express x4 (Gen 2.x) slots	1	Depth *	384 mm
PCI Express x16 (Gen 2.x) slots	1	Height *	100 mm
PCI Express x16 (Gen 3.x) slots	1	Weight *	7.2 kg
Design		Packaging content	
Chassis type *	SFF	Mouse included	x
Water cooling system	X	Keyboard included	×
Number of 3.5" bays	3		
Number of 5.25" bays	1	Display	
Number of 2.5" bays Product colour *	1 Black	Display included *	X
Froduct colodi	DIUCK	Other features	
		Optical drives quantity	1

