



HP Intel Xeon Gold 6142 processor 2.6 GHz 22 MB L3

Brand : HP

Product code: L09268-001

Product name : Intel Xeon Gold 6142

Intel Xeon Gold 6142, 22M Cache, 2.6 GHz, 150 W TDP, FCLGA3647

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HP Intel Xeon Gold 6142. Processor family: Intel® Xeon® Gold, Processor socket: LGA 3647 (Socket P), Processor lithography: 14 nm. Memory channels: Hexa-channel, Maximum internal memory supported by processor: 768 GB, Memory types supported by processor: DDR4-SDRAM. Market segment: Server, Supported instruction sets: AVX, AVX 2.0, AVX-512, SSE4.2, Scalability: S4S

Processor		Features	
Processor generation	1st Generation Intel® Xeon® Scalable	Scalability	S4S
Processor model *	6142	Embedded options available	✗
Processor base frequency *	2.6 GHz	Processor special features	
Processor family *	Intel® Xeon® Gold	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor cores *	16	Intel® Turbo Boost Technology	2.0
Processor socket *	LGA 3647 (Socket P)	Intel® AES New Instructions (Intel® AES-NI)	✓
Component for	Server/workstation	Enhanced Intel SpeedStep Technology	✓
Processor lithography *	14 nm	Intel Trusted Execution Technology	✓
Processor series	Intel Xeon Gold 6000 Series	Intel® Speed Shift Technology	✓
Processor threads	32	Intel VT-x with Extended Page Tables (EPT)	✓
Processor operating modes *	64-bit	Intel TSX-NI	✓
Processor boost frequency	3.7 GHz	Intel 64	✓
Processor cache	22 MB	Intel Virtualization Technology (VT-x)	✓
Processor cache type	L3	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Thermal Design Power (TDP)	150 W	Intel Turbo Boost Max Technology 3.0	✗
Cooler included *	✗	Intel® Optane™ Memory Ready	✗
Stepping	H0	AVX-512 Fused Multiply-Add (FMA) units	1
Bus type	UPI	Intel® vPro™ Platform Eligibility	✓
Processor codename	Skylake	Operational conditions	
Memory		Tcase	85 °C
Maximum internal memory supported by processor	768 GB	Technical details	
Memory types supported by processor	DDR4-SDRAM	Intel® Volume Management Device (VMD) version	✓
Memory clock speeds supported by processor	2666 MHz	Mode-based Execute Control (MBE) version	✓
Memory channels *	Hexa-channel	Number of UPI links	3
ECC	✓	Features	
Graphics		Execute Disable Bit	✓
On-board graphics card *	✗	Market segment	Server
Discrete graphics card *	✗	Maximum number of PCI Express lanes	48
Features		PCI Express slots version	3.0
Execute Disable Bit	✓	Supported instruction sets	AVX, AVX 2.0, AVX-512, SSE4.2
Market segment	Server		
Maximum number of PCI Express lanes	48		
PCI Express slots version	3.0		
Supported instruction sets	AVX, AVX 2.0, AVX-512, SSE4.2		

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