Intel Pentium Gold G6400 processor 4 GHz 4 MB Smart Cache Box

Brand : Intel

Processor

Product family: Pentium

Product code: BX80701G6400

Features

Product name : G6400

Intel® Pentium® Gold G6400 Processor (4M Cache, 4.00 GHz)

Intel Pentium Gold G6400. Processor family: Intel® Pentium® Gold, Processor socket: LGA 1200 (Socket H5), Processor lithography: 14 nm. Memory channels: Dual-channel, Maximum internal memory supported by processor: 128 GB, Memory types supported by processor: DDR4-SDRAM. On-board graphics card model: Intel® UHD Graphics 610, Maximum on-board graphics card memory: 64 GB, On-board graphics card base frequency: 350 MHz. Market segment: Desktop, PCI Express configurations: 1x16, 2x8, 1x8+2x4, Supported instruction sets: SSE4.1, SSE4.2. Package type: Retail box





		Features	
Processor manufacturer * Processor model * Processor base frequency * Processor family * Processor cores * Processor socket * Component for Processor lithography *	Intel G6400 4 GHz Intel® Pentium® Gold 2 LGA 1200 (Socket H5) PC 14 nm	CPU configuration (max) Embedded options available Thermal solution specification PCI Express CEM revision Export Control Classification Number (ECCN) Commodity Classification Automated Tracking System (CCATS)	1 X PCG 2015C 3.0 5A992C G077159
Processor threads	4	Processor special features	
System bus rate Processor operating modes * Processor cache Processor cache type	8 GT/s 64-bit 4 MB Smart Cache	Intel® Hyper Threading Technology (Intel® HT Technology) Intel® Identity Protection	1
Thermal Design Power (TDP)	58 W	Technology (Intel® IPT)	
Box * Cooler included *	4	Intel® Turbo Boost Technology Intel® Quick Sync Video Technology Intel® InTru™ 3D Technology	× √ √
Memory bandwidth supported by processor (max)	41.6 GB/s	Intel® Clear Video HD Technology (Intel® CVT HD)	✓
Processor codename Processor ARK ID	Comet Lake 199288	Intel® AES New Instructions (Intel® AES-NI)	4
Memory		Enhanced Intel SpeedStep	1
		Technology	•
Maximum internal memory supported by processor	128 GB	Intel Trusted Execution Technology	×
,	128 GB DDR4-SDRAM	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional	x x x
supported by processor Memory types supported by processor Memory clock speeds supported by processor	DDR4-SDRAM 2666 MHz	Intel Trusted Execution Technology Intel® Thermal Velocity Boost	×
supported by processor Memory types supported by processor Memory clock speeds supported by	DDR4-SDRAM	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page	×
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics	DDR4-SDRAM 2666 MHz Dual-channel	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT)	× × √
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics On-board graphics card *	DDR4-SDRAM 2666 MHz	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program	× × √
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics	DDR4-SDRAM 2666 MHz Dual-channel	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program (SIPP)	× × √
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics On-board graphics card * Discrete graphics card *	DDR4-SDRAM 2666 MHz Dual-channel	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program (SIPP) Intel® OS Guard Intel Clear Video Technology Intel Software Guard Extensions (Intel SGX)	× × ✓ ✓ ×
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics On-board graphics card * Discrete graphics card * On-board graphics card model * Maximum on-board graphics card	DDR4-SDRAM 2666 MHz Dual-channel	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program (SIPP) Intel® OS Guard Intel Clear Video Technology Intel Software Guard Extensions (Intel SGX) Intel 64 Intel Virtualization Technology (VT-	× × ✓ ✓ ×
supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics On-board graphics card * Discrete graphics card * On-board graphics card model * Maximum on-board graphics card memory On-board graphics card base	DDR4-SDRAM 2666 MHz Dual-channel Intel® UHD Graphics 610 64 GB	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program (SIPP) Intel® OS Guard Intel Clear Video Technology Intel Software Guard Extensions (Intel SGX) Intel 64 Intel Virtualization Technology (VT- x) Intel Virtualization Technology for	× × ✓ ✓ ×
 supported by processor Memory types supported by processor Memory clock speeds supported by processor Memory channels * Graphics On-board graphics card * Discrete graphics card * On-board graphics card model * Maximum on-board graphics card memory On-board graphics card base frequency On-board graphics card dynamic 	DDR4-SDRAM 2666 MHz Dual-channel Intel® UHD Graphics 610 64 GB 350 MHz	Intel Trusted Execution Technology Intel® Thermal Velocity Boost Intel® Transactional Synchronization Extensions Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel Stable Image Platform Program (SIPP) Intel® OS Guard Intel Clear Video Technology Intel Software Guard Extensions (Intel SGX) Intel 64 Intel Virtualization Technology (VT- x)	× × ✓ ✓ ×

Graphics		Processor special features	
On-board graphics card DirectX	12.0	Intel [®] Optane [™] Memory Ready	4
version		Intel [®] Boot Guard	✓
On-board graphics card OpenGL version	4.5	Intel® vPro [™] Platform Eligibility	×
On-board graphics card maximum resolution (DisplayPort)	4096 x 2304 pixels	Operational conditions	
		Tjunction	100 °C
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	4096 x 2304 pixels	Technical details	
		Launch date	Q2'20
On-board graphics card maximum resolution (HDMI)	4096 x 2160 pixels	Maximum resolution & refresh rate (DisplayPort)	4096x2304@60Hz
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz	Product type	Processor
		Status	Launched
On-board graphics card refresh rate		Maximum memory	128 GB
at maximum resolution (eDP - Integrated Flat Panel)	60 Hz	Supported memory types	DDR4-SDRAM
On-board graphics card refresh rate		Bus speed	8 GT/s
at maximum resolution (HDMI)	30 Hz	Maximum graphics card memory	64 GB
On-board graphics card ID	0x9BA8	Processor ID	0x9BA8
Discrete graphics card model *	Not available	Logistics data	
Features		Harmonized System (HS) code	85423119
Execute Disable Bit	1	Packaging data	
Idle States	1	Package type	Retail box
Thermal Monitoring Technologies	4	Weight & dimensions	
Market segment	Desktop	Processor package size	37.5 x 37.5 mm
Maximum number of PCI Express	16		57.5 X 57.5 IIIII
lanes		Other features	
PCI Express slots version	3.0	Maximum internal memory	128 GB
PCI Express configurations	1x16, 2x8, 1x8+2x4		

Supported instruction sets

Scalability

SSE4.1, SSE4.2

1S









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