Intel Pentium Gold G5400 processor 3.7 GHz 4 MB Smart Cache

Brand : Intel   **Product family:** Pentium   **Product code:** CM8068403360112

Product name : G5400

Intel® Pentium® Gold G5400 Processor (4M Cache, 3.70 GHz)
Intel Pentium Gold G5400. Processor family: Intel® Pentium® Gold, Processor socket: LGA 1151 (Socket H4), Processor lithography: 14 nm. Memory channels: Dual-channel, Maximum internal memory supported by processor: 64 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

Processor

Processor manufacturer *	Intel
Processor model *	G5400
Processor base frequency *	3.7 GHz
Processor family *	Intel® Pentium® Gold
Processor cores *	2
Processor socket *	LGA 1151 (Socket H4)
Component for	PC
Processor lithography *	14 nm
Processor series	Intel Pentium Gold Series
Processor threads	4
System bus rate	8 GT/s
Processor operating modes *	64-bit
Processor cache	4 MB
Processor cache type	Smart Cache
Thermal Design Power (TDP)	58 W
Box *	✖
Cooler included *	✖
Bus type	DMI3
Memory bandwidth supported by processor (max)	37.5 GB/s
Processor codename	Coffee Lake
Processor ARK ID	129951

Memory

Maximum internal memory supported by processor	64 GB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2400 MHz
Memory channels *	Dual-channel
ECC	✔

Graphics

On-board graphics card *	✔
Discrete graphics card *	✖
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
On-board graphics card dynamic frequency (max)	1050 MHz

Features

Commodity Classification Automated Tracking System (CCATS)	G077159

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Turbo Boost Technology	✖
Intel® Quick Sync Video Technology	✔
Intel® InTru™ 3D Technology	✔
Intel® Clear Video HD Technology (Intel® CVT HD)	✔
Intel® AES New Instructions (Intel® AES-NI)	✔
Enhanced Intel SpeedStep Technology	✔
Intel Trusted Execution Technology	✖
Intel® Memory Protection Extensions (Intel® MPX)	✔
Intel® Transactional Synchronization Extensions	✖
Intel Enhanced Halt State	✔
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✔
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel TSX-NI	✖
Intel Stable Image Platform Program (SIPP)	✖
Intel® OS Guard	✔
Intel Clear Video Technology	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel 64	✔
Intel Identity Protection Technology version	1.00
Intel Secure Key Technology version	1.00
Intel Stable Image Platform Program (SIPP) version	0.00
Intel Virtualization Technology (VT-x)	✔

Graphics

Number of displays supported (on-board graphics)	3
On-board graphics card 4K support	✓
On-board graphics card DirectX version	12.0
On-board graphics card OpenGL version	4.5
On-board graphics card maximum resolution (DisplayPort)	4096 x 2304 pixels
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	4096 x 2304 pixels
On-board graphics card maximum resolution (HDMI)	4096 x 2304 pixels
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz
On-board graphics card refresh rate at maximum resolution (eDP - Integrated Flat Panel)	60 Hz
On-board graphics card refresh rate at maximum resolution (HDMI)	24 Hz
On-board graphics card ID	0x3E90/x93
Discrete graphics card model *	Not available

Features

Execute Disable Bit	✓
Idle States	✓
Thermal Monitoring Technologies	✓
Market segment	Desktop
Maximum number of PCI Express lanes	16
PCI Express slots version	3.0
PCI Express configurations	1x16, 2x8, 1x8+2x4
Supported instruction sets	SSE4.1, SSE4.2
Scalability	1S
CPU configuration (max)	1
Embedded options available	✓
Thermal solution specification	PCG 2015C
PCI Express CEM revision	3.0
Export Control Classification Number (ECCN)	5A992C

Processor special features

Intel Virtualization Technology for Directed I/O (VT-d)	✓
Intel TSX-NI version	0.00
Intel® Optane™ Memory Ready	✓
Intel® Boot Guard	✓
Intel® vPro™ Platform Eligibility	✗

Operational conditions

Tjunction	100 °C

Technical details

Bus bandwidth	8
Bus type units	GT/s
Launch date	Q2'18
Maximum resolution & refresh rate (DisplayPort)	4096x2304@60Hz
Maximum resolution & refresh rate (HDMI)	4096x2304@24Hz
Maximum resolution & refresh rate (Integrated Flat Panel)	4096x2304@60Hz
Processor cache	4096 KB
Product type	Processor
Status	Launched
Maximum memory	64 GB
Processor brand name	Intel Pentium Gold (2017) Intel Pentium Gold Processor (2017)
Supported memory types	DDR4-SDRAM
Last change	63903513
Product family	Intel Pentium Processor
Bus speed	8 GT/s
Maximum graphics card memory	64 GB
Processor ID	0x3E90/x93

Logistics data

Harmonized System (HS) code	8542310001

Packaging data

Package type	Retail box

Weight & dimensions

Processor package size	37.5 x 37.5 mm

Other features

Maximum internal memory	64 GB
Maximum internal memory	65536 MB

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