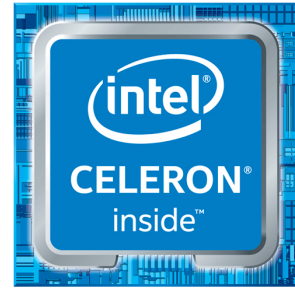intel

Intel Celeron G5905 processor 3.5 GHz 4 MB Smart Cache Box

Brand : Intel   **Product family:** Celeron   **Product code:** BX80701G5905

Product name : G5905

Intel® Celeron® Processor G5905 (4M Cache, 3.50 GHz)
Intel Celeron G5905. Processor family: Intel® Celeron® G, 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

Processor

Processor manufacturer *	Intel
Processor model *	G5905
Processor base frequency *	3.5 GHz
Processor family *	Intel® Celeron® G
Processor cores *	2
Processor socket *	LGA 1200 (Socket H5)
Component for	PC
Processor lithography *	14 nm
Processor threads	2
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 *	✓
Memory bandwidth supported by processor (max)	41.6 GB/s
Processor codename	Comet Lake
Processor ARK ID	201899

Memory

Maximum internal memory supported by processor	128 GB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2666 MHz
Memory channels *	Dual-channel

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
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

Features

CPU configuration (max)	1
Embedded options available	✗
Thermal solution specification	PCG 2015C
PCI Express CEM revision	3.0
Export Control Classification Number (ECCN)	5A992C
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® 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 Directed I/O (VT-d)	✓
Intel Turbo Boost Max Technology 3.0	✗
Intel® Optane™ Memory Ready	✓
Intel® Boot Guard	✓
Intel® vPro™ Platform Eligibility	✗

Graphics

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 2160 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)	30 Hz
On-board graphics card ID	0x9BA8
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

Operational conditions

Tjunction	100 °C

Technical details

Launch date	Q3'20
Maximum resolution & refresh rate (DisplayPort)	4096x2304@60Hz
Product type	Processor
Status	Launched
Maximum memory	128 GB
Supported memory types	DDR4-SDRAM
Bus speed	8 GT/s
Maximum graphics card memory	64 GB
Processor ID	0x9BA8

Logistics data

Harmonized System (HS) code	85423119

Packaging data

Package type	Retail box

Weight & dimensions

Processor package size	37.5 x 37.5 mm

Other features

Maximum internal memory	128 GB

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