

## Intel Xeon E-2176G processor 3.7 GHz 12 MB Smart Cache

**Brand :** Intel

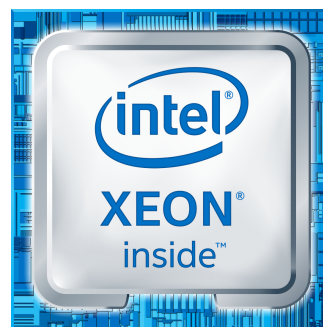
**Product family:** Xeon

**Product code:**  
CM8068403380018

**Product name :** E-2176G

Intel® Xeon® E-2176G Processor (12M Cache, up to 4.70 GHz)

Intel Xeon E-2176G. Processor family: Intel Xeon E, Processor socket: LGA 1151 (Socket H4), 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 P630, Maximum on-board graphics card memory: 128 GB, On-board graphics card outputs supported: Embedded DisplayPort (eDP), DisplayPort, HDMI, DVI. Market segment: Server, PCI Express configurations: 1x16, 2x8, 1x8+2x4, Supported instruction sets: SSE4.1, SSE4.2, AVX 2.0. Intel® Turbo Boost Technology 2.0 frequency: 4.7 GHz



Processor		Processor special features	
Processor manufacturer *	Intel	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor model *	E-2176G	Intel® Turbo Boost Technology	2.0
Processor base frequency *	3.7 GHz	Intel® Quick Sync Video Technology	✓
Processor family *	Intel Xeon E	Intel® InTru™ 3D Technology	✓
Processor cores *	6	Intel® Clear Video HD Technology (Intel® CVT HD)	✓
Processor socket *	LGA 1151 (Socket H4)	Intel® AES New Instructions (Intel® AES-NI)	✓
Component for	Server/workstation	Enhanced Intel SpeedStep Technology	✓
Processor lithography *	14 nm	Intel Trusted Execution Technology	✓
Processor threads	12	Intel® Memory Protection Extensions (Intel® MPX)	✓
System bus rate	8 GT/s	Intel® Turbo Boost Technology 2.0 frequency	4.7 GHz
Processor operating modes *	64-bit	Intel® Transactional Synchronization Extensions	✓
Processor boost frequency	4.7 GHz	Intel Enhanced Halt State	✓
Processor cache	12 MB	Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✓
Processor cache type	Smart Cache	Intel VT-x with Extended Page Tables (EPT)	✓
Thermal Design Power (TDP)	80 W	Intel® Secure Key	✓
Box *	✗	Intel TSX-NI	✓
Cooler included *	✗	Intel® OS Guard	✓
Stepping	U0	Intel Clear Video Technology	✓
Bus type	DMI3	Intel Software Guard Extensions (Intel SGX)	✓
Memory bandwidth supported by processor (max)	41.6 GB/s	Intel 64	✓
Processor codename	Coffee Lake	Intel Secure Key Technology version	1.00
Processor code	SR3WS	Intel Virtualization Technology (VT-x)	✓
Processor ARK ID	134860	Intel Virtualization Technology for Directed I/O (VT-d)	✓
<b>Memory</b>		Intel TSX-NI version	1.00
Maximum internal memory supported by processor	128 GB	Intel® Optane™ Memory Ready	✓
Memory types supported by processor	DDR4-SDRAM	Intel® Boot Guard	✓
Memory clock speeds supported by processor	2666 MHz	Intel® vPro™ Platform Eligibility	✓
Memory channels *	Dual-channel	<b>Operational conditions</b>	
ECC	✓	Tjunction	100 °C
<b>Graphics</b>			
On-board graphics card *	✓		
Discrete graphics card *	✗		
On-board graphics card model *	Intel UHD Graphics P630		
Maximum on-board graphics card memory	128 GB		

Graphics		Technical details	
On-board graphics card outputs supported	Embedded DisplayPort (eDP), DisplayPort, HDMI, DVI	Bus bandwidth	8
On-board graphics card base frequency	350 MHz	Bus type units	GT/s
On-board graphics card dynamic frequency (max)	1200 MHz	Launch date	Q3'18
Number of displays supported (on-board graphics)	3	Maximum resolution & refresh rate (DisplayPort)	4096x2304@60Hz
On-board graphics card 4K support	✓	Maximum resolution & refresh rate (HDMI)	4096x2160@24Hz
On-board graphics card DirectX version	12.0	Maximum resolution & refresh rate (Integrated Flat Panel)	4096x2304@60Hz
On-board graphics card OpenGL version	4.5	Maximum resolution & refresh rate (VGA)	N/A
On-board graphics card maximum resolution (DisplayPort)	4096 x 2304 pixels	Processor cache	12288 KB
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	4096 x 2304 pixels	Product type	Processor
On-board graphics card maximum resolution (HDMI)	4096 x 2160 pixels	Status	Launched
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz	Maximum memory	128 GB
On-board graphics card refresh rate at maximum resolution (eDP - Integrated Flat Panel)	60 Hz	Processor brand name	Intel Xeon
On-board graphics card refresh rate at maximum resolution (HDMI)	24 Hz	Supported memory types	DDR4-SDRAM
On-board graphics card ID	0x3E96	Last change	63903513
Discrete graphics card model *	Not available	Product family	Intel Xeon Processors
Features		Bus speed	8 GT/s
Execute Disable Bit	✓	Maximum graphics card memory	128 GB
Idle States	✓	Processor ID	0x3E96
Thermal Monitoring Technologies	✓	Servicing status	Baseline Servicing
Market segment	Server	Logistics data	
Maximum number of PCI Express lanes	16	Harmonized System (HS) code	85423119
PCI Express slots version	3.0	Packaging data	
PCI Express configurations	1x16, 2x8, 1x8+2x4	Package width	70 mm
Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0	Package depth	116 mm
Scalability	1S	Package height	101 mm
CPU configuration (max)	1	Package weight	316.1 g
Embedded options available	✓	Package type	Retail box
PCI Express CEM revision	3.0	Weight & dimensions	
Export Control Classification Number (ECCN)	5A992C	Processor package size	37.5 x 37.5 mm
Commodity Classification Automated Tracking System (CCATS)	G077159	Other features	
		Maximum internal memory	128 GB
		Maximum internal memory	65536 MB
		Graphics output	eDP/DP/HDMI/DVI
		Video decoding	✓



0675901520720



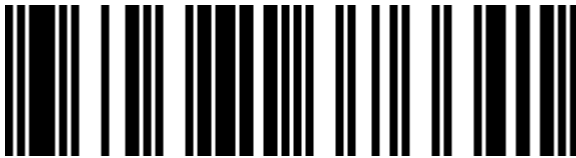
675901520720



8592978109776



5054444238067



7330381376641

Disclaimer. The information published here (the "Information") is based on sources that can be considered reliable, typically the manufacturer, but this Information is provided "AS IS" and without guarantee of correctness or completeness. The Information is only indicative and can be changed at any time without notification. No rights can be based on the Information. Suppliers or aggregators of this Information do not accept any liability with regard to the content of (web)pages and other documents, including its Information. The publisher of the Information can not be held liable for the content of 3rd party websites that are linking this Information or are linked to from this Information. You as the User of the Information are solely responsible for the choice and usage of this Information. You are not entitled to transfer, copy or otherwise multiply or distribute the Information. You are obliged to follow the directions of the copyright owner(s) with regard to the use of the Information. Exclusively Dutch law is applicable. With regard to price and stock data on the site, the publisher followed a number of starting points, which are not necessarily relevant for your private or business circumstances. Therefore, the price and stock data are only indicative and are subject to changes. You are personally responsible for the way you use and apply this information. As a user of the Information or sites or documents in which this Information is included, you will adhere to standard fair use including avoidance of spamming, ripping, intellectual-property violations, privacy violations, and any other illegal activity.