Support Home > Product Specifications > Processors

Search specifications





Intel[®] Core[™] i7-4700MQ Processor

Add to Compare

6M Cache, up to 3.40 GHz

Specifications

Essentials

Performance

Supplemental Information

Memory Specifications

Processor Graphics

Expansion Options

Package Specifications

Advanced Technologies

Security & Reliability

Ordering and Compliance

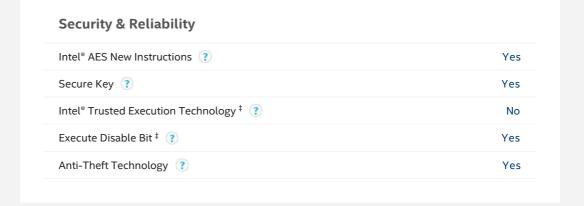
Product Images

Compatible Products

Downloads and Software

Essentials	Export specification
Product Collection	4th Generation Intel® Core™ i7 Processors
Code Name	Products formerly Haswell
Vertical Segment	Mobile
Processor Number	i7-4700MQ
Status	Launched
Launch Date 🔞	Q2'13
Lithography ?	22 nm
Recommended Customer Price ?	N/A
Performance	
# of Cores ?	4
# of Threads ?	8
Processor Base Frequency ?	2.40 GHz
Max Turbo Frequency 😯	3.40 GHz
Cache ?	6 MB SmartCache
Bus Speed 🔞	5 GT/s DMI2
TDP ?	47 W
Supplemental Information	
Embedded Options Available ?	No
Datasheet	View now
Memory Specifications	
Max Memory Size (dependent on memory type) ?	32 GB
Memory Types ?	DDR3L 1333/1600
Max # of Memory Channels ?	2
Max Memory Bandwidth ?	25.6 GB/s
ECC Memory Supported ‡ ?	No
Processor Graphics	
Processor Graphics ‡ ?	Intel® HD Graphics 4600
Graphics Base Frequency 🕧	400 MHz

Graphics Max Dynamic Frequency ?	1.15 GHz
Graphics Video Max Memory 🕐	2 GB
Graphics Output ?	eDP/DP/HDMI/VGA
Max Resolution (HDMI 1.4)‡ 👔	3840x2160@60Hz
Max Resolution (DP)‡ 🔞	3840x2160@60Hz
Max Resolution (VGA)‡ 🕐	2880x1800@60Hz
DirectX* Support ?	11.2/12
OpenGL* Support ?	4.3
Intel® Quick Sync Video 🔞	Yes
Intel® InTru™ 3D Technology 🍞	Yes
Intel® Flexible Display Interface (Intel® FDI)	Yes
Intel® Clear Video HD Technology 🕡	Yes
# of Displays Supported ‡	3
Device ID	0x416
Expansion Options	
PCI Express Revision ?	3
PCI Express Configurations ‡ ?	1x16, 2x8, 1x8 2x4
Max # of PCI Express Lanes ?	16
Package Specifications	
-	
	ECDC AO 46
Sockets Supported ?	FCPGA946
Max CPU Configuration	1
Max CPU Configuration T _{JUNCTION} ?	1 100°C
Max CPU Configuration	1
Max CPU Configuration TJUNCTION ?	1 100°C
Max CPU Configuration TJUNCTION Package Size	1 100°C
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies	1 100°C 37.5mm x 32mm x 1.6mm
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology ‡ ?	1 100°C 37.5mm x 32mm x 1.6mm
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology ‡ ? Intel® vPro™ Platform Eligibility ‡ ?	1 100°C 37.5mm x 32mm x 1.6mm
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology ‡ ? Intel® vPro™ Platform Eligibility ‡ ? Intel® Hyper-Threading Technology ‡ ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d)	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No Yes
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ? Intel® TSX-NI ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes \$ 1
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ? Intel® TSX-NI ? Intel® 64 † ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No Yes No Yes
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ? Intel® TSX-NI ? Intel® 64 † ? Instruction Set ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No Yes No Yes Ano Ano Yes Ano
Max CPU Configuration TJUNCTION ? Package Size Advanced Technologies Intel® Turbo Boost Technology † ? Intel® vPro™ Platform Eligibility † ? Intel® Hyper-Threading Technology † ? Intel® Virtualization Technology (VT-x) † ? Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ? Intel® TSX-NI ? Intel® 64 † ? Instruction Set ? Instruction Set Extensions ?	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No Yes No Yes Available No Yes No Yes No Yes
Max CPU Configuration TJUNCTION ② Package Size Advanced Technologies Intel® Turbo Boost Technology † ② Intel® vPro™ Platform Eligibility † ② Intel® Hyper-Threading Technology † ③ Intel® Virtualization Technology (VT-x) † ③ Intel® Virtualization Technology for Directed I/O (VT-d) Intel® VT-x with Extended Page Tables (EPT) † ② Intel® TSX-NI ② Intel® 64 † ③ Instruction Set ② Instruction Set Extensions ③ Idle States ③	1 100°C 37.5mm x 32mm x 1.6mm 2.0 No Yes Yes No Yes 1 1 100°C 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



More support options for Intel® Core™ i7-4700MQ Processor (6M Cache, up to 3.40 GHz)





Downloads and Software



Support Community



Warranty and Replacement



Need more help?

Contact support



All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

Intel classifications are for informational purposes only and consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company as an importer and/or exporter is responsible for determining the correct classification of your transaction.

Refer to Datasheet for formal definitions of product properties and features.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

See http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html? wapkw=hyper+threading for more information including details on which processors support Intel® HT Technology.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers, typically represent 1,000-unit purchase quantities, and are subject to change without notice. Taxes and shipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply. If sold in bulk, price represents individual unit. Listing of these RCP does not constitute a formal pricing offer from Intel. Please work with your appropriate Intel representative to obtain a formal price quotation.

 $System\ and\ Maximum\ TDP\ is\ based\ on\ worst\ case\ scenarios.\ Actual\ TDP\ may\ be\ lower\ if\ not\ all\ I/Os\ for\ chipsets\ are\ used.$

For benchmarking data see http://www.intel.com/performance.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See http://www.intel.com/content/www/us/en/processors/processor-numbers.html for details.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.



Company Information Our Commitment Communities Investor Relations Contact Us Newsroom Jobs











© Intel Corporation | Terms of Use | *Trademarks | Privacy | Cookies | Supply Chain Transparency | Site Map

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for CPU - Central Processing Units category:

Click to view products by Intel manufacturer:

Other Similar products are found below:

AT80612003090AAS LBWJ B4860NSE7QUMD NPIXP2855AB-S-LA88 IVPX7225-RTM-1 96MPI5-2.9-6M10T 2SC4646D-AN

SMBV1061LT1G 2SC4646E-AN 2SJ268-DL-E CP80617003981AHS LBTQ MATXM-CORE-411-HTSNK TEC0193BPF TND516SS-TL-E

BGSF 1717MN26 E6327 D8086-2 LF80538GF0282M-S-L8VY CM8063401293902S R1A4 CM8063501521302S R1B8

CM8066201919901 SR2L0 CM8066201928505 SR2HT CPH5855-TL-E CM8063501293200S R1A0 AV8063801129600S R10F EMS36-02
2H-MDT EMM04-MDT NG80386DX33 NHIXP432AC NK80530MZ866256S-L7XH P1021NXE2HFB R0K5ML001SS00BR

LC87F2608A LC87FBK08A PRIXP425BC PRIXP423BB CM8066201921712S R2LF CM8064601467102S R152 CM8063501375800S

R1AX CM8063501293506S R1A2 CM8063401293802S R1A3 CM8062107185405S R0KM LC87F0G08A CM8067702867061S R374 PB
8SMB COMX-300-HSP RTM-ATCA-7360 96MPI7-3.4-8M11T CM8066002023801S R2J1 96MPP-2.3-3M10T 96MPI7-3.4-8M11T1

96MPXE-2.0-15M20T