

Intel® Core™ i5-5300U Processor (3M Cache, up to 2.90 GHz)

Specifications	
- Essentials	
Status	Launched
Launch Date	Q1'15
DMI2	5 GT/s
Processor Number	i5-5300U
Cache	3 MB
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX 2.0
Embedded Options Available	No
Lithography	14 nm
Recommended Customer Price	TRAY: \$281.00
Datasheet	Link
Conflict Free	Yes
- Performance	
# of Cores	2
# of Threads	4
Processor Base Frequency	2.3 GHz
Max Turbo Frequency	2.9 GHz
TDP	15 W
Configurable TDP-down Frequency	600 MHz
Configurable TDP-down	7.5 W
- Memory Specifications	
Max Memory Size (dependent on memory type)	16 GB
Memory Types	DDR3L 1333/1600, LPDDR3 1333/1600
Max # of Memory Channels	2
Max Memory Bandwidth	25.6 GB/s
- Graphics Specifications	
Processor Graphics [‡]	Intel® HD Graphics 5500
Graphics Base Frequency	300 MHz
Graphics Max Dynamic Frequency	900 MHz
Graphics Video Max Memory	16 GB
Graphics Output	eDP/DP/HDMI

ıx Resolution (HDMI 1.4)‡		2560X1600@60Hz	
Resolution (DP)‡		3840x2160@60Hz	
ectX* Support		11.2	
enGL* Support		4.3	
Intel® Quick Sync Video	Q	Yes	
Intel® InTru™ 3D Technology		Yes	
Intel® Flexible Display Interface (Intel® FDI)		Yes	
Intel® Clear Video HD Technology		Yes	
Intel® Clear Video Technology		Yes	
Intel® Wireless Display	Q	Yes	
Intel® Insider™		Yes	
# of Displays Supported ‡		3	
Device ID		0x1616	
- Expansion Options			
PCI Express Revision		2.0	
PCI Express Configurations [‡]		4x1, 2x4	
Max # of PCI Express Lanes		12	
- Package Specifications			
Max CPU Configuration		1	
TJUNCTION		105°C	
Package Size	ackage Size		
Graphics and IMC Lithography		14nm	
Sockets Supported		FCBGA1168	
Low Halogen Options Available		See MDDS	
Advanced Technologies			
- Advanced Technologies			
Intel® Turbo Boost Technology ‡		2.0	
Intel® vPro Technology ‡ Intel® Hyper-Threading Technology ‡	Q	Yes	
	Q	Yes	
Intel® Virtualization Technology (VT-x) ‡		Yes	
Intel® Virtualization Technology for Directed I/O (VT-d) ‡	Q	Yes	
Intel® VT-x with Extended Page Tables (EPT) ‡	Q	Yes	
Intel® TSX-NI		Yes	
Intel® 64 ‡	Q	Yes	
<u>Idle States</u>		Yes	
Enhanced Intel SpeedStep® Technology	Q	Yes	
Thermal Monitoring Technologies		Yes	

Intel® Fast Memory Access	Yes
Intel® Flex Memory Access	Yes
Intel® Identity Protection Technology ‡	Yes
Intel® Stable Image Platform Program (SIPP)	Yes
Intel® Small Business Advantage	Yes
Intel® Smart Response Technology	Yes
- Intel® Data Protection Technology	
Intel® AES New Instructions	Q Yes
Secure Key	Yes
- Intel® Platform Protection Technology	
Trusted Execution Technology [‡]	[Q] Yes
Execute Disable Bit [‡]	Yes
OS Guard	Yes

Ordering and Spec Information

Trade Compliance Information

ECCN	CCATS	US HTS
5A992CN3	G071701++	8542310000-HYBRD

Ordering and Spec Information

Spec Code	Ordering Code	Step	RCP
Intel® Core™ i5-5300U Process	or (3M Cache, up to 2.90 GHz) FC-BGA14F, Tray		
SR23X	FH8065801620104	FO	\$281.00

Download Drivers



Intel® Security Unifier

Intel® Security Unifier utility enables users to scan their computing devices for the latest security software components available from Intel (1.0.0.658).

Version: 1.0.0.658 (Latest) **Date:** 5/5/2016

Operating Systems: Windows 7*, Windows 8*, Windows 8.1*, 2 more



Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40].

Version: Beta 15.40.23.4444 (Latest) **Date:** 4/29/2016

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

Version 15.40.22.4424 of the Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1*.

Version: 15.40.22.4424 (Latest) **Date:** 4/22/2016

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more

Intel® Management Engine (Intel® ME) software for systems based on 3rd generation Intel® Processors or above.



Intel® Management Engine (Intel® ME) software 11.0.2.1002 for systems based on 3rd generation Intel® Processors or above.

Version: 11.0.2.1002 (Latest) Date: 3/29/2016

Operating Systems: Windows Vista*, Windows Vista Beta 1*, Windows Vista Business, 32-bit*, 37 more



Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

Intel® Beta Graphics Driver for Windows® 7/8.1/10* [15.40]

Version: Beta 15.40.20.4404 (Previously

Date: 3/11/2016

Released)

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

OS support varies by platform with these drivers. Read driver ReadMe's to see if your product+OS combo is supported with this driver.

Version: 15.40.18.4380 (Previously Released) **Date:** 3/8/2016

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

This download installs the Intel® beta graphics driver version 15.40.18.4380 for Windows* 7, Windows 8.1, and Windows® 10.

Version: Beta 15.40.18.4380 (Previously Released) Date: 2/5/2016

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 2 more



Intel® Graphics Driver for Windows 7*/8.1* [15.36]

This download installs the Intel® Graphics Driver version 15.36.28.4332 for Windows* 7 and Windows 8.1 supporting 4th and 5th Generation Intel® Core™ Processors.

Version: 15.36.28.4332 (Previously Released)

Date: 12/11/2015

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, Windows 8.1, 64-bit*



Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

This is a BETA Graphics Driver (versions 15.40.12.64.4326 and 15.40.12.4326) for Windows*.

Version: Beta 15.40.12.4326 (Previously **Date:** 11/20/2015

Released)

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

These downloads are used to install the Intel® Graphics Driver package version 15.40.10.4300, which supports Windows* 7, Windows 8.1, and Windows® 10, 32- and 64-bit.

Version: 15.40.10.4300 (Previously Released) **Date:** 10/26/2015 **Operating Systems:** Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Graphics Driver for Windows 7*/8.1* [15.36]

Windows 7* & 8.1* - 15.36.26.4294 (10.18.14.4294) 4th Gen (HSW) & 5th Gen (BDW). See ReleaseNotes for details on system requirements support.

Version: 15.36.26.4294 (Previously Released) **Date:** 10/9/2015

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, Windows 8.1, 64-bit*



Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]

This driver for Windows* (version 15.40.7.4279) adds support for the 6th Generation Intel® Core family of processors with Intel® HD Graphics 500.

Version: 15.40.7.4279 (Previously Released)

Date: 9/1/2015

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more



Intel® Iris™, Iris™ Pro, and HD Graphics Production Driver for Windows® 10 64-bit

This download installs the Intel® Iris™ graphics, Iris™ Pro graphics, and Intel® HD Graphics production driver version 15.40.4.64.4256 for Windows® 10, 64-bit, adding new Windows 10 features.

Version: 15.40.4.64.4256 (Previously Released) **Date:** 8/5/2015

Operating Systems: Windows® 10, 64-bit

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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, i7-2675QM, 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.

"Conflict free" and "conflict-free" means "DRC conflict free", which is defined by the U.S. Securities and Exchange Commission rules to mean products that do not contain conflict minerals (tin, tantalum, tungsten and/or gold) that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries. Intel also uses the term "conflict-free" in a broader sense to refer to suppliers, supply chains, smelters and refiners whose sources of conflict minerals do not finance conflict in the DRC or adjoining countries. Intel processors manufactured before January 1, 2013 are not confirmed conflict free. The conflict free designation refers only to product manufactured after that date. For Intel Boxed Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatsinks/coolers.

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.

Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

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.

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