

Intel® Core™ i7-5500U Processor (4M Cache, up to 3.00 GHz)

Specifications			
- Essentials			
Processor Number	i7-5500U		
Status	Launched		
Launch Date	Q1'15		
Lithography	14 nm		
Recommended Customer Price	\$393.00		
- Performance			
# of Cores	2		
# of Threads	4		
Processor Base Frequency	2.40 GHz		
Max Turbo Frequency	3.00 GHz		
Cache	4 MB		
Bus Speed	5 GT/s DMI2		
TDP	15 W		
Configurable TDP-down Frequency	600.00 MHz		
Configurable TDP-down	7.5 W		
- Supplemental Information			
Embedded Options Available	No		
Datasheet	Link		
Conflict Free	Yes		
- Memory Specifications	и		
16 GB			
Memory Types	DDR3L 1333/1600, LPDDR3 1333/1600		
# of Memory Channels 2			
Max Memory Bandwidth 25.6 GB/s			
- Graphics Specifications			
Processor Graphics ‡	Intel® HD Graphics 5500		
Graphics Base Frequency	300.00 MHz		
Graphics Max Dynamic Frequency	950.00 MHz		
Graphics Video Max Memory	16 GB		
	eDP/DP/HDMI		
Graphics Output	eDP/DP/HDMI		
Graphics Output Max Resolution (HDMI 1.4)‡	eDP/DP/HDMI 2560x1600@60Hz		
Max Resolution (HDMI 1.4)‡	2560x1600@60Hz		

Intel® Quick Sync Video	Q	Yes		
Intel® InTru™ 3D Technology				
Intel® Flexible Display Interface (Intel® FDI)	Yes			
Intel® Clear Video HD Technology	Yes			
Intel® Clear Video Technology		Yes		
Intel® Wireless Display	Q	Yes		
# of Displays Supported ‡				
Device ID		0x1616		
- Expansion Options				
PCI Express Revision		2.0		
PCI Express Configurations [‡]		4x1, 2x4		
Max # of PCI Express Lanes		12		
- Package Specifications				
Sockets Supported		FCBGA1168		
ax CPU Configuration 1				
TJUNCTION		105°C		
Package Size		40mm x 24mm x 1.3mm		
Low Halogen Options Available		See MDDS		
- Advanced Technologies				
Intel® Turbo Boost Technology ‡		2.0		
Intel® vPro Technology ‡	Q	No		
Intel® Hyper-Threading Technology [‡]	Q	Yes		
el® Virtualization Technology (VT-x) [‡] Yes el® Virtualization Technology for Directed I/O (VT-d) [‡] Q Yes				
Intel® Virtualization Technology for Directed I/O (VT-d) [±]	Yes			
Intel® VT-x with Extended Page Tables (EPT) [‡]		Yes		
Intel® TSX-NI		No		
Intel® 64 [‡]	Q	Yes		
Instruction Set		64-bit		
Instruction Set Extensions		SSE4.1/4.2, AVX 2.0		
Idle States		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)		No		
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 Prote	ction Technology					
Trusted Execution Technol	ogy‡		Q	No		
Execute Disable Bit ‡				Yes		
OS Guard				Yes		
Ordering and Spec	Information					
Trade Compliance Inform						
ECCN		CCATS			US HT	S
5A992CN3	G	071701++	854231	0000-HYBR	D	
Ordering and Spec Inform	ation					
Spec Code	ation	Ordering Code	9		Step	RCP
•	Processor (4M Ca	che, up to 3.00 GHz) FC-BGA14F,			Step	iter
SR23W		65801620004			FO	\$393.00
Version: 1.1.0.40 (Unifier utility enab _atest)	les users to scan their computing de	evices for the lat Date: 8/18/2	-	software componer	nts available from Intel (1.1.0.40
Installs the Intel® G Version: 15.40.28.	raphics Driver 15.4 4501 (Latest)	0.28.4501 for Windows 7*/8.1* 0.28.4501 for Windows® 10 and Wi Date: 8/12/2016 bit*, Windows 7, 64-bit*, Windows 8	ndows 7*/8.1*	2		
	s Driver for *Gears 0.xx.4530 (Previous		/8.1* [15.40]			
Intel® Beta Graphic Version: Beta 15.4 Released)	s Driver for Windov 0.26.4474 (Previou	Vindows [®] 10 and Windows 7* vs [®] 10 and Windows 7*/8.1* [15.40] sly Date: 6/24/2016 pit*, Windows 7, 64-bit*, Windows 8].	pre		
	raphics Driver 15.4 4463 (Previously	ows [®] 10 and Windows 7*/8.1* 0.25.4463 for Windows [®] 10 and Wi Date: 6/17/2016				

Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8, 32-bit*, 5 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 (Previously Date: 4/29/2016 Released)
	Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more
J	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 (Previously Released) Date: 4/22/2016 Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more
IJ	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
U	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
IJ	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: 2/5/2016Operating Systems:Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 2 more
IJ	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*
U	Intel® Beta Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]This download installs Beta versions 15.40.12.64.4326 and 15.40.12.4326 of the graphics driver for Windows* 7/8.1/10.Version: Beta 15.40.12.4326 (Previously Released)Date: 11/20/2015Operating Systems: Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more
U	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
U	Intel® Graphics Driver for Windows 7*/8.1* [15.36]This download installs version 15.36.26.4294 of the Intel® Graphics Driver for Windows* 7/ 8.1, 32 and 64-bit.Version: 15.36.26.4294 (Previously Released)Date: 10/9/2015Operating Systems:Windows 7, 64-bit*, Windows 8.1, 32-bit*, Windows 8.1, 64-bit*
U	Intel® Graphics Driver for Windows® 10 and Windows 7*/8.1* [15.40]This download installs version 15.40.7.4279 of the Intel® Graphics Driver for Windows* 7/8.1/10, 32 and 64-bit.Version: 15.40.7.4279 (Previously Released)Date: 9/1/2015Operating Systems:Windows 7, 64-bit*, Windows 8.1, 32-bit*, 3 more
U	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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correct classification of any item at the time of export.

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.

"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 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.

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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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