



Intel® Core™ i7-6600U Processor (4M Cache, up to 3.40 GHz)

Specifications

- Essentials

Status	Launched
Launch Date	Q3'15
Processor Number	i7-6600U
Intel® Smart Cache	4 MB
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX 2.0
Embedded Options Available	 Yes
Lithography	14 nm
Recommended Customer Price	TRAY: \$393.00
Conflict Free	Yes
Datasheet	Link
Product Brief	Link

- Performance

# of Cores	2
# of Threads	4
Processor Base Frequency	2.6 GHz
Max Turbo Frequency	3.4 GHz
TDP	15 W
Configurable TDP-up Frequency	2.8 GHz
Configurable TDP-up	25 W
Configurable TDP-down Frequency	800 MHz
Configurable TDP-down	7.5 W

- Memory Specifications

Max Memory Size (dependent on memory type)	32 GB
Memory Types	DDR4-2133, LPDDR3-1866, DDR3L-1600
Max # of Memory Channels	2
Max Memory Bandwidth	34.1 GB/s
ECC Memory Supported †	 No

- Graphics Specifications

Processor Graphics †	Intel® HD Graphics 520
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Graphics Base Frequency	300 MHz
Graphics Max Dynamic Frequency	1.05 GHz
Graphics Video Max Memory	32 GB
Graphics Output	eDP/DP/HDMI/DVI
4K Support	Yes, at 60Hz
Max Resolution (Intel® WiDi)‡	1080p
Max Resolution (HDMI 1.4)‡	4096x2304@24Hz
Max Resolution (DP)‡	4096x2304@60Hz
Max Resolution (eDP - Integrated Flat Panel)‡	4096x2304@60Hz
Max Resolution (VGA)‡	N/A
DirectX* Support	12
OpenGL* Support	4.4
Intel® Quick Sync Video	 Yes
Intel® InTru™ 3D Technology	Yes
Intel® Insider™	Yes
Intel® Wireless Display	 Yes
Intel® Clear Video HD Technology	Yes
Intel® Clear Video Technology	Yes
# of Displays Supported †	3
Device ID	0x1916
- Expansion Options	
PCI Express Revision	3.0
PCI Express Configurations †	1x4, 2x2, 1x2+2x1 and 4x1
Max # of PCI Express Lanes	12
- Package Specifications	
Max CPU Configuration	1
T _{JUNCTION}	100°C
Package Size	42mm X 24mm
Graphics and IMC Lithography	14 nm
Sockets Supported	FCBGA1356
Low Halogen Options Available	See MDDS
- Advanced Technologies	
Intel® Turbo Boost Technology †	2.0
Intel® vPro Technology †	 Yes
Intel® Hyper-Threading Technology †	 Yes
Intel® Virtualization Technology (VT-x) †	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) †	 Yes

Intel® VT-x with Extended Page Tables (EPT) ‡		Yes
Intel® TSX-NI		Yes
Intel® 64 ‡		Yes
Intel® My WiFi Technology		Yes
Idle States		Yes
Enhanced Intel SpeedStep® Technology		Yes
Thermal Monitoring Technologies		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		Yes
Secure Key		Yes
Intel® Software Guard Extensions (Intel® SGX)		Yes
Intel® Memory Protection Extensions (Intel® MPX)		Yes
- Intel® Platform Protection Technology		
OS Guard		Yes
Trusted Execution Technology ‡		Yes
Execute Disable Bit ‡		Yes

Ordering and Spec Information

Trade Compliance Information

ECCN	CCATS	US HTS
5A992CN3	G147881	8542310000

Ordering and Spec Information

Spec Code	Ordering Code	Step	RCP
Intel® Core™ i7-6600U Processor (4M Cache, up to 3.40 GHz) FC-BGA14C, Tray			
SR2F1	FJ8066201924950	D1	\$393.00

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® Graphics Driver for Windows® 7/8.1/10* [15.40 6th Gen]**

This package installs the Intel® graphics driver versions 15.40.14.64.4352 and 15.40.14.32.4352 on Windows* for 6th generation platforms.

Version: 15.40.14.4352 (Latest)**Date:** 12/23/2015**Operating Systems:** Windows 7, 32-bit*, Windows 7, 64-bit*, Windows 8.1, 64-bit*, Windows® 10, 64-bit**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 Released)**Date:** 3/11/2016**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]**

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® 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 Released)**Date:** 11/20/2015**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® 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

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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, i7-2670QM/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.

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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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