

Specifications		
- Essentials		
Processor Number	i3-4030U	
Status	Launched	
Launch Date	Q2'14	
Lithography	22 nm	
Recommended Customer Price	\$281.00	
- Performance		
# of Cores	2	
# of Threads	4	
Processor Base Frequency	1.90 GHz	
Cache	3 MB SmartCache	
Bus Speed	5 GT/s DMI2	
TDP	15 W	
- Supplemental Information		
Embedded Options Available	Q No	
Datasheet	Link	
Conflict Free	Yes	
- 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	
ECC Memory Supported <sup>‡</sup>	No	
- Graphics Specifications		
Processor Graphics ‡	Intel® HD Graphics 4400	
Graphics Base Frequency	200.00 MHz	
Graphics Max Dynamic Frequency	1.00 GHz	
Graphics Video Max Memory	2 GB	
Graphics Output	eDP/DP/HDMI	
Max Resolution (HDMI 1.4)‡	3200x2000@60Hz	
Max Resolution (DP)‡	3200x2000@60Hz	
Max Resolution (VGA)‡	N/A	
DirectX* Support	11.2/12	
OpenGL* Support	4.3	

Intel® InTru™ 3D Technology Intel® Flexible Display Interface (Intel® FDI)		Yes No	
ntel® Clear Video HD Technology		Yes	
Intel® Wireless Display	Q	Yes	
# of Displays Supported <sup>‡</sup>		3	
Device ID		0xA16	
- Expansion Options			
PCI Support		No	
PCI Express Revision		2.0	
PCI Express Configurations <sup>‡</sup>		4x1, 2x4	
Max # of PCI Express Lanes		12	
- I/O Specifications			
USB Revision		3.0	
# of USB Ports		4	
Total # of SATA Ports		4	
Integrated LAN		No	
Integrated IDE		No	
General Purpose IO		Yes	
UART		Yes	
Max # of SATA 6.0 Gb/s Ports		4	
- Package Specifications			
Sockets Supported		FCBGA1168	
Max CPU Configuration		1	
TJUNCTION		100°C	
Package Size		40mm x 24mm x 1.5mm	
Low Halogen Options Available		See MDDS	
- Advanced Technologies			
Intel® Turbo Boost Technology ‡		No	
Intel® vPro Technology ‡	Q	No	
Intel® Hyper-Threading Technology ‡	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		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	رت	Yes	
Intel® ME Firmware Version		9.5	

Intel® HD Audio Technology		Yes
Intel® Matrix Storage Technology		No
Intel® Identity Protection Technology ‡		Yes
Intel® Rapid Storage Technology		Yes
Intel® Smart Connect Technology		Yes
- Intel® Data Protection Technology		
Intel® AES New Instructions	Q	Yes
Secure Key		Yes
- Intel® Platform Protection Technology		
Trusted Execution Technology ‡	Q	No
Execute Disable Bit ‡		Yes
Anti-Theft Technology		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™ i3-4030U Process	sor (3M Cache, 1.90 GHz) FC-BGA12F, Tray		
SR1EN	CL8064701552900	DO	\$281.00

## **Download Drivers**



# Intel® Graphics Driver for Windows® 10 [15.40][4th Gen]

Installs Intel® Graphics Driver 15.40.28.4501 for Windows® 10

Version: 15.40.28.4501 (Latest) Date: 8/12/2016 Operating Systems: Windows® 10, 64-bit\*



# Intel® Processor Identification Utility - Windows\* Version

This download installs version 5.50 of the Intel® Processor Identification Utility for Windows\*.

Version: 5.50 (Latest) Date: 5/28/2016

Operating Systems: Windows Vista\*, Windows Server 2008\*, Windows XP\*, 8 more



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

Installs the Intel® Graphics Driver version 15.36.31.4414 for Windows 7\* and Windows 8.1\*.

**Version:** 15.36.31.4414 (Latest) Date: 5/13/2016

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



# **BIOS Implementation Test Suite (BITS)**

This download installs version build 2073 of the BIOS Implementation Test Suite (BITS).

Version: Build 2073 (Latest) Date: 2/2/2016

Operating Systems: OS Independent



## Intel® Processor Diagnostic Tool

This download installs the Intel® Processor Diagnostic Tool release 3.0.0.25, which is compatible with multiprocessor systems.

Version: 3.0.0.25 (Latest) Date: 1/25/2016 Operating Systems: Linux\*, Windows 7\*, Windows Server 2008 R2\*, 5 more



#### Intel® Processor Identification Utility - Bootable Version

The Intel® Processor Identification Utility is provided by Intel to identify characteristics of a processor inside a system.

**Version:** 5.30 (Latest) **Date:** 8/13/2015

Operating Systems: OS Independent



# Intel® Graphics Driver for Windows® 10 [15.40][4th Gen]

Installs Intel® Graphics Driver 15.40.25.4463 for Windows® 10.

(Previously Released)

Operating Systems: Windows® 10, 64-bit\*



#### Intel® Graphics Driver for Windows® 10 [15.40][4th Gen]

Downloads version 15.40.22.4424 of the Intel® Graphics Driver for Windows® 10.

**Version:** 15.40.22.4424 (Previously **Date:** 4/29/2016

Released)

Operating Systems: Windows® 10, 64-bit\*



## Intel® Graphics Driver for Windows® 10 [15.40][4th Gen]

This driver (version 15.40.18.4380) for Windows® 10 fixes some hangs, graphics corruption, and functional issues seen across a number of games.

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

Operating Systems: Windows® 10, 64-bit\*



#### 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 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: 11/20/2015

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



## Intel® Graphics Driver for Windows® 10 [15.40][4th Gen]

This installer provides Intel® Graphics Driver version 15.40.10.4300 for the Windows® 10 operating system.

**Version:** 15.40.10.4300 (Previously Released) **Date:** 10/26/2015

Operating Systems: Windows® 10, 64-bit\*



# 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:** 10/9/2015

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 [15.40][4th Gen]

This download installs version 15.40.7.64.4279 of the Intel® Graphics Driver for Windows\* 10, 64-bit.

**Version:** 15.40.7.64.4279 (Previously Released) **Date:** 9/1/2015

Operating Systems: Windows® 10, 64-bit\*



#### Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 64bit

This download installs the Intel $^{\circ}$  Iris $^{m}$ , Iris $^{m}$  Pro and Intel $^{\circ}$  HD Graphics Driver version 15.36.24.64.4264 for Windows\* 7/8/8.1, 64-bit

**Version:** 15.36.24.64.4264 (Previously Released) **Date:** 8/19/2015

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



#### Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32bit

Installs the Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32-bit version 15.36.23.4264 (10.18.14.4264)

**Version:** 15.36.24.4264 (Previously Released) **Date:** 8/19/2015

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



## Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 64bit

This download installs version 15.36.23.64.4251 of the Intel® Iris™, Intel® Iris™ Pro, and Intel® HD Graphics Driver for Windows\* 7/8/8.1, 64-bit.

Version: 15.36.23.64.4251 (Previously Released) Date: 7/27/2015 Operating Systems: Windows 7, 64-bit\*, Windows 8, 64-bit\*, Windows 8, 1, 64-bit\*



# Intel<sup>®</sup> Iris<sup>™</sup>, Iris<sup>™</sup> Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32bit

Installs the Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32-bit version 15.36.23.4251 (10.18.14.4251)

Version: 15.36.23.4251 (Previously Released) Date: 7/23/2015 Operating Systems: Windows 7, 32-bit\*, Windows 8, 32-bit\*, Windows 8.1, 32-bit\*



#### Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 64bit

This download installs version 15.36.21.64.4222 of the Intel® Iris™, Iris™ Pro and Intel® HD Graphics Driver for Windows\* 7/8/8.1, 64-bit.

Version: 15.36.21.64.4222 (Previously Released) Date: 5/29/2015 Operating Systems: Windows 7, 64-bit\*, Windows 8, 64-bit\*, Windows 8.1, 64-bit\*



## Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32bit

Installs the Intel® Iris™, Iris™ Pro, and HD Graphics Driver for Windows\* 7/8/8.1 32-bit version 15.36.21.4222 (10.18.10.4222)

Version: 15.36.21.4222 (Previously Released) Date: 5/29/2015 Operating Systems: Windows 7, 32-bit\*, Windows 8, 32-bit\*, Windows 8.1, 32-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, i7-26300M/i7-26350M, i7-26700M/i7-26750M, 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 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

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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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