

Intel® NUC Kit NUC7i3BNHX1 with Intel® Optane™ Memory

Specifications

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Essentials

Product Collection	Intel® NUC Kits
Code Name	Products formerly Baby Canyon
Status	Launched
Launch Date	Q2'17
Board Form Factor	UCFF (4" x 4")
Socket	Soldered-down BGA
Internal Drive Form Factor	2.5" Drive
# of Internal Drives Supported	1
Lithography	14 nm
TDP	15 W
DC Input Voltage Supported	12-19 VDC
Recommended Customer Price	\$321.00
Processor Included	Intel® Core™ i3-7100U Processor (3M Cache, 2.40 GHz)
Warranty Period	3 yrs

Supplemental Information

Embedded Options Available	No
Description	Other features: 16GB Intel® Optane™ Memory M.2 module pre-installed, includes USB 3.1 Gen 2 (10Gbps) and DP 1.2 via USB-C; also includes SDXC card slot, dual microphones

Memory Specifications

Max Memory Size (dependent on memory type)

32 GB

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32 GB

Memory Types	DDR4-2133 1.2V SO-DIMM
Max # of Memory Channels	2
Max Memory Bandwidth	34.1 GB/s
Max # of DIMMs	2
ECC Memory Supported †	No

Graphics Specifications

Integrated Graphics †	Yes
Graphics Output	HDMI 2.0a; USB-C (DP1.2)
# of Displays Supported †	3

Expansion Options

PCI Express Revision	Gen3
PCI Express Configurations †	M.2 slot with PCIe x4 lanes
Removable Memory Card Slot	SDXC with UHS-I support
M.2 Card Slot (storage)	22x42/80

I/O Specifications

USB Configuration	2x front and 2x rear USB 3.0; 2x USB 2.0 via internal headers
USB Revision	2.0, 3.0
# of USB Ports	6
USB 2.0 Configuration (External + Internal)	0 + 2
USB 3.0 Configuration (External + Internal)	2B 2F + 0
Total # of SATA Ports	2
Max # of SATA 6.0 Gb/s Ports	2
Audio (back channel + front channel)	7.1 digital (HDMI mDP); L+R+mic (F)
Integrated LAN	10/100/1000
Integrated Wifi	Intel® Wireless-AC 8265 + BT 4.2
Integrated Bluetooth	Yes
Consumer Infrared Rx Sensor	Yes
Additional Headers	CEC, 2x USB2.0, FRONT_PANEL
# of Thunderbolt™ 3 Ports	0

Package Specifications

Low Halogen Options Available

See MDDS

Advanced Technologies

Intel® Optane™ Memory Supported ‡	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) ‡	Yes
Intel® vPro™ Technology ‡	No
TPM	No
Intel® HD Audio Technology	Yes
Intel® Rapid Storage Technology	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® Platform Trust Technology (Intel® PTT)	Yes

Security & Reliability

Intel® AES New Instructions	Yes
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Ordering and Compliance

Downloads and Software

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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.

"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.

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.

