



Product Brief: Intel® NUC Mini PCs

# INTEL® NUC 8 HOME

## NUC8i3CYSM & NUC8i3CYSN



The Shape that Fits the Future.



# INTEL® NUC: GO SMALL. GET BIG.

Get ready for full visual immersion. Fully-built Mini PCs with discrete graphics, the Intel® NUC8i3CYSM and the Intel® NUC8i3CYSN give you picture perfect performance for streaming movies, viewing photos, or playing your favorite eSports games. You can easily tuck the 4x4-inch NUC8i3CYSM or NUC8i3CYSN out of sight in your living room or use it as a second PC for home entertainment or gaming without breaking your budget.

## Visual immersion with discrete third-party graphics

Built with 8th generation Intel® Core™ i3 processors and discrete Radeon™ 540 graphics, the NUC8i3CYSM and NUC8i3CYSN Mini PCs deliver the graphics performance and software optimizations that allow you to use your Intel® NUC for heart-pounding games like League of Legends\* or immersive home theater on demand.

The NUC8i3CYSM and NUC8i3CYSN both have 2 GB of GDDR5 graphics RAM, but the NUC8i3CYSM has 8 GB of LPDDR4 memory and the NUC8i3CYSN has 4 GB of LPDDR4 memory. Both Mini PCs include software optimizations, including Radeon ReLive\*—which allows you to re-watch your greatest gameplay moments—and FreeSync\* which keeps your video feed in synch with your refresh rate so that your gameplay doesn't stutter.

## Ready to go right out-of-the-box

The Intel NUC8i3CYSM and NUC8i3CYSN are complete Mini PCs ready to plug in, power up, and play away. Preinstalled with Windows® 10, the NUC8i3CYSM and the NUC8i3CYSN also come with four USB 3.1 ports for all your gaming controllers and peripherals—so you can jump right into your favorite game or binge watch the latest series.

Both Mini PCs have a 1 TB SATA HDD installed along with an extra M.2 slot where you can add Intel® Optane™ memory for a system that delivers faster game level-loading for smoother game play.<sup>1</sup> Or install an SSD and create a RAID-0 or RAID-1 configuration to keep all your files safe.

## Premium performance at a mainstream price

Whether it's streaming Netflix\* or playing Counter-Strike,\* the Intel NUC8i3CYSM and NUC8i3CYSN Mini PCs built with 8th generation Intel Core i3 processors and discrete Radeon™ 540 graphics give you the system that fits your budget and your usage needs, balancing price and performance. With the latest Intel® processor, AMD graphics, and GDDR5 and LPDDR4 memory, you get a powerful system that doesn't break the bank. Built by Intel, you get the performance, quality, and value you've come to expect in a complete package that's about 4-inches square. Best of all, assembly is NOT required.

## INTEL® NUC: Tiny. Powerful. Complete.

# THE GAME IS ON

## Intel® NUC 8 Home: NUC8i3CYSM & NUC8i3CYSN

### Highlighted Features

- 1 8th generation Intel® Core™ i3 processor
- 2 Discrete Radeon™ 540 graphics
- 3 Dual channel LPDDR4 RAM (8 GB NUC8i3CYSM, 4 GB NUC8i3CYSN)
- 4 M.2 slot with flexible support for a 42 or 80 mm Intel® Optane™ memory module, PCIe\* x4 SSD or SATA SSD
- 5 Intel® Dual Band Wireless-AC 9560D2W and Bluetooth\* 5.0
- 6 Kensington lock support
- 7 SD card slot
- 8 Support for user-replaceable third-party lids
- 9 Consumer infrared sensor
- 10 Two USB 3.1 ports (including one charging port)
- 11 3.5 mm headphone/microphone jack
- 12 Two HDMI\* 2.0b display ports supporting 8 channel audio (7.1 surround sound)
- 13 Two USB 3.1 ports
- 14 DC power connector (19V)
- 15 Intel® Gigabit LAN



# INTEL® NUC MINI PC NUC8i3CYSM & NUC8i3CYSN

## Technical Specifications

### Processor

- 8th generation Intel® Core™ i3 processor

### Graphics

- Radeon™ 540 graphics
- 2 GB GDDR5 graphics memory
- Two HDMI\* 2.0b ports

### System Memory

- Dual channel LPDDR4 RAM  
(8 GB NUC8i3CYSM, 4 GB NUC8i3CYSN)

### Storage Capabilities

- SDXC slot with UHS-I support
- One M.2 Type M connector supporting 22x42 or 22x80 SATA or PCIe\* x4 SSD
- 2.5" 1 TB SATA3 HDD

### Peripheral Connectivity

- Intel® Gigabit LAN
- Four Super Speed USB 3.1 ports (two back panel ports and two front ports including one charging port)
- Two additional Hi-Speed USB 2.0 ports via internal headers
- Intel® Dual Band Wireless-AC 9560D2W (802.11ac), 2x2, up to 1.73 Gbps
- Dual Mode Bluetooth\* 5.0

### System Bios

- 128 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V6.1, SMBIOS3.1
- Intel® Visual BIOS

### Hardware Management Features

- Processor fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- ACPI-compliant power management control

### Expansion Capabilities

- One CEC header
- Two Internal USB 2.0 ports via two 1x4 headers (for replaceable lid support)

### Audio

- Up to 7.1 surround audio via HDMI
- Headphone/Microphone jack on the front panel

### Front Panel Header

- Reset, Power LED, power on/off

### Mechanical Chassis Size

- 117 mm x 112 mm x 52 mm
- 4.6" x 4.4" x 2.04"

### Baseboard Power Requirements

- 19V, 90W AC-DC power adapter

### Environment Operating Temperature

- 0° C to +40° C

### Storage Temperature

- -20° C to +70° C

### Safety Regulations and Standards

- IEC/EN/UL 60950-1
- IEC/EN/UL 62368-1

### EMC/RF Regulations and Standards

- FCC Part 15B/15C/15E
- CISPR/EN 55032/55024
- ICES-003
- VCCI 32
- BSMI CNS 13438
- KN 32/35
- AS/NZS CISPR 32

- EN 300 328
- EN 301 893
- EN 300 440
- EN 301 489-1/3/17
- EN 62311
- AS/NZS 4268
- AS/NZS 2772.2
- ARPANSA

### Environmental Regulations

- EU RoHS
- China RoHS
- Taiwan BSMI RoHS
- REACH

<sup>1</sup> Gaming workloads were tested with same configuration, except using a discrete graphics card (NVIDIA® (EVGA) GTX 1080) with and without 16 GB Intel® Optane™ Memory Module.

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Actual Intel® NUC kit may differ from the image shown.

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