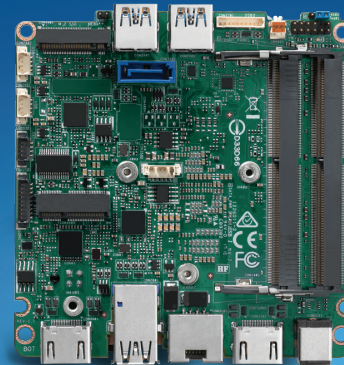




Product Brief

# INTEL® NUC KITS NUC7i5DNKE & NUC7i5DNHE

# INTEL® NUC BOARD NUC7i5DNBE



- Intel® vPro™ Technology
- Intel® Optane™ Memory Ready<sup>1,2</sup>
- Intel® Remote Secure Erase<sup>3</sup>
- 4K60 Display Capability



The Shape that Fits the Future.



# INTEL® NUC: MINI PC, FULL-SIZED PERFORMANCE

## **Built for Business, Powered for success**

Your clients want the features and performance to tackle demanding tasks, display eye-catching visuals, and keep data safe and the Intel® NUC Kits NUC7i5DNKE and NUC7i5DNHE built with 7th generation Intel® Core™ i5 vPro™ processors deliver the performance and innovation for small space and embedded solutions that your clients want. Whether you're creating a digital kiosk, deploying intelligent vending, or refreshing enterprise PCs, the Intel NUC7i5DNKE and NUC7i5DNHE can get the job done easily. With Intel® Wireless 8265-AC and the option to run Windows® 10 or Linux\* or another OS, the NUC7i5DNKE and NUC7i5DNHE deliver the flexibility to build the exact solution your clients want.

The slightly taller Intel NUC7i5DNHE is Intel® Optane™ memory ready.<sup>2</sup> By pairing Intel Optane memory with high capacity HDD storage media, performance increases 14 times faster than just a hard disk drive alone<sup>4,5,6,7</sup>—exactly what customers want for digital kiosks that are streaming content or enterprise solutions where clients are connecting to cloud-based apps. Intel NUC7i5DNHE has room for up to a 2 TB 2.5" HDD, so clients can store data or sensitive files locally. This kit also has an M.2 slot available for a lightning fast SSD. In addition, there's also an internal expansion area on the back of the chassis to encourage your innovation. Create a system with a DB9 connection for serial ports or build out internal expandability for 10/100 GbE—the possibilities are only limited by your imagination. The slimmer Intel NUC7i5DNKE makes it perfect for mounting in tight locations—on a wall behind a digital sign or on the display itself.

## **Keeping data, passwords, and security keys safe**

With Intel® vPro™ technology you can help your customers get ahead of security threats. The built-in hardware-enhanced security means you can keep client data and credentials secure, and remote manageability is perfect for installations such as unattended digital

kiosks and intelligent vending. In addition, Intel® Remote Secure Erase,<sup>3</sup> lets you wipe an Intel SSD on a lost or stolen laptop. Or, if you are refreshing enterprise clients, Remote Secure Erase can wipe all data and encryption keys, making any data that was on the drive, virtually impossible to retrieve.

Also built into the hardware is Intel® Trusted Platform Module (TPM) which addresses the growing concern over boot process integrity and offers better data protection. There are two discrete TPM modules available, enabling sales in all countries, including China.

## **New features let you customize any way you want**

Both the Intel NUC7i5DNKE and NUC7i5DNHE have some new features including a USB 3.0 on the internal header, in addition to 4 USB 3.0 ports on the chassis. For the first time, the commercial kits also come with two full-sized HDMI\* 2.0a ports to power brilliant 4K displays at 60 Hz. Suddenly your clients' digital kiosks and intelligent vending machines have images that really pop and draw people in. The power button is now located on the front panel for easy on/off no matter where you locate the Intel NUC.

## **From kiosks to intelligent vending: build embedded solutions with the Intel® NUC board NUC7i5DNBE**

The Intel® NUC board NUC7i5DNBE enables infinite flexibility and expandability depending on your customers' needs. The board includes a 4-lane eDP connector that allows you to create interactive touch systems perfect for digital signage, casino gaming, or intelligent vending. The NUC7i5DNBE board also has an internal power connector with a 12-24 volt input range so your systems stay up and running no matter the fluctuation in power. The board ships without a wireless card so you can choose what's best for the solution you're building.

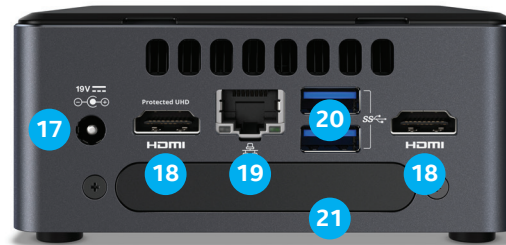
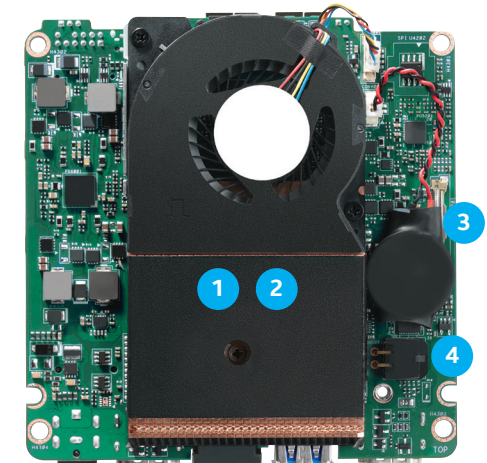
**INTEL® NUC: Tiny. Solid. Reliable.**



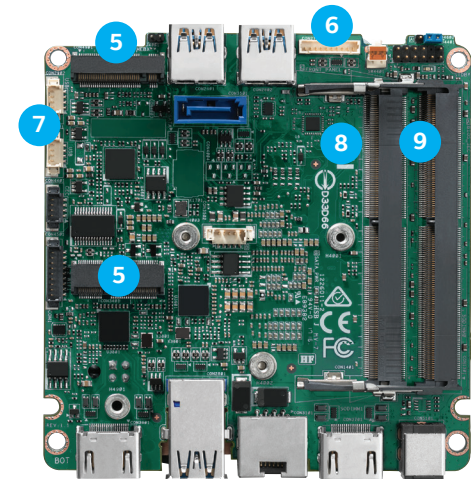
# POWER, CAPABILITIES, AND PERFORMANCE IN FOUR INCHES SQUARE

## Highlighted Features

- 1 7th generation Intel® Core™ i5-7300U processor with Intel® vPro™ technology
- 2 Intel® HD Graphics 620
- 3 4-lane eDP 1.4 connector (NUC7i5DNBE only)
- 4 Internal 2x2 power connector, 12-24V (NUC7i5DNBE only)
- 5 Two M.2 connectors (22x80 and 22x30)
- 6 One USB 3.0 internal header
- 7 Two USB 2.0 internal headers
- 8 Intel® Trusted Platform Module (TPM)
- 9 Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz)
- 10 Intel® Optane™ memory ready<sup>2</sup> (NUC7i5DNHE only)
- 11 Intel® Wireless-AC 8265 and Bluetooth\* 4.2 (installed in the 22x30 M.2 slot)
- 12 1x SATA3 port for connection to 2.5" HDD or SSD (NUC7i5DNHE only)
- 13 Kensington lock support
- 14 Support for user-replaceable third-party lids
- 15 Two USB 3.0 ports
- 16 Front panel power button
- 17 Back panel DC power connector (12-19V)
- 18 Two full-size HDMI\* 2.0a display ports supporting 8 channel audio (7.1 surround sound)
- 19 Intel® Gigabit LAN
- 20 Two USB 3.0 ports on the back panel
- 21 Backpanel opening with DB9 bracket



NUC7i5DNHE



NUC7i5DNBE



NUC7i5DNKE

# INTEL® NUC KITS NUC7i5DNKE, NUC7i5DNHE

## INTEL® NUC BOARD NUC7i5DNBE

### Technical Specifications

#### Processor

- Intel® Core™ i5-7300U processor (2.64 GHz to 3.5 GHz Turbo, Dual-Core 3MB cache, 15W TDP)

#### Graphics

- Intel® HD Graphics 620
- Two HDMI\* 2.0a ports supporting 4K at 60 Hz

#### System Memory

- Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz), 1.2V

#### Storage Capabilities

- One M.2 connector supporting 22x80 M.2 SSD
- One M.2 connector supporting 22x30 M.2 card (NUC7i5DNBE Only)
- One SATA3 port for connection to 2.5" HDD or SSD (up to 9.5 mm thickness) (NUC7i5DNHE Only)

#### Peripheral Connectivity

- Intel® Gigabit LAN
- Four USB 3.0 ports (two back panel ports and two front ports)
- One additional USB 3.0 port via internal header
- Intel® Dual Band Wireless-AC 8265 with Dual Mode Bluetooth\* 4.2 pre-installed in the 22x30 M.2 slot (NUC7i5DNHE and NUC7i5DNKE only)

#### System Bios

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V5.0b, SMBIOS2.5
- Intel® Visual BIOS
- Intel® Express BIOS update support

#### 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 Internal USB 3.0 ports
- Two Internal USB 2.0 ports
- RS252
- HDMI CEC header

#### Audio

- Up to 7.1 surround audio via HDMI

#### Front Panel Header

- Reset, HDD LED, Power LEDs, power on/off

#### Mechanical Chassis Size

##### NUC7i5DNHE

- 4.55" x 4.57" x 2.01"
  - 115 mm x 111 mm x 52 mm
- ##### NUC7i5DNKE
- 4.55" x 4.57" x 1.58"
  - 115 mm x 111 mm x 56 mm

#### Mechanical Board Size

##### NUC7i5DNBE

- 4" x 4"
- 102 mm x 102 mm

#### Baseboard Power Requirements

- 19V, 65W wall-mount AC-DC power adapter
- Internal 2x2 power connector, 12-24V (NUC7i5DNBE)

#### Environment Operating Temperature

- 0° C to +40° C

#### Storage Temperature

- 20° C to +60° C

#### Product Safety Regulations and Standards

- IEC 60950-1
- UL 60950-1
- EN 60950-1
- CAN/CSA-C22.2 No. 60950-1

#### EMC/RF Regulations and Standards (Class B)

- CISPR 52
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- ICES-005
- EN 55052
- EN 55024
- ETSI EN 500 528
- ETSI EN 501 489-1
- ETSI EN 501 489-17
- ETSI EN 501 895
- EN 62511
- AS/NZS 2772.2
- AS/NZS 4268
- VCCI V-2, V-5, V-4
- KN-52
- KN-24
- CNS 15458

#### Environmental Regulations

- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- China RoHS - Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products

<sup>1</sup> Available on the Intel® NUC Kit NUC7i5DNHE only.

<sup>2</sup> Intel technologies may require enabled hardware, specific software, or services activation. Performance varies depending on system configuration. Check with your system manufacturer or retailer or learn more at [intel.com/optanememory](http://intel.com/optanememory)

<sup>3</sup> Requires certain features, including an Intel Pro SSD.

<sup>4</sup> PCMark® Vantage (HDD Suite) - Benchmark from Futuremark® that measures Windows® everyday computing performance. PCMark Vantage is made up of several benchmarking suites: PCMark Suite (produces "PCMark" Score), Memories Suite, TV and Movies Suite, Gaming Suite, Music Suite, Communications Suite, Productivity Suite and HDD Suite. The HDD Suite contains an operating system start-up workload that is sensitive to HDD versus SSD boot devices.

<sup>5</sup> Presentation Launch Workload - Time elapsed to launch the Microsoft® PowerPoint 2016 application with a 3.5MB presentation file.

<sup>6</sup> Media Project Load Workload - Time elapsed to load a 500MB video project file in Adobe® Premiere Pro (CS6).

<sup>7</sup> Tested with 16GB Intel® Optane™ Memory Engineering Samples. Results may vary in final product, but we have a high confidence level that there will be no significant differences in performance.

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

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