**Product Brief** 



## INTEL® NUC KITS NUC7i3DNKE & NUC7i3DNHE

INTEL® NUC BOARD NUC7i3DNBE





- 4K60 Display Capability
- Slim Form Factor
- eDP Capable<sup>1</sup>
- Intel® Optane™ Memory Ready<sup>2,3</sup>



The Shape that Fits the Future.

# NTEL NUCLEAR SOLUTION MAPS BUILD IT THE WAY YOU WANT

### Built with a 7th generation Intel® Core™ i3 processor

Perfect for digital signage, intelligent vending, enterprise solutions, or wireless collaboration hubs, the Intel® NUC Kits NUC7i3DNKE and NUC7i3DNHE built with 7th generation Intel® Core™ i3 processors deliver innovation for small space and embedded solutions that your customers want. The two kits are preinstalled with Intel® Wireless-AC 8265 into one of two M.2 slots, while the other slot is available for a lightning fast SSD. And whether it's Windows® 10 or Linux\* or another OS, the NUC7i3DNKE and NUC7i3DNHE are verified to run a wide range of operating systems so you can build the exact solution your clients want.

The slimmer Intel NUC7i3DNKE uses an M.2 SSD, which makes the system perfect for mounting in tight locations—on a wall behind a digital sign or on the display itself—while the slightly taller Intel NUC7i3DNHE has room for a 2 TB 2.5" drive, so clients can store data or sensitive files locally. The Intel NUC7i3DNHE is also Intel® Optane™ memory ready.³ By pairing Intel Optane memory with high capacity HDD storage media, you get amazing performance and responsiveness as well as shorter boot times, faster application launches, and more responsive browsing—exactly what you need for digital signage and kiosks that are streaming content or enterprise solutions where clients are connecting to cloud-based apps. 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.

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

Both the Intel NUC7i3DNKE and NUC7i3DNHE have some new features including an exposed USB 3.0 port on the internal header, in addition to 4 USB 3.0 ports on the chassis. For the first time, the kits also come with dual full-sized HDMI\* 2.0a ports to power brilliant 4K displays at 60 Hz. Suddenly your clients' digital signage 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 signage to vending: build embedded solutions with the Intel NUC board NUC7i3DNBE

The Intel® NUC board NUC7i3DNBE 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 or intelligent vending. The NUC7i3DNBE 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™ i3-7100U processor
- 2 Intel® HD Graphics 620
- **3** 4-lane eDP 1.4 connector (NUC7i3DNBE only)
- 4 Internal 2x2 power connector, 12-24V (NUC7i3DNBE only)
- 5 Two M.2 connectors (22x80 and 22x30)
- 6 One USB 3.0 internal header
- **7** Two USB 2.0 internal headers
- 8 Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz)
- 9 Intel® Optane™ memory ready³ (NUC7i3DNHE only)

- 10 Intel® Wireless-AC 8265 and Bluetooth\* 4.2 (installed in the 22x30 M.2 slot)
- 11 1x SATA3 port for connection to 2.5" HDD or SSD (NUC7i3DNHE only)
- 12 Kensington lock support
- 13 Support for user-replaceable third-party lids
- 14 Two USB 3.0 ports
- **15** Front panel power button
- **16** Back panel DC power connector (12–19V)
- 17 Two full-size HDMI\* 2.0a display port supporting 8 channel audio (7.1 surround sound)
- 18 Intel® Gigabit LAN
- 19 Two USB 3.0 ports on the back panel
- 20 Backpanel opening with DB9 bracket



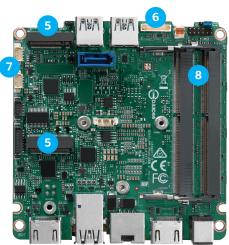


**NUC7i3DNHE** 









**NUC7i3DNBE** 

### INTEL® NUC KITS NUC7i3DNKE, NUC7i3DNHE INTEL® NUC BOARD NUC7i3DNBE

### **Technical Specifications**

### Processor

• Intel® Core™ i3-7100U processor (2.4 GHz, Dual-Core 3 MB 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 (NUC7i3DNBE Only)
- One SATA3 port for connection to 2.5" HDD or SSD (up to 9.5 mm thickness) (NUC7i3DNHE Only)

### **Peripheral Connectivity**

- Intel® Gigabit LAN
- Four USB 3.0 ports (two back panel ports and two front ports)
- One USB 3.0 port via internal header
- Two USB 2.0 ports via internal headers
- Intel® Dual Band Wireless-AC 8265 with Dual Mode Bluetooth\* 4.2 pre-installed in the 22x30 M.2 slot (NUC7i3DNHE and NUC7i3DNKE only)

### System BIOS

- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play
- Advanced configuration and power interface V3.0b, 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 port
- Two Internal USB 2.0 ports
- RS232
- 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

### NUC7i3DNKF

- 4.53" x 4.37" x 1.38"
- 115 mm x 111 mm x 36 mm

### NUC7i3DNHE

- 4.53" x 4.37" x 2.01"
- 115 mm x 111 mm x 52 mm

### **Mechanical Board Size**

### NUC7i3DNBE

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

### **Power Requirements**

- 19V, 65W AC-DC brick power adapter
- Internal 2x2 power connector, 12-24V (NUC7i3DNBE)

### **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 32
- FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E
- ICES-003
- EN 55032
- EN 55024
- ETSI EN 300 328
- ETSI EN 301 489-1
- ETSI EN 301 489-17
- ETSI EN 301 893
- EN 62311
- AS/NZS 2772.2
- AS/NZS 4268
- VCCI V-2, V-3, V-4
- KN-32
- KN-24
- CNS 13438

### **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

Look for Intel® NUC with Intel Inside® at www.intel.com/NUC

<sup>3</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. Intel products are not intended for use in medical, life-saving, or life-sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice. All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice. Availability in different channels may vary.

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

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<sup>&</sup>lt;sup>1</sup> Available on the Intel® NUC Board NUC7i3DNBE only.

<sup>&</sup>lt;sup>2</sup> Available on the Intel® NUC Kit NUC7i3DNHE only.