



PRODUCT BRIEF

# D54250WYK

Intel® NUC Kit



MINI  
HDMI\*



CONSUMER  
INFRARED  
SENSOR

GIGABIT LAN



USB  
3.0



MINI DISPLAY  
PORT\*

The Shape that Fits the Future.



Think you know what small  
can do? **Think again.**

## Ultra Compact. Ultra Impact.

A revolution in ultra-compact device design, the new Intel® NUC packs more features into an even slimmer form factor. This fully scalable, computing solution is the smallest possible form factor, complete with the latest 4th generation Intel® Core™ i5 processor. The Intel NUC provides a flexible, customizable engine to drive home theater PCs, media center PCs, and intelligent computing for small spaces, or anywhere else you can imagine. The D54250WYK SKU of Intel NUC has many useful features including four USB 3.0 ports, an infrared sensor, a head-phone/microphone jack, and Mini HDMI\* and Mini DisplayPort\* video interfaces to support a variety of home or small office usages. With that kind of power and size, you'll rethink what's possible. Because the only thing more amazing than Intel® technology is what you'll do with it.

### Superior processing and graphics

The D54250WYK is equipped with the 4th generation Intel® Core™ i5-4250U processor with Intel® Turbo Boost Technology 2.0<sup>1</sup>, automatically allowing processor cores to safely run faster than the base operating frequency for short durations to maximize performance. It also features visibly smart graphics using Intel® HD Graphics 5000 to provide amazing performance and visually stunning graphics for immersive gaming, media editing with Intel® Quick Sync Video, and HD playback with Intel® Clear Video HD Technology (Intel® CVT HD).

### Advanced technologies

Based on the 4th generation Intel® Core™ processor, you'll get ultra-responsive performance in a highly secure platform. Intel® Rapid Start Technology<sup>2</sup> ensures you are quickly up and running, and you'll stay up to date with Intel® Smart Connect Technology.<sup>3</sup> Also, with Intel® Smart Response Technology<sup>4</sup> you'll get SSD-like performance from your Intel NUC-based system. And for peace of mind you'll get embedded security that helps keep threats out, user identities and credentials safe, and your data protected.



# Power, Capabilities, and Performance in Four Inches Square

## HIGHLIGHTED FEATURES

- 1 Intel Core i5-4250U processor
- 2 Two SO-DIMM sockets for memory expandability up to 16 GB
- 3 Dual PCIe\* mini card connectors for flexible support of wireless and SSD configurations
- 4 One Mini DisplayPort supporting DP 1.2 and one Mini HDMI port supporting HDMI 1.4a
- 5 Dual rear Panel USB 3.0 ports
- 6 Intel® Gigabit LAN
- 7 19V, 65 W DC power connector
- 8 Dual front panel USB 3.0 ports
- 9 Consumer infrared sensor
- 10 Headphone/microphone jack



# Intel® NUC Kit D54250WYK

## TECHNICAL SPECIFICATIONS

### PROCESSOR

- Intel® Core™ i5 4250U Processor (1.3 GHz with turbo capability to achieve 2.6 GHz, Dual-Core processor with 3 MB smart cache)
- Supports Intel® Hyper-Threading Technology<sup>5</sup>
- Supports Intel® 64 architecture<sup>6</sup>

### GRAPHICS

- Intel® HD Graphics 5000
- One Mini DisplayPort\* 1.2 supporting ultra-high definition 4K displays and multiple monitor functionality
- One Mini HDMI\* 1.4a port

### PERIPHERAL CONNECTIVITY

- Integrated Intel 10/100/1000 Network Connection
- Four Super Hi-Speed USB 3.0 ports (two back panel ports and two front ports)
- Two additional Hi-Speed USB 2.0 ports via internal header

### MEMORY VOLTAGE

- 1.35 V

### 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

### FAST BOOT BIOS

- Optimized POST for almost instant-on access to PC from power on

### SYSTEM MEMORY

- Dual-channel DDR3L with two connectors for 1600/1333 MHz memory support (16 GB max)

### HARDWARE MANAGEMENT FEATURES

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

### INTEL® PRO 10/100/1000 NETWORK CONNECTION

- Low-power design

### EXPANSION CAPABILITIES

- One PCI Express\* half-mini card connector<sup>7</sup>
- One PCI Express full-mini card connector<sup>7</sup>
- 1x SATA port (6 Gb/s)

### AUDIO

- Intel® HD Audio<sup>8</sup> via Mini HDMI 1.4a and Mini DisplayPort 1.2 output supporting 8 channel (7.1) digital audio
- Intel® HD Audio via stereo analog audio jack (microphone in/headphone out/speaker out)

### FRONT-PANEL CONNECTORS

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

### MECHANICAL CHASSIS SIZE

- 4.59" x 4.41" x 1.36"
- 116.6mm x 112.0mm x 34.5mm

### BOARD SIZE

- 4" x 4"
- 101.6mm x 101.6mm

### BASEBOARD POWER REQUIREMENTS

- DC Power 12 - 19 V, 65 W
- Power Cord Options (Types B, E, and G)

### ENVIRONMENT OPERATING TEMPERATURE

- 0° C to +55° C

### STORAGE TEMPERATURE

- 20° C to +70° C

### REGULATIONS AND SAFETY STANDARDS

United States

UL 60950-1

Canada

CAN/CSA-C22.2 No. 60950-1

Europe

(Low Voltage Directive 2006/95/EC)

EN 60950-1

International

IEC 60950-1

### EMC REGULATIONS (CLASS B)

United States

FCC CFR Title 47, Chapter I, Part 15, Subparts A, B

Canada

ICES-003

Europe

(EMC Directive 2004/108/EC)

EN 55022 and EN 55024

Australia/New Zealand

EN 55022

Japan

VCCI V-3, V-4

South Korea

KN-22 and KN-24

Taiwan

CNS 13438

International

CISPR 22

### ENVIRONMENTAL COMPLIANCE

Europe

Europe RoHS (Directive 2011/65/EU)

China

China RoHS (MII Order #39)

<sup>1</sup> Requires a system with Intel® Turbo Boost Technology. Intel Turbo Boost Technology and Intel Turbo Boost Technology 2.0 are only available on select Intel® processors. Consult your system manufacturer. Performance varies depending on hardware, software, and system configuration. For more information, visit <http://www.intel.com/go/turbo>

<sup>2</sup> Requires a select Intel® processor, Intel® software and BIOS update, and a Solid-State Drive (SSD) or hybrid drive. Depending on system configuration, your results may vary. Contact your system manufacturer for more information.

<sup>3</sup> Intel® Smart Connect Technology requires a select Intel® processor, Intel® software and BIOS update, Intel® Wireless adapter, and Internet connectivity. Solid-state memory or drive equivalent may be required. Depending on system configuration, your results may vary. Contact your system manufacturer for more information.

<sup>4</sup> Intel® Smart Response Technology requires a Intel® Core™ processor, select Intel® chipset, Intel® Rapid Storage Technology software version 12.5 or higher, and a solid state hybrid drive reporting at least 16 GB capacity and supporting SATA-IO hybrid information feature. Depending on system configuration, your results may vary. Contact your system manufacturer for more information.

<sup>5</sup> Available on select Intel® Core™ processors. Requires an Intel® HT Technology-enabled system. Consult your PC manufacturer. Performance will vary depending on the specific hardware and software used. For more information including details on which processors support HT Technology, visit <http://www.intel.com/info/hyperthreading>.

<sup>6</sup> Requires a system with a 64-bit enabled processor, chipset, BIOS and software. Performance will vary depending on the specific hardware and software you use. Consult your PC manufacturer for more information. For more information, visit <http://www.intel.com/info/em64t>

<sup>7</sup> System resources and hardware (such as PCI and PCI Express™) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.

<sup>8</sup> Requires an Intel® HD Audio enabled system. Consult your PC manufacturer for more information. Sound quality will depend on equipment and actual implementation. For more information about Intel HD Audio, refer to [www.intel.com/design/chipset/hdaudio.htm](http://www.intel.com/design/chipset/hdaudio.htm)

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