Mini-ITX Form Factor

Intel® Desktop Board D2500HN Innovation Series

The Intel® Desktop Board D2500HN is the latest Innovation Series board that optimizes the performance of the Intel® Atom™ processor D2500 and the Intel® NM10 Express Chipset by delivering new-generation technologies, value-added features, and easy integration. The Intel Desktop Board D2500HN is suitable for basic computing and powerful enough to enable a rich Internet experience.

The Intel Desktop Board D2500HN features the new integrated dual-core 1.86 GHz Intel Atom processor D2500. This processor supports Intel® Graphics Media Accelerator 3600, an improved graphics core that supports high-definition video playback capabilities compared with the previous-generation entry-level desktop PC. This board provides flexibility and upgradability with two single-channel SODIMM connectors for DDR3 1066 / 800 MHz memory support (4 GB1 max). The use of SODIMM memory modules delivers greater performance and power efficiency. The revolutionary two-chip layout continues to enable lower power consumption and saves 70 percent of its board layout size. This results in a board that has better heat flow with the passive thermal solution.

The Intel Desktop Board D2500HN provides enhanced features such as 10/100/1000 Mb/s integrated LAN, integrated four-channel Intel® High Definition Audio1, and support for legacy features for emerging market needs, including a PS/2 port, serial port, and parallel port. Supporting a USB Solid-State Drive keep-out zone design, the Intel Desktop Board D2500HN is ideal for diskless usage model by integrating the USB Solid-State Drive inside the chassis.

The Intel Desktop Board D2500HN is a mini-ITX form factor board. Backward-compatible with ATX and microATX, this form factor allows you to build green, energy-efficient, small form factor solutions. This board offers simple, affordable, Internet-centric computer designs in a compact 170mm x 170mm size—perfect for a cool system with a small form factor chassis.

Available at an affordable price, the Intel Desktop Board D2500HN is ideal for innovative small form factor systems for basic computing and thin-client systems.
The boxed Intel® Desktop Board D2500HN solution includes:
- ATX 2.2 compliant I/O shield
- SATA cables
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Microsoft® Windows® 7 WHQL certified

The takeaway software included with the Intel® Desktop Board D2500HN works best for your everyday computing.

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<th>CAPABILITY</th>
<th>SOFTWARE INCLUDED:</th>
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<tr>
<td>Productivity</td>
<td>• Intel AppUp&lt;sup&gt;SM&lt;/sup&gt;</td>
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<td></td>
<td>• Intel® Integrator Assistant (Internet Download)</td>
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<td>• Laplink® PCmover Express*</td>
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<td>Entertainment</td>
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<tr>
<td>Antivirus</td>
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**Intel® Desktop Board D2500HN Innovation Series**

**Features and Benefits**

1. **Integrated with the new dual-core Intel® Atom™ processor D2500:** Features an integrated graphics core (Intel® GMA 3600) with high-definition graphics performance improvements.

2. **Intel® NM10 Express Chipset:** Designed to support the new Intel® Atom™ processor D2500.

3. **Single-channel DDR3 with two connectors for 1066 / 800 MHz memory support (4 GB' max)**

4. **One PCI connector:** Expansion connector for custom system configurations and future add-in card upgrades.

5. **Two SATA ports (3.0 Gb/s)**

6. **Four-channel Intel® High Definition Audio²:** Integrated stereo audio at an excellent value.

7. **Integrated 10/100/1000 Mb/s Network Connection**

8. **Eight Hi-Speed USB 2.0 ports:** Four back panel ports and four additional ports via internal header.

9. **PS/2 port:** Supports keyboard or mouse.

10. **Parallel and serial ports:** Provide legacy device compatibility.

11. **Mini-ITX / microATX-compatible form factor**
Intel® Desktop Board D2500HN Innovation Series

Technical Specifications

**PROCESSOR**
Processor Support
- Intel® Atom™ processor D2500 (dual-core / 1.86 GHz / 512 KB x 2 L2 cache)

**CHIPSET**
- Intel® NM10 Express Chipset

**Graphics**
- Intel® Graphics Media Accelerator 3600
- One VGA port
- Two SATA ports (fully shrouded)
- One serial port
- One parallel port
- One PS/2 port
- One serial header
- One serial port
- One parallel port

**USB 2.0**
- Four external ports
- Four ports via headers

**Audio Solution**
- Two channel Intel® High Definition Audio2 (with multi-streaming)
- Front-panel mic / headphone header

**10/100/1000 Network Connection**
- Intel® B82574L 10/100/1000 Mb/s Ethernet Controller
- Wake-up from Network
  - Wired for Management (WFM) 2.0 compatible
  - Support for system wake-up using an add-in network interface card with remote wake-up capability

**SYSTEM MEMORY**
Memory Capacity
- Single-channel DDR3 with two connectors for 1066 / 800 MHz memory support (4 GB max)

Memory Types
- DDR3 1066 / 800 SDRAM memory support
- Non-ECC Memory

Memory Voltage
- 1.8 V

**System BIOS**
- 8 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V2.0b, DMI 2.0, multilingual support
- Serial Peripheral Interface (SPI) Flash

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

**SYSTE M MEMORY**
Memory Capacity
- Single-channel DDR3 with two connectors for 1066 / 800 MHz memory support (4 GB max)

Memory Types
- DDR3 1066 / 800 SDRAM memory support
- Non-ECC Memory

Memory Voltage
- 1.8 V

**JUMPERS AND FRONT PANEL CONNECTORS**
Jumpers
- Jumper: yellow
- Header: black

Front-Panel Connectors
- Reset, HD LED, Power LEDs, power on/off, aux LED
- USB 2.0 headers
- Audio header

**MECHANICAL**
Board Style
- Mini-ITX / microATX-compatible
- 170mm x 170mm

Baseboard Power Requirements
- ATX12V or SFX12V

**ENVIRONMENT**
Operating Temperature
- 0°C to +50°C

Storage Temperature
- -20°C to +70°C

**REGULATIONS AND SAFETY STANDARDS**
United States and Canada
- UL 60950-1
- CAN/CSA-C22.2 No. 60950-1

Europe (Low Voltage Directive 2006/95/EC)
- EN 60950-1

**ENVIRONMENTAL COMPLIANCE**
- China RoHS (MII Order # 39)

1 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.

2 Intel® High Definition Audio requires a system with an appropriate Intel® chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers, and speakers. For more information about Intel® HD Audio, refer to www.intel.com/design/chipsets/hdaudio.htm

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Actual Intel® Desktop Board may differ from the image shown.

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