The Intel® Desktop Board D2500CC 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 D2500CC is suitable for PC-like embedded products that require dual independent display capability.

The Intel Desktop Board D2500CC 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 D2500CC provides enhanced features such as dual 10/100/1000 Mb/s integrated LAN, integrated six + two-channel Intel® High Definition Audio2, four serial ports, and dual display capability with VGA and DVI-I ports. Supporting a USB Solid-State Drive keep-out zone design, the Intel Desktop Board D2500CC is ideal for a diskless usage model by integrating the USB Solid-State Drive inside the chassis.

The Intel Desktop Board D2500CC 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 and affordable PC-like embedded computer designs in a compact 170mm x 170mm size—perfect for a point-of-sale or digital signage system with a small form factor chassis.

Available at an affordable price, the Intel Desktop Board D2500CC is ideal for innovative PC-like embedded small form factor systems that require dual independent display and multiple I/O connections.
Intel® Desktop Board D2500CC Innovation Series

The boxed Intel® Desktop Board D2500CC 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 D2500CC works best for your everyday computing.

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<th>CAPABILITY</th>
<th>SOFTWARE INCLUDED:</th>
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<td>Productivity</td>
<td>• Intel AppUp™&lt;br&gt;• Intel® Integrator Assistant (Internet Download)&lt;br&gt;• Laplink® PCmover Express*</td>
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<tr>
<td>Entertainment</td>
<td>• DivX® for Windows*</td>
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<td>Antivirus</td>
<td>• ESET® Smart Security 4 (45-day license)</td>
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Intel® Desktop Board D2500CC 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 GB¹ max)

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

5. One PCI Express* Mini Card connector: Expansion connector for future add-in upgrades such as Wi-Fi® or WiMax® cards.

6. Two SATA ports (3.0 Gb/s)

7. Six-channel Intel® High Definition Audio²: Rich stereo audio at an excellent value.

8. Integrated dual 10/100/1000 Mb/s Network Connections

9. Seven Hi-Speed USB 2.0 ports: Four back panel ports and three additional ports via internal header.

10. PS/2 port: Supports keyboard or mouse.

11. Parallel header: Provides legacy device compatibility.

12. Four serial ports: Provide legacy connectivity to embedded devices.

13. Dual display capability with VGA and DVI-I ports

14. Mini-ITX / microATX-compatible form factor

¹ Maximum supported memory size.

² Requires HD Audio software driver.
Intel® Desktop Board D2500CC Innovation Series

Technical Specifications

For ordering information, visit www.intel.com
For the most current product information, visit http://developer.intel.com/products/desktop/motherboard/

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
• One DVI-I port
• 24bpp dual-channel LVDS connector

I/O Controller
• Two SATA ports (fully shrouded)
• Two PS/2 ports
• Two serial headers
• Two serial ports
• One parallel header

USB 2.0
• Four external ports
• Three ports via headers

Audio Solution
• 6+2 channel Intel® High Definition Audio2 (with multi-streaming)
• Front-panel mic / headphone header

Dual 10/100/1000 Network Connections
• Intel® 82574L 10/100/1000 Mb/s Ethernet Controller

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

SYSTEM MEMORY
Memory Capacity
• Single-channel DDR3 with two connectors for 1066 / 800 MHz memory support (4 GB1 max)

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

Memory Voltage
• 1.8 V

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

Expansion Capabilities
• One PCI connector
• One PCI Express® Mini Card connector

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

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

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 2002/95/EC)
China
China RoHS (MII Order # 39)

* 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.

* 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

In order to use Intel® Atom™ processor D2500 with Intel® NM10 Express Chipset, the motherboard must be installed with an appropriate codec and a system with an appropriate Intel® or AMD chipset.

Intel® Graphics Media Accelerator 3600 may not be available on some Intel® Desktop Board D2500CC.

For the most current product information, visit http://developer.intel.com/products/desktop/motherboard/

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