PRODUCT BRIEF Intel<sup>®</sup> Desktop Board D2500CC Innovation Series



### Mini-ITX Form Factor

# Intel<sup>®</sup> Desktop Board D2500CC Innovation Series





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 newgeneration 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<sup>®</sup> Graphics Media Accelerator 3600, an improved graphics core that supports high-definition video playback capabilities compared with the previousgeneration entry-level desktop PC. This board provides flexibility and upgradability with two single-channel SODIMM connectors for DDR3 1066 / 800 MHz memory support (4 GB<sup>1</sup> 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<sup>®</sup> High Definition Audio<sup>2</sup>, four serial ports, and dual display capability with VGA and DVI-I ports. Supporting a USB Solid-State Drive keepout 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. Backwardcompatible 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<sup>®</sup> 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<sup>®</sup> Express Installer driver and software DVD
- Microsoft\* Windows\* 7 WHQL certified

# The takeaway software included with the Intel<sup>®</sup> Desktop Board D2500CC works best for your everyday computing.

CAPABILITY	SOFTWARE INCLUDED:
Productivity	Intel AppUp <sup>SM</sup>
	<ul> <li>Intel<sup>®</sup> Integrator Assistant (Internet Download)</li> </ul>
	Laplink* PCmover Express*
Entertainment	•DivX* for Windows*
Antivirus	<ul> <li>ESET* Smart Security 4 (45-day license)</li> </ul>

# Intel<sup>®</sup> 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<sup>®</sup> NM10 Express Chipset: Designed to support the new Intel<sup>®</sup> Atom<sup>™</sup> processor D2500.
- Single-channel DDR3 with two connectors for 1066 / 800 MHz memory support (4 GB<sup>1</sup> max)
- 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.
- Two SATA ports (3.0 Gb/s)

- 7 Six-channel Intel<sup>®</sup> High Definition Audio<sup>2</sup>: 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.
- 1 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
- Mini-ITX / microATX-compatible form factor



# Intel<sup>®</sup> 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<sup>®</sup> NM10 Express Chipset

#### Graphics

- Intel<sup>®</sup> 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<sup>®</sup> High Definition Audio<sup>2</sup> (with multi-streaming)
- Front-panel mic / headphone header

#### Dual 10/100/1000 Network Connections

 Intel<sup>®</sup> 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 autoconfigure
- 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 GB<sup>1</sup> 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

• 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

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

#### 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 2002/95/EC)

China China RoHS (MII Order # 39)

<sup>1</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>2</sup> Intel<sup>®</sup> High Definition Audio requires a system with an appropriate Intel<sup>®</sup> 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<sup>®</sup> HD Audio, refer to www.intel.com/design/chipsets/hdaudio.htm

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL\* PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT.

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® Desktop Board may differ from the image shown.

Intel, the Intel logo, Intel Atom, Intel Atom Inside, and Intel AppUp are trademarks of Intel Corporation in the U.S. and other countries.

\* Other names and brands may be claimed as the property of others.

Copyright ° 2011 Intel Corporation. All rights reserved. 0811/CLC/MS/PDF 325497-001US

