



## Can an Intel® Desktop Board deliver quality and integrity at a superb value?

Yes. Intel® Desktop Board D845GVFN for Intel® processors in the 478-pin package delivers quality and integrity at a superb value.



### Delivering an Ultra Value Desktop Board

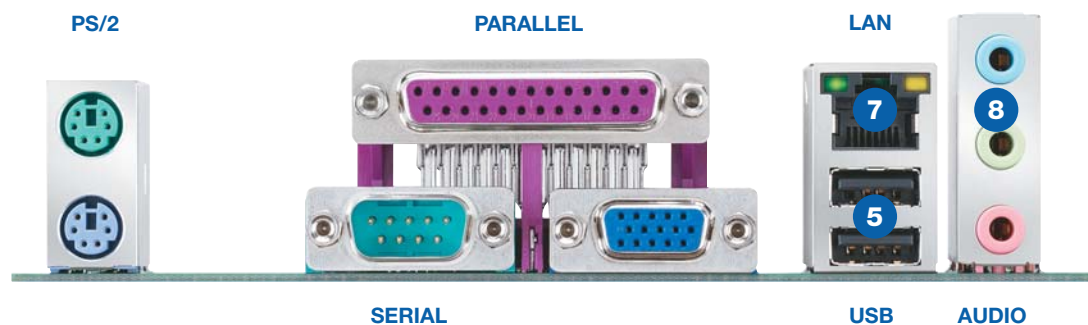
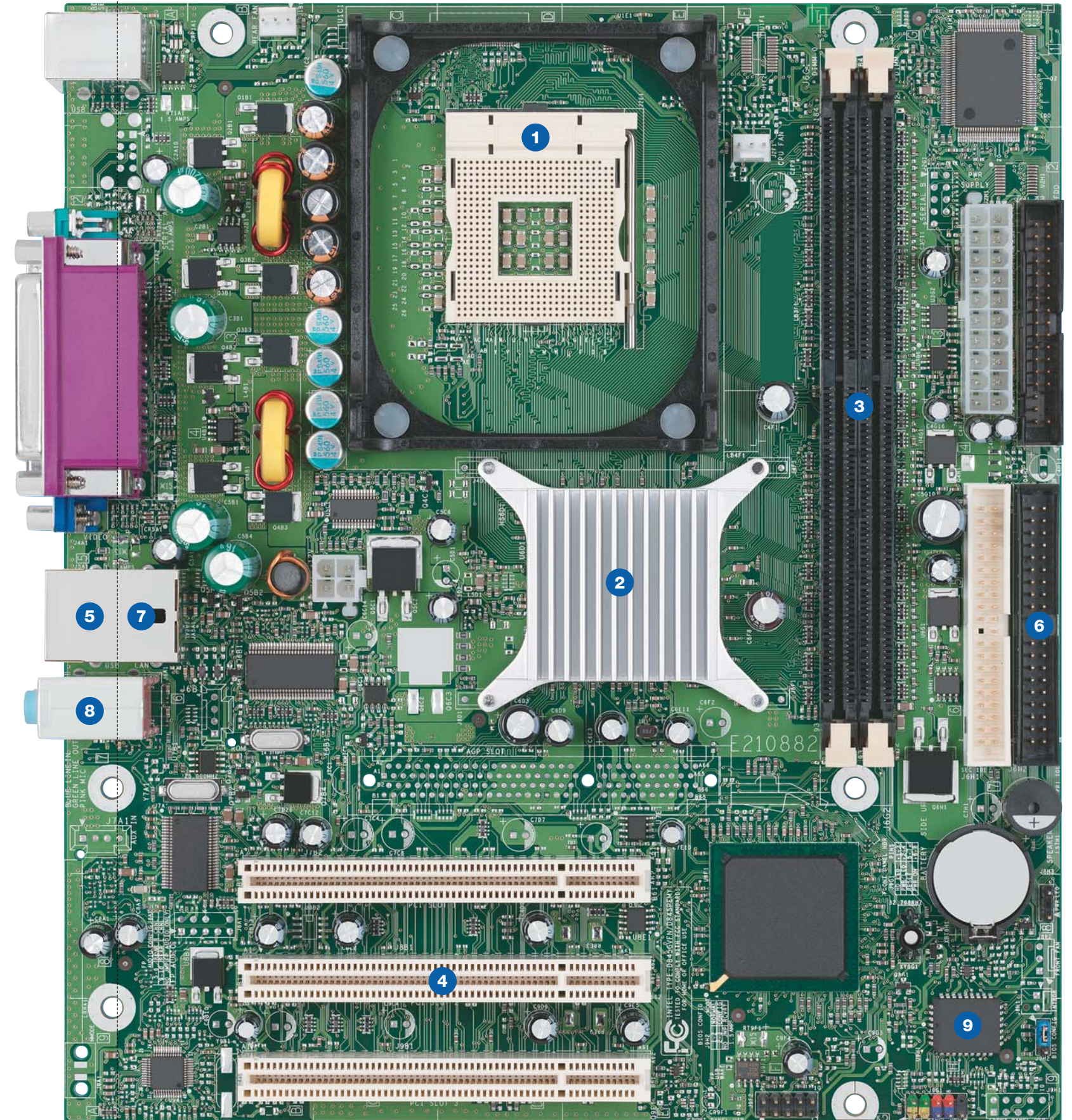
The Intel® Desktop Board D845GVFN delivers an integrated graphics solution with essential features designed to support the Intel® Celeron® processor with 400-MHz system bus<sup>1</sup>, Intel® Celeron® D processor with 533-MHz system bus<sup>2</sup>, and the Intel® Pentium® 4 processor with 533- or 400-MHz system bus<sup>3</sup> in the 478-pin package. This board design includes the quality and integrity you've come to expect from Intel® desktop boards with a focus on achieving the most economical platform solution. This product features the Intel® 845GV chipset with Intel® Extreme Graphics and support for up to 2 GB<sup>4</sup> of DDR 333<sup>5</sup>/266 SDRAM memory, onboard Intel® PRO 10/100 Network Connection, up to four USB 2.0 ports, and AC'97 audio to provide the essential low-cost platform building blocks for the value-oriented customer.

### Boxed Intel® Desktop Board D845GVFN includes:

- Desktop Board D845GVFN
- ATX-compliant I/O shield
- IDE and floppy cables
- Board and back-panel I/O layout stickers
- Quick Reference Guide
- One-year Limited Desktop Board Warranty<sup>6</sup>
- Intel® Express Installer CD, including:
  - Norton Internet Security\* 2003
  - NTI CD-Maker\*
  - Farstone\* RestoreIT! Lite
  - Adobe Acrobat\* Reader
  - Software Drivers
  - Product Guide

# Intel® Desktop Board D845GVFN

- 1 Processor Support: Intel® Celeron® processors with 400-MHz system bus<sup>1</sup>, Intel® Celeron® D processors with 533-MHz system bus<sup>2</sup>, and Intel® Pentium® 4 processors with 533- or 400-MHz system bus<sup>3</sup> in the 478-pin package.
- 2 Intel® 845GV chipset: Featuring Intel® Extreme Graphics with 64 MB Dynamic Video Memory.
- 3 Two DDR SDRAM DIMM sockets: Designed to support up to 2 GB<sup>4</sup> of single-channel DDR SDRAM memory (DDR 333<sup>5</sup>/266).
- 4 Three PCI slots: Expansion slots for custom system configurations and future add-in card upgrades.
- 5 Four Hi-Speed USB 2.0 ports: Two rear ports and one header for two front-panel USB 2.0 ports.
- 6 Two ATA 100/66 connectors: Enables fast IDE interface for transfers to storage devices.
- 7 Integrated Intel® PRO 10/100 Network Connection: Onboard 10/100-Mbps Ethernet LAN connectivity.
- 8 AC'97 Audio: Integrated two-channel audio providing audio performance at an excellent value.
- 9 Intel® Rapid BIOS Boot: Reduced boot time enables fast system access.



# Intel® Desktop Board D845GVFN

## Desktop Board Specifications

<b>Processors Supported</b> (via mPGA478 connector)	<ul style="list-style-type: none"><li>• Intel® Celeron® processors with 400-MHz system bus<sup>1</sup></li><li>• Intel® Celeron® D processors with 533-MHz system bus<sup>2</sup></li><li>• Intel® Pentium® 4 processors with 533-MHz or 400-MHz system bus<sup>3</sup></li></ul>
<b>Intel® 845GV Chipset</b>	<ul style="list-style-type: none"><li>• Intel® 82801DB I/O Controller Hub (Intel® ICH4) with Accelerated Hub Architecture bus</li><li>• Intel® 82802AB Firmware Hub (FWH)</li></ul>
<b>Intel® ICH4 I/O Controller Hub</b>	<ul style="list-style-type: none"><li>• Ultra ATA 100/66</li><li>• Intel® PRO 10/100 Network Connection</li></ul>
<b>I/O Features</b>	<ul style="list-style-type: none"><li>• Integrated super I/O LPC bus controller</li><li>• Three PCI local bus slots</li></ul>
<b>USB 2.0</b>	<ul style="list-style-type: none"><li>• Two back-panel ports</li><li>• Two ports routed to one onboard header (requiring cable to front panel)</li></ul>
<b>Firmware Hub</b>	
<b>System BIOS</b>	<ul style="list-style-type: none"><li>• 3-Mb Flash EEPROM with Intel®/AMI* BIOS featuring Plug and Play, IDE drive auto-configure</li><li>• Advanced configuration and power interface V1.0b, DMI 2.0, multilingual support</li></ul>
<b>Intel® Rapid BIOS Boot</b>	<ul style="list-style-type: none"><li>• Optimized POST for fast access to PC from power-on</li></ul>
<b>System Memory</b>	
<b>Memory Capacity</b>	<ul style="list-style-type: none"><li>• Two 184-pin DIMM connectors supporting up to two double-sided DIMMS</li><li>• Designed to support up to 2 GB<sup>4</sup> (based on 512-Mb technology) dual-channel of DDR 333/266 SDRAM</li></ul>
<b>Memory Type</b>	<ul style="list-style-type: none"><li>• DDR 333<sup>5</sup> SDRAM</li><li>• DDR 266 SDRAM</li></ul>
<b>Memory Modes</b>	<ul style="list-style-type: none"><li>• Single-channel operation support</li></ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"><li>• 2.5V</li></ul>
<b>Wake-Up From Network</b>	
	<ul style="list-style-type: none"><li>• Wired for Management (WfM) 2.0 compatible</li><li>• Support for system wake up using an add-in network interface card with remote wake-up capability or PCI</li></ul>

## Expansion Capabilities

- Three PCI bus add-in card connectors

## Jumpers and Front-Panel Connectors

<b>Jumpers</b>	<ul style="list-style-type: none"><li>• Single configuration jumper design</li><li>• Jumper access for BIOS configuration mode</li></ul>
<b>Front-Panel Connectors</b>	<ul style="list-style-type: none"><li>• Reset, HD LED, Power LEDs, power on/off, aux LED</li><li>• USB header</li><li>• Audio header (AA#C77646-105 only)</li></ul>

## Mechanical

<b>Board Style</b>	<ul style="list-style-type: none"><li>• µATX 1.1-compliant board size</li></ul>
<b>Board Size</b>	<ul style="list-style-type: none"><li>• 9.2" x 8.2" (23.4 cm x 20.8 cm)</li></ul>

## Baseboard Power

<b>Requirements</b>	<ul style="list-style-type: none"><li>• ATX12V or SFX12V</li></ul>
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## Environment

<b>Operating Temperature</b>	<ul style="list-style-type: none"><li>• 0° C to +55° C</li></ul>
<b>Storage Temperature</b>	<ul style="list-style-type: none"><li>• -40° C to +70° C</li></ul>

## Regulations

### Safety Regulations

<i>U.S. and Canada</i>	UL 1950, Third edition—CAN/CSA C22.2 No. 950-95 with recognized U.S. and Canadian component marks
<i>Europe</i>	Nemko certified to EN 60950
<i>International</i>	Nemko certified to IEC 60950 (CB report with CB certificate)

### EMC Regulations (tested in representative chassis)

<i>U.S.</i>	FCC Part 15, Class B
<i>U.S.</i>	FCC Part 15, Class B open-chassis (cover off) testing
<i>Canada</i>	ICES-003, Class B
<i>Europe</i>	EMC directive 89/336/EEC; EN 55022:1998 Class B; EN 55024:1998
<i>Australia/New Zealand</i>	AS/NZS 3548, Class B
<i>Taiwan</i>	CNS 13438, Class B
<i>International</i>	CISPR 22:1997, Class

Power requirements vary.

## Ordering Information

See Intel's Web site at [www.intel.com](http://www.intel.com)  
For the most current product information available, visit Intel's Web site at:  
[developer.intel.com/design/motherbd/](http://developer.intel.com/design/motherbd/)

<sup>1</sup> Intel® Desktop Board D845GVFN designed to support Intel® Celeron® processors (2 GHz or higher), as well as the 1.8a GHz in the 478-pin package.

<sup>2</sup> Intel® Desktop Board D845GVFN designed to support Intel® Celeron® D processor 320–340\* (2.40–2.93GHz with 533-MHz system bus in the 478-pin package).

<sup>3</sup> Intel® Desktop Board D845GVFN designed to support Intel® Pentium® 4 processors (1.60a, 2a, 2.26 GHz or higher) with 533-MHz or 400-MHz system bus in the 478-pin package.

<sup>4</sup> Intel® Desktop Board D845GVFN designed to support up to 2-GB DDR SDRAM memory based on 512-Mb technology. For information on the latest validated memory support, visit <http://developer.intel.com/design/motherbd/>

<sup>5</sup> DDR 333 SDRAM memory is not supported in combination with Intel® Pentium® 4 processors or Intel® Celeron® processors with 400-MHz system bus. DDR 333 memory will run at 266 MHz.

<sup>6</sup> All orders for Intel® Desktop Board D845GVFN are non-cancelable and non-returnable, will not be eligible for inventory price protection and stock rotation, and will be eligible only for Standard Warranty Replacement. Advanced Warranty Replacement will not apply.

\* Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number) for details.

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