



# Can a desktop board deliver exceptional value and quality?

PRODUCT BRIEF



**Intel® Desktop Board D845GVS  
for the Intel® Celeron® processor  
in the mPGA478-pin package**



# Intel® Desktop Board D845GVS

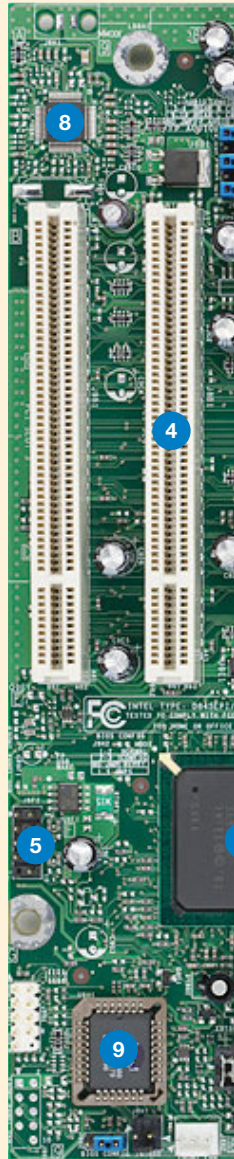


## Delivering Exceptional Value and Quality

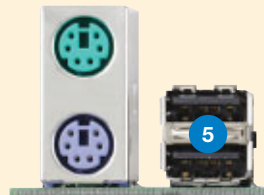
The Intel® Desktop Board D845GVS delivers an integrated graphics solution with essential features designed to support the Intel® Celeron® processor in the mPGA478-pin package. The Intel Desktop Board D845GVS was designed with a focus on reducing overall platform cost. Features such as the Intel® 845GV chipset with Intel® Extreme Graphics and support for up to 2 GB<sup>1</sup> of DDR333<sup>2</sup>/266/200 SDRAM memory, optional onboard Intel® PRO 10/100 LAN Network Connection, and AC'97 audio provide the essential building blocks for the value-oriented customer to use on a low-cost platform. As you have come to expect, this product delivers the stability and reliability associated with all Intel® desktop boards.

## FEATURES AND BENEFITS

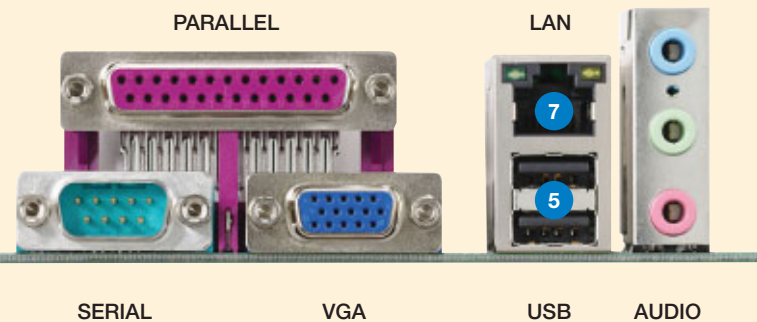
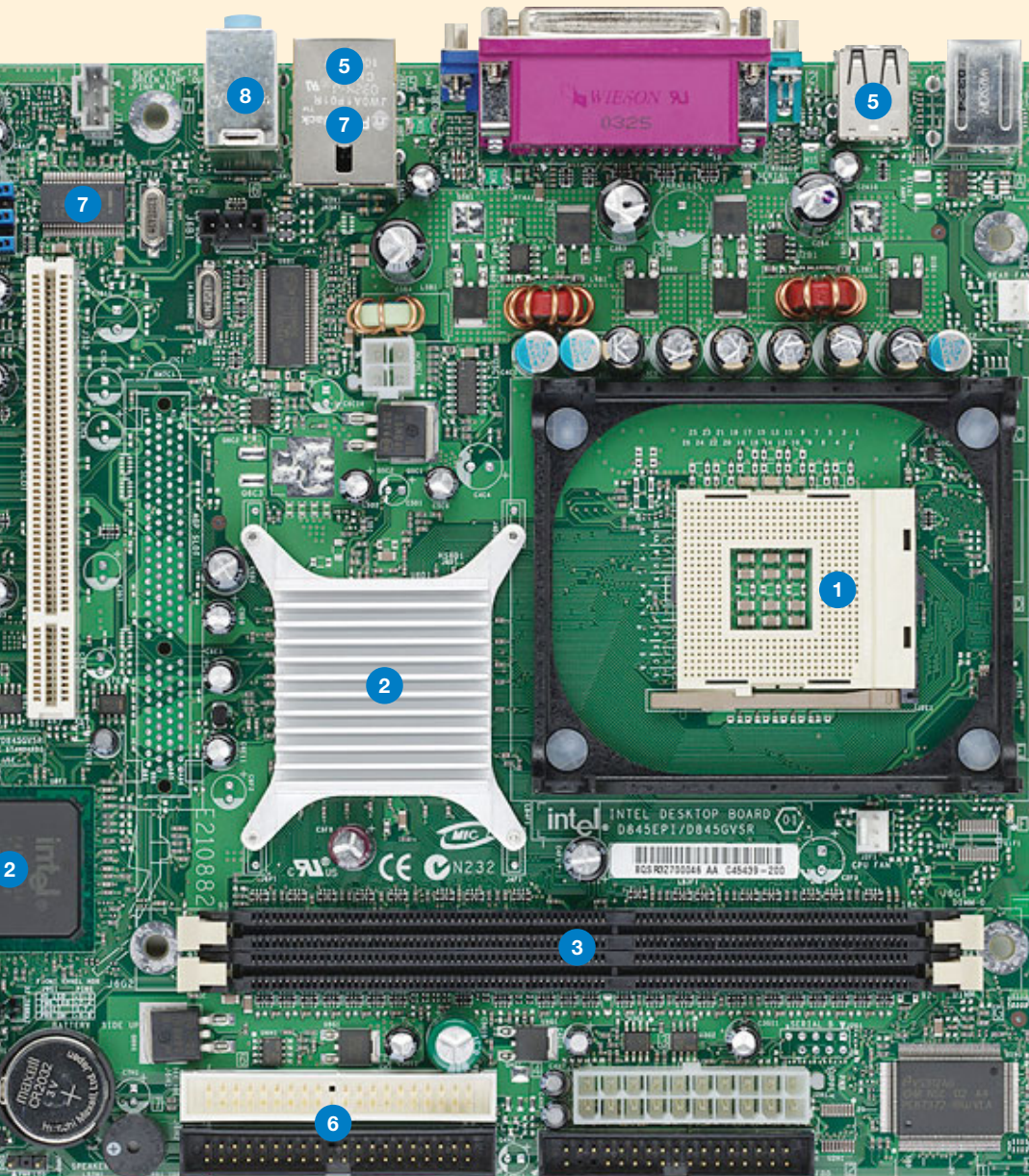
- 1 Processor Support:** Supports Intel® Celeron® processors in the mPGA478-pin package and Intel® Pentium® 4 processors with 533 or 400-MHz FSB processors in the mPGA478-pin package.
- 2 Intel® 845GV chipset featuring Intel® Extreme Graphics with up to 64 MB Dynamic Video Memory:** Low-cost, high-performance graphics solution.
- 3 Two DDR SDRAM DIMM sockets:** Designed to support up to 2 GB<sup>1</sup> of DDR SDRAM memory (DDR333<sup>2</sup>/266/200).
- 4 Three PCI slots:** Expansion slots for custom system configurations and future add-in card upgrades.
- 5 Six Hi-Speed USB 2.0 ports:** Four rear ports and one header for two front-panel USB 2.0 ports.
- 6 Ultra ATA100/66:** Enables fast IDE interface for transfers to storage devices.
- 7 Integrated Intel® PRO 10/100 Network Connector:** 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.



PS/2



USB



SERIAL

VGA

USB

AUDIO

### BOXED INTEL® DESKTOP BOARD D845GVSR SOLUTION INCLUDES:

- Desktop Board D845GVSR
- Intel® Express Installer CD, including:
  - NTI\* CD-Maker\*
  - RealOne\*
  - Farstone\* RestoreIT! Lite
  - Executive Software\* Diskeeper Lite
  - Norton\* Internet Security\* 2003
  - Software Drivers for Audio and Optional Lan
  - Product Guide
  - Desktop Board Three-year Limited Warranty
- ATX-compliant I/O shield
- Integrated processor thermal solution retention mechanism
- Floppy and IDE cables
- Board and back-panel I/O layout stickers
- Quick Reference Guide

# Intel® Desktop Board D845GVSr

## Processor

<b>Processors Supported</b>	<ul style="list-style-type: none"> <li>Intel® Celeron® processors with mPGA478-pin package</li> <li>Intel® Pentium® 4 processors with 533-MHz or 400-MHz FSB</li> </ul>
<b>Intel® 845GV Chipset</b>	<ul style="list-style-type: none"> <li>Intel® 845GV Graphics Memory Controller Hub (GMCH) with Accelerated Hub Architecture bus</li> <li>Intel® 82801DB I/O Controller Hub (ICH4) with Accelerated Hub Architecture bus</li> <li>Intel® 82802AB Firmware Hub (FWH)</li> </ul>
<b>Graphics Memory Controller Hub (GMCH)</b>	<ul style="list-style-type: none"> <li>Designed to support up to 2 GB<sup>1</sup> (based on 512 Mb technology) of DDR333<sup>2</sup>/266/200 SDRAM</li> </ul>
<b>Intel® ICH4 I/O Controller Hub</b>	<ul style="list-style-type: none"> <li>Supports up to Ultra ATA100</li> <li>Allows support of three PCI bus masters</li> </ul>
<b>I/O Features</b>	Integrated super I/O LPC bus controller <ul style="list-style-type: none"> <li>Three PCI local bus slots</li> <li>Power management support for ACPI 1.0</li> </ul>
<b>USB 2.0</b>	<ul style="list-style-type: none"> <li>Four back-panel ports (two dual stack)</li> <li>Two ports routed to one onboard header (requiring cable to front panel)</li> </ul>
<b>Audio Solution</b>	<ul style="list-style-type: none"> <li>AC'97-compliant integrated audio solution</li> </ul>
<b>Intel® PRO 10/100 Network Connection (optional)</b>	On board 10/100-Mbps Ethernet LAN connectivity utilizing Intel® 82562ET LAN

## Firmware Hub

<b>System BIOS</b>	<ul style="list-style-type: none"> <li>4-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, multi-lingual 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>

## System Memory

<b>Memory Capacity</b>	<ul style="list-style-type: none"> <li>Two 184-pin DIMM connectors supporting up to two double-sided DIMMS</li> </ul>
<b>Memory Type</b>	<ul style="list-style-type: none"> <li>DDR333<sup>2</sup>, DDR266, or DDR200 SDRAM</li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>2.5V DDR</li> </ul>

## 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 or PCI

## 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</li> </ul>

## Mechanical

<b>Board Style</b>	uATX 1.1-compliant board size
<b>Board Size</b>	9.2" x 8.2"

## Baseboard Power

<b>Requirements</b>	ATX12V or SFX12V
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## Environment

<b>Operating Temperature</b>	0° C to +55° C
<b>Storage Temperature</b>	-40° C to +70° C

## Regulations

<b>Safety Regulations</b>	
<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 B

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/)

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<sup>1</sup> Intel® Desktop Board D845GVSr designed to support up to 2GB DDR SDRAM memory based on 512Mb technology for information on the latest validated memory support, visit <http://developer.intel.com/design/motherbd/>.

<sup>2</sup> DDR333 SDRAM memory is supported in combination with Intel® Pentium® 4 processor 533-MHz system bus.

