



Can a desktop board deliver exceptional value and quality?

Yes. Intel® Desktop Board D865GVHZ for the Intel® Celeron® processor and Intel® Pentium® 4 processor in the mPGA478-pin package



Delivering Exceptional Value and Quality

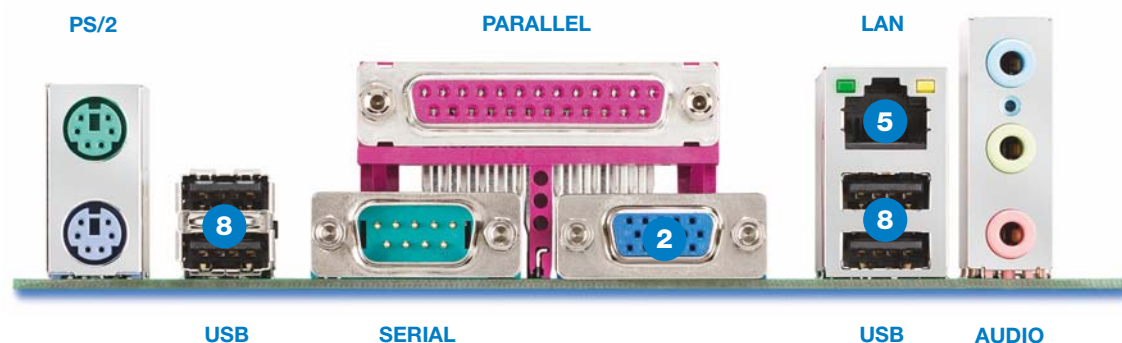
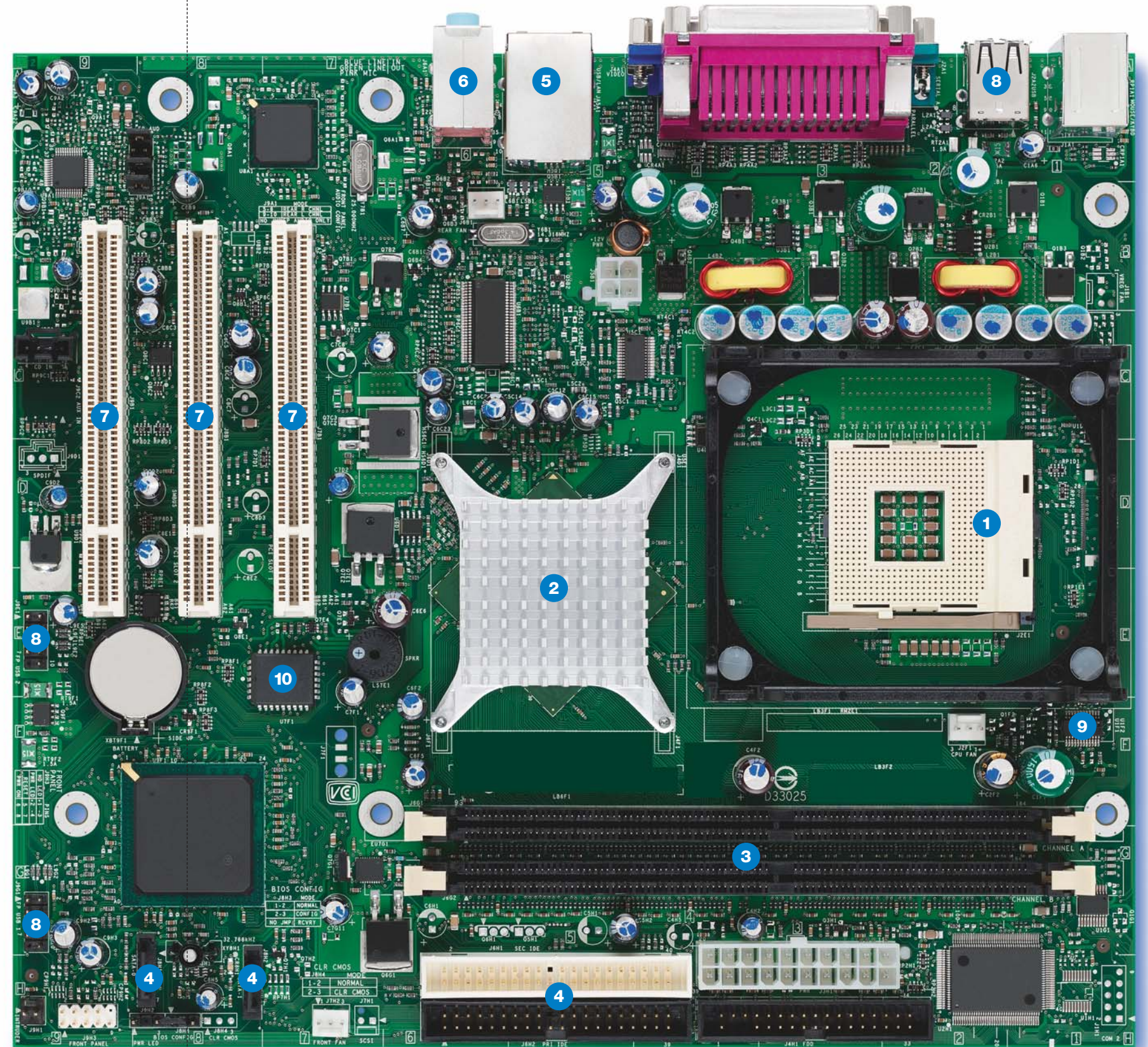
The Intel® Desktop Board D865GVHZ delivers an integrated graphics solution with essential features designed to support the Intel® Celeron® processor and Intel® Pentium® 4 processor in the mPGA478-pin package. The Intel Desktop Board D865GVHZ was designed with a focus on reducing overall platform cost. Features such as the Intel® 865GV chipset with Intel® Extreme Graphics 2 and support for up to 2 GB¹ of dual-channel DDR400³/333²/266 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.

Boxed Intel® Desktop Board D865GVHZ Solution includes:

- Desktop Board D865GVHZ
- ATX-compliant I/O shield
- Integrated processor thermal solution retention mechanism
- Floppy, SATA, and IDE cables
- Board and back-panel I/O layout stickers
- Quick Reference Guide
- Desktop Board three-year limited warranty
- Intel® Express Installer CD, including:
 - Intel® Active Monitor
 - Norton Internet Security*
 - Farstone* RestoreIT! Lite
 - InterVideo* WinDVD* Recorder Silver
 - Diskeeper* Lite
 - NTI CD-Maker*
 - Real One* Player
 - Software Drivers with Web updates
 - Desktop Board Product Guide

Intel® Desktop Board D865GVHZ

- 1 Processor Support:** Supports Intel® Celeron® processors (2 GHz and higher) and Intel® Pentium® 4 processors (2.20 GHz and higher) supporting Hyper-Threading Technology⁴ in the mPGA478-pin GHz package.
- 2 Intel® 865GV chipset featuring Intel® Extreme Graphics 2 using Dynamic Video Memory Technology (DVMT):** Low-cost, high-performance graphics solution.
- 3 Dual-Channel DDR400 SDRAM support:** Two DIMM sockets designed to support up to 2 GB¹ of DDR400³/333^{2/5}/266 DDR SDRAM memory. Flexible support for either single- or dual-channel operation.
- 4 SATA 150 and Ultra ATA 100 connectors:** Flexible support of new-generation SATA 150 (2 ports) and current generation ATA (2 channels) storage devices.
- 5 Integrated Intel® PRO 10/100 LAN (optional):** Optional onboard 10/100-Mbps Ethernet LAN connectivity.
- 6 AC'97 Audio:** Integrated two-channel audio providing audio performance at an excellent value.
- 7 Three PCI slots:** Expansion slots for custom system configurations and future add-in card upgrades.
- 8 Eight Hi-Speed USB 2.0 ports:** Four rear ports and two headers for up to four additional USB 2.0 ports.
- 9 Intel® Precision Cooling Technology:** Advanced management ASIC supports temperature-based chassis fan control. Chassis fan speeds adjust real time according to system temperatures to help reduce unnecessary noise and energy consumption.
- 10 Intel® Rapid BIOS Boot:** Reduced boot time enables fast system access.



Intel® Desktop Board D865GVHZ

Desktop Board Specifications

Processors Supported	<ul style="list-style-type: none">• Intel® Celeron® processors (2 GHz and higher) with mPGA478-pin package• Intel® Pentium® 4 processors (2.20 GHz and higher) with mPGA478-pin package
Intel® 865GV Chipset	<ul style="list-style-type: none">• Intel® 865GV Graphics Memory Controller Hub (GMCH) with Accelerated Hub Architecture bus• Intel® 82801EB I/O Controller Hub (ICH5) with Accelerated Hub Architecture bus• Firmware Hub (FWH)
I/O Features	<ul style="list-style-type: none">• Integrated super I/O LPC bus controller• Ultra ATA 100/66• Two SATA 150 (1.5 Gbps) ports• Three PCI local bus slots
USB 2.0	<ul style="list-style-type: none">• Four back-panel ports (two dual stack)• Four ports routed to two onboard headers
Audio Solution	<ul style="list-style-type: none">• AC'97-compliant integrated audio solution
Intel® PRO 10/100 Network Connection (optional)	<ul style="list-style-type: none">• Optional onboard 10/100-Mbps Ethernet LAN connectivity utilizing Intel® 82562EZ LAN
Firmware Hub	
System BIOS	<ul style="list-style-type: none">• 4-Mb Flash EEPROM with Intel®/AMI® BIOS featuring Plug and Play, IDE drive auto-configure• Advanced configuration and power interface V1.0b, DMI 2.0, multilingual support
Intel® Rapid BIOS Boot	<ul style="list-style-type: none">• Optimized POST for fast access to PC from power-on
System Memory	
Memory Capacity	<ul style="list-style-type: none">• Two 184-pin DIMM connectors supporting up to two double-sided DIMMS• Designed to support up to 2 GB¹ of system memory using DDR400³/333^{2,5} SDRAM
Memory Type	<ul style="list-style-type: none">• DDR400³, DDR333^{2,5}, or DDR266 SDRAM
Memory Voltage	<ul style="list-style-type: none">• 2.5V
Wake-Up From Network	
	<ul style="list-style-type: none">• 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

	<ul style="list-style-type: none">• Three PCI bus add-in card connectors
Jumpers and Front-Panel Connectors	
Jumpers	<ul style="list-style-type: none">• Single configuration jumper design• Jumper access for BIOS configuration mode
Front-Panel Connectors	<ul style="list-style-type: none">• Reset, HD LED, Power LEDs, power on/off, aux LED• USB 2.0 headers• Audio header

Mechanical

Board Style	µATX 1.0-compliant board size
Board Size	9.6" x 8.5" (24.38 cm x 21.59 cm)

Baseboard Power

Requirements	ATX12V or SFX12V
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Environment

Operating Temperature	0° C to +55° C
Storage Temperature	-40° C to +70° C

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
For the most current product information available, visit Intel's Web site at:
developer.intel.com/design/motherbd/

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¹ Intel® Desktop Board D865GVHZ 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/>.

² When using an 800-MHz FSB CPU, DDR333 memory is clocked at 320 MHz. This minimizes system latencies to optimize system performance.

³ DDR400 memory speed only supported in combination with Intel® Pentium® 4 processor with 800-MHz system bus.

⁴ Hyper-Threading requires a computer system with an Intel® Pentium® 4 processor supporting this technology, a chipset and BIOS that utilize this technology, and an operating system that includes optimizations for this technology. Performance will vary depending on the specific hardware and software you use. See www.intel.com/info/hyperthreading for information.

⁵ DDR333 memory speed not supported in combination with Intel® Pentium® 4 processor with 400-MHz system bus.

