



Intel® 845E Chipset for Applied Computing

Product Highlights

- The Intel® 845E chipset is designed, validated, and optimized for the Intel® Pentium® 4 processor and Intel® Pentium® 4 Processor – M with Intel® NetBurst™ microarchitecture
- 400MHz or 533MHz system bus delivers a high-bandwidth connection between the Intel Pentium 4 processor and the platform, providing 3x the bandwidth over platforms based on Intel® Pentium® III processors
- Advanced packaging technology and industry-leading electrical design innovations deliver long-term system reliability over wide operating conditions
- The AGP4X interface provides advanced graphics support, enabling over 1GB/s of graphics bandwidth
- Three USB controllers provide high-performance peripherals with 480Mbps of bandwidth, while enabling support for up to six USB 2.0 ports. This results in a significant increase over previous integrated 1-4 port hubs at 12Mbps
- The latest AC '97 implementation delivers 20-bit audio for enhanced sound quality and full surround sound capability. Integrated audio solutions continue to enjoy success as a very cost-effective, yet high-performance solution
- LAN Connect Interface (LCI) provides flexible network solutions such as 10/100Mbps Ethernet and 10/100Mbps Ethernet with LAN manageability
- The Intel® SingleDriver™ Technology supports all three network options, which simplifies network connectivity and eases deployment
- Dual Ultra ATA 100 controllers, coupled with the Intel® Application Accelerator – a performance software package – support faster IDE transfers to storage devices
- The Intel Application Accelerator software provides additional performance over native ATA drivers. The Intel Application Accelerator improves system performance by improving I/O transfer rates and enables faster O/S load time resulting in accelerated boot times
- Communication and Network Riser (CNR) offers flexibility in system configuration with a baseline feature set that can be upgraded with an audio card, modem card, or network card
- Embedded lifecycle support

Intel 845E Chipset Overview

Evolutionary Architecture

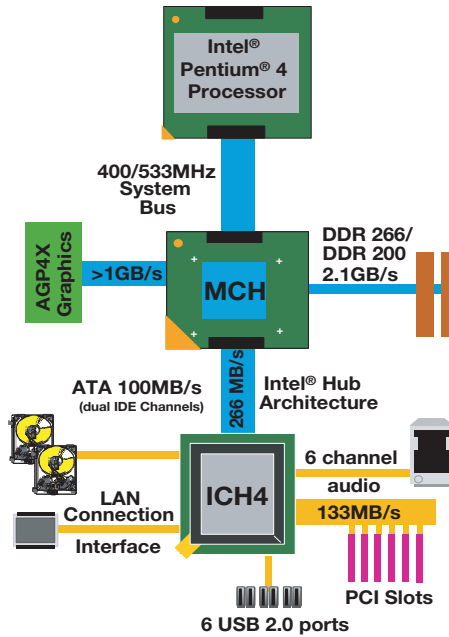
Intel 845E chipset-based platforms extend the Intel Pentium 4 processor and Intel Pentium 4 Processor – M capabilities with an excellent balance of price and performance for applied computing segments.

The Intel 845E chipset consists of two controller hubs:

The 82845E Memory Controller Hub (MCH) supports a 400MHz or 533MHz system bus, DDR200/266 memory and the latest graphics devices through the 1.5V AGP4X interface. The 82801DB I/O Controller Hub (ICH4) makes a direct connection to the graphics and memory for faster access to peripherals. It provides the features and bandwidth required for applied computing-usage models.

The Intel® Platform Advantage

Intel's platform architecture delivers the performance and high scalability required for today's cutting edge e-Business and e_home applications. Intel's comprehensive efforts to enable the industry ensure fast deployment of next-generation platforms, maximizing competitive advantage. Our world-class platform validation creates a robust foundation for emerging applications, while minimizing deployment risks.



Intel® 845E Chipset Linecard

| Product | Product Code | Package | Features |
|------------------------------------|--------------|------------|--|
| 82845E Memory Controller Hub (MCH) | RG82845E | 593 FC-BGA | 400MHz or 533MHz System Bus DDR200/266 Memory AGP4X interface enables over 1GB/s of graphics bandwidth |
| I/O Control Hub 4 | FW82801DB | 421 mBGA | Direct connection to MCH with Intel's accelerated hub architecture Supports 32-bit PCI IDE controllers with ATA 100 Six USB ports with USB 2.0 support AC '97 controller with 20-bit audio support Integrated LAN connect interface |

Intel Access

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