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Intel[®] 875P Chipset for Embedded Computing

Product Overview

The Intel® 875P chipset-based platform delivers the performance and high scalability required for today's cutting-edge e-Business and e-Home applications. It extends the capabilities of the Intel® Pentium® 4, Intel® Celeron D, and the Intel® Celeron® processors while maintaining a balance of price and performance for embedded computing solutions.

The Intel 875P chipset consists of the Intel® 82875P Memory Controller Hub (MCH) and the Intel® 6300ESB I/O Controller Hub (ICH). Together, they provide exceptional graphics bandwidth and support graphics controllers needed to meet the demands of today's communications and embedded computing market segments.

Product Highlights

- Designed, validated, and optimized for Intel Pentium 4, Intel Celeron D, and Intel Celeron processors with Intel NetBurst[®] microarchitecture, including the Intel Pentium 4 processor with Hyper-Threading (HT) Technology[†]
- 400 MHz, 533 MHz, and 800 MHz system bus provides scalability to the highestperformance Intel Pentium 4 processors
- Supports HT Technology for maximum performance
- Dual-channel DDR 266/333/400 SDRAM with ECC is supported for added scalability
- AGP 8X interface supports the latest graphics controllers



- Communication Streaming Architecture (CSA), featuring a Dedicated Network Bus (DNB), enables real Gigabit Ethernet performance by eliminating the PCI bottleneck and providing a direct path to system memory. The optional Intel[®] 82547GI Gigabit Ethernet Controller readily connects to CSA
- Advanced packaging technology and industryleading electrical design innovations deliver long-term system reliability over wide operating conditions
- Four PCI-X* 64/66 slots, plus four PCI 32/33 slots allow for system expansion
- Two SATA/150 (serial) plus two ATA/100 (parallel) controllers for high-speed storage transfer
- Provides 37 GPIOs, in addition to four USB
 2.0 ports, two integrated serial ports, and
 AC'97 support
- Built-in watchdog timer
- Embedded life cycle support

Intel Platform Advantage

Intel is committed to supporting fast deployment of platforms and maximizing competitive advantage. Extensive platform validation creates a robust foundation for emerging applications while minimizing deployment risks.

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Intel® 875P Chipset

Product	Product Code	Package	Feature
Intel® 82875P Memory Controller Hub	RG82875	1005 FC-BGA	 400/533/800 MHz system bus DDR 266/333/400 SDRAM with ECC AGP 8X graphics interface CSA network interface
Intel® 6300ESB I/O Controller Hub	FW80001ESB689	mBGA	 PCI 32/33 and PCI-X 64/66 Serial and parallel ATA interfaces USB 2.0 and serial ports AC'97 support Watchdog timer, 37 GPIOs

Intel Access

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Embedded Intel® Architecture Home Page:	intel.com/design/intarch
Developer's Site:	developer.intel.com
Intel in Communications:	intel.com/communications
General Information Hotline:	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST
Intel [®] Literature Center:	(800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada)
	International locations please contact your local sales office.

t Hyper-Threading Technology requires a computer system with an Intel® Pentium® 4 processor supporting Hyper-Threading Technology and an HT Technology-enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See http://www.intel.com/info/hyperthreading for more information including details on which processors support HT Technology.

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