

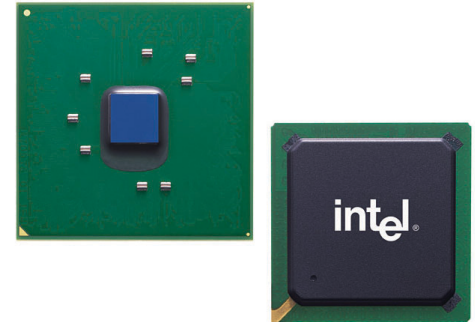


Intel® 855GME GMCH and Intel® ICH-4 for Embedded Computing

Product Overview

The Intel® 855GME GMCH and Intel® ICH-4 for Embedded Computing are an optimized integrated graphics solution with a 400 MHz system bus and integrated 32-bit 3D core at 133 MHz. It features a low-power design, supports the Intel® Pentium® M and Intel® Celeron® M processors and up to 2 GB of DDR 333 system memory.

Intel's platform architecture delivers the performance and high scalability required for today's cutting-edge embedded computing applications. The Intel 855GME GMCH and ICH-4 are part of Intel's comprehensive validation process that enables fast deployment of next-generation platforms to maximize competitive advantage while minimizing development risks.



Product Highlights

- The Intel 855GME GMCH is designed, validated, and optimized for the Intel Pentium M and Intel Celeron M processors and associated microarchitecture
- 400 MHz system bus delivers a high-bandwidth connection between the processor and the platform
- Integrated graphics utilizing Intel® Extreme Graphics 2 technology
- AGP 4X support
- Advanced packaging technology and industry-leading electrical design innovations deliver long-term system reliability over wide operating conditions
- Three USB host controllers provide high-performance peripherals with 480 Mbps 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 12 Mbps
- The latest AC '97 implementation delivers 20-bit audio for enhanced sound quality and full surround sound capability
- LAN Connect Interface (LCI) provides flexible network solutions such as 10/100 Mbps Ethernet and 10/100 Mbps Ethernet with LAN manageability
- 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 by improving I/O transfer rates and enabling 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
- Error Correcting Code (ECC) support in integrated graphics mode only

Intel in
Communications



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Display

- Analog display support
- Dual independent pipe support
 - Concurrent: different images and native display timings on each display device
 - Simultaneous: same images and native display timings on each display device
- DVO (DVOB and DVOC) support
 - Digital video out ports DVOB and DVOC with 165 MHz dot clock on each 12-bit interface; two 12-bit channels can be combined to form one dual-channel 24-bit interface with an effective dot clock of 330 MHz
 - Compliant with DVI Specification 1.0
- Dedicated Local Flat Panel (LFP) LVDS interface

Internal Graphics Features

- Core frequency
 - Display core frequency of 133 MHz
 - Render core frequency of 133 MHz

Intel® Embedded Graphics Driver

- Graphics interface support
 - GDI and DirectX* DirectDraw* with overlay for Windows* XP, Windows* 2000, and Windows* Embedded XP
 - XFree86*, XAA, and Xv for Linux*
- Multi-monitor support
 - Multiple programmable configurations
 - Dual independent display
 - DVO device support/TV-Out
- Dynamic display-mode support
 - User definable and extensible
- Embedded video BIOS
 - Common port interface support
 - Full VGA compatibility

Intel® 855GME GMCH and Intel® ICH-4 for Embedded Computing

Product	Product Code	Package	Features
855GME Memory Controller Hub (GMCH)	RG82855GME	732 micro-FC-BGA	<ul style="list-style-type: none"> ■ 400 MHz system bus ■ DDR 333 Memory ■ Integrated graphics support
I/O Controller Hub 4	FW82801DB	421 micro-BGA	<ul style="list-style-type: none"> ■ Direct connection to MCH with Intel® 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

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

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