Product Brief

**Intel® 915GV Express Chipset**

Embedded Computing

# Intel® 915GV Express Chipset for Embedded Computing

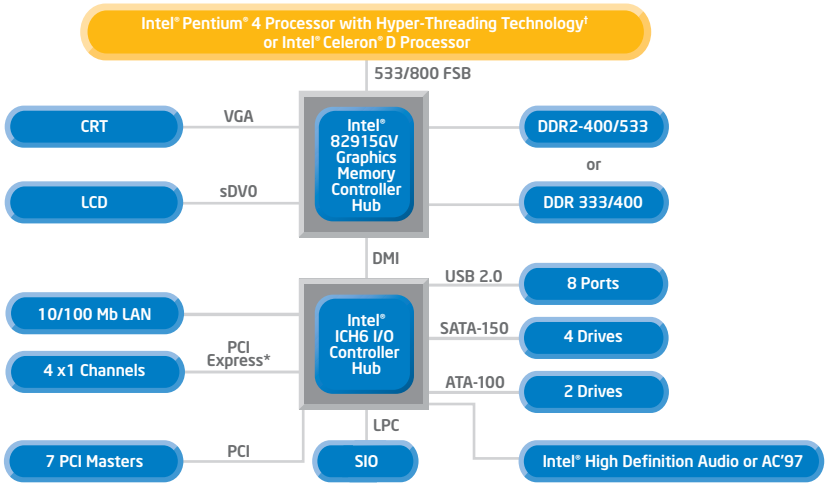
## Product Overview

The Intel® 915GV Express chipset delivers innovative features for interactive client, communications, and embedded computing solutions. Designed for, and validated with Intel® Pentium® 4 processors 551[Δ] and 651[Δ] with Hyper-Threading Technology[†] (HT Technology), and Intel® Celeron® D processors 352[Δ] and 341[Δ] – all with Intel® Extended Memory 64 Technology[Φ] (Intel® EM64T) – this chipset introduces a new generation of scalable performance and value.

The Intel 915GV Express chipset consists of the Intel® 82915GV Graphics and Memory Controller Hub (GMCH) and the Intel® ICH6 I/O Controller Hub (ICH). Together they provide superior graphics with outstanding memory performance and high-speed I/O. This chipset also supports present and future mainstream memory technologies, and next-generation I/O capability including PCI Express* and Intel® High Definition Audio.


## Product Highlights

- Designed, validated and optimized for Intel Pentium 4 processors 551 and 651 with HT Technology, and Intel Celeron D processors 352 and 341, all with Intel EM64T and LGA-775 packaging
- 533 MHz and 800 MHz system bus provides scalability to the highest performance Intel Pentium 4 processors with HT Technology and Intel Celeron D processors
- Support for dual-channel DDR2-400/533 SDRAM or DDR 333/400 SDRAM
- Integrated analog VGA and sDVO outputs allow maximum flexibility when making display decisions
- Intel® Graphics Media Accelerator 900 (Intel® GMA 900) provides superior graphics in an integrated package
- Direct Media Interface (DMI) delivers 2.0 GB/s concurrent bandwidth to maximize throughput between core chipset components
- Seven PCI masters provide generous system expansion capability
- Four x1 PCI Express channels for high-speed I/O
- Support for four SATA-150 (serial) plus two ATA-100 (parallel) hard disk drives for high-speed storage
- Integrated LAN controller provides direct connection to Platform LAN Connect (PLC) components
- Eight integrated USB 2.0 ports
- Intel High Definition Audio features eight independent DMA audio engines or AC'97
- Embedded lifecycle support
- Along with a strong ecosystem of hardware and software vendors, including members of the Intel® Communications Alliance (intel.com/go/ica), Intel helps cost-effectively meet development challenges and speed time-to-market




## Intel® 915GM Express Chipset for Embedded Computing

| Product | Product Code | Package | Features |
|---|---|---|---|
| Intel® 82915GV Graphics and Memory Controller Hub | NG82915GV | 1210 FC-BGA | ▪ 533/800 MHz system bus<br>▪ DDR2-400/533 or DDR 333/400 SDRAM<br>▪ Intel® GMA 900 graphics<br>▪ High-bandwidth DMI |
| Intel® ICH6 I/O Controller Hub | FW82801FB | 609 µBGA | ▪ Seven PCI masters and four PCI Express* x1 channels<br>▪ Serial and Parallel ATA interfaces<br>▪ USB 2.0 (8 ports)<br>▪ Intel® High Definition Audio or AC'97 |

[Δ] Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See http://www.intel.com/products/processor_number for details.

[†] 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.

[•] Intel® EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information including details on which processors support Intel® EM64T or consult with your system vendor for more information.

## 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 |
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