

Product Brief

Development Kit

Embedded Computing



Mobile Intel® 945GME Express Chipset Development Kit

Product Overview

The Mobile Intel® 945GME Express chipset development kit provides an excellent choice for developers of a wide range of low-power embedded applications such as industrial automation, test and instrumentation, aerospace, defense, and medical imaging systems.

The Mobile Intel® 945GME Express chipset provides excellent flexibility for developers of embedded applications by offering improved graphics and increased I/O bandwidth. Features include an integrated 32-bit 3D graphics engine based on Intel® Graphics Media Accelerator 950 (Intel® GMA 950) architecture, 533/667 MHz front-side bus (FSB), 4 GB of 400/533/667 MHz DDR2 SODIMM system memory, Intel® Active Management Technology (Intel® AMT)† and Intel® Matrix Storage Technology.

This and other development kits from Intel provide a fully working system with a range of performance options that can be modified or used immediately for product development. A validated board platform lets software vendors test BIOS and operating system software.

Product Highlights

- Supports the following processors manufactured on 65nm process technology:
 - Intel® Core™2 Duo processors
 - Intel® Core™ Duo processors
 - Intel® Celeron® M processors
- Features the Mobile Intel 945GME Express chipset, consisting of the Intel® 82945GME Graphics Memory Controller Hub (GMCH) in a µFC-BGA package and Intel® 82801GHM I/O Controller Hub 7-M (ICH7-M).
- Supports 533/667 MHz FSB and dual-channel DDR2 SODIMM at 400/533/667 MHz with two SODIMM slots (one per channel).
- Provides 128 MB to 4 GB system memory using 256 Mbit, 512 Mbit, or 1 Gbit technology. Eighteen bpp LVDS and VGA are supported.



Board Peripheral Features

- One x16 PCI Express* graphics Interface, doubling as a Media Expansion Card connector, provides access to dual SDVO ports if PCI Express is unused
- Two SATA ports
- One Ultra ATA (33/66/100) IDE connector supporting up to two IDE devices
- Seven USB 2.0 ports (five on rear panel, two via headers)
- Two PCI 2.3-compliant 33 MHz interface connectors
- PS/2-style keyboard and PS/2 mouse (6-pin mini-DIN) connectors
- LVDS connector on top of circuit board near GMCH
- One VGA connector providing access to integrated graphics
- One LAN connector providing 10/100/1000 Mbps connectivity from Intel® 82573E Gigabit Ethernet controller
- One 9-pin serial port connector
- One IrDA port
- Two PCI Express slots (x1)
- Two SODIMM connectors on rear of circuit board

Included in the Kit

- Development board
- One Intel Core 2 Duo processor T7400^A at 2.16 GHz with 4 MB L2 cache on 65nm process in 478-pin μ FC-PGA package, installed
- One Intel Core Duo processor T2400^A at 1.83 GHz with 2 MB L2 cache on 65nm process in 478-pin μ FC-PGA package, supplied
- One firmware hub, installed
- One Intel 82945GME GMCH heat sink, installed
- One type 2032, socketed 3V lithium coin cell battery, installed
- One 256 MB/667 MHz DDR2 SODIMM (200 pin)
- One CPU thermal solution and CPU back plate (not installed)
- One cable kit

Software Overview

In order to provide customers with a complete development environment in the development kit, Intel works to enable the platform to support customer applications and operating systems. Any software/firmware provided in the kit is subject to change without notice. For the most recent updates, please refer to the Web site for embedded Intel[®] architecture development kits at developer.intel.com/design/intarch/devkits/index.htm

Ordering Information

IPDCD945GMEDVKT

Intel Access

Embedded Intel[®] Architecture Home Page: intel.com/design/intarch

Developer's Site: intel.com/design

Intel in Embedded and Communications: intel.com/go/embedded

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.](#)

^AIntel[®] Active Management Technology requires the computer to have additional hardware and software, connection with a power source, and a network connection. Check with your PC manufacturer for details.

^AIntel 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.

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