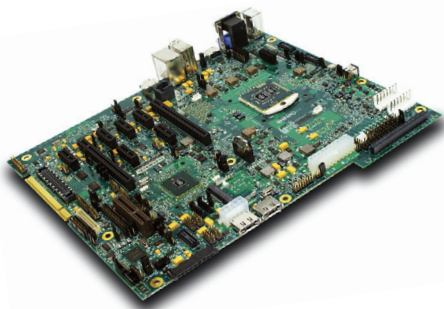


Intel® Core™ i5 Processor with Mobile Intel® QM57 Express Chipset Development Kit



Product Overview

The Intel® Core™ i5 processor with Mobile Intel® QM57 Express chipset development kit provides outstanding flexibility for developers of embedded applications with excellent graphics, memory and I/O bandwidth, as well as remote asset management capabilities, storage speed and reliability. It addresses requirements of a broad range of embedded applications, including retail and transaction solutions, gaming platforms and industrial automation equipment.

The processor combines intelligent performance and power efficiency. By integrating the graphics engine into the processor, this new two-chip solution provides board real estate savings with improved graphics performance compared to previous-generation Intel® platforms. Integration of the memory controller hub into the processor also helps reduce the footprint and simplify the architecture. While incorporating advanced technology, the processor remains software-compatible with previous IA-32 processors.

This platform is part of Intel's comprehensive validation process, enabling rapid deployment of next-generation platforms to help developers maximize competitive advantage and minimize development risks. This and other development kits from Intel provide a working system with a range of performance options that can be modified or used immediately for product development, and allow software vendors to test BIOS and operating system software.

Product Highlights

- Intel® Core™ i5-520M^A processor at 2.93 GHz max core frequency in a 988 FCPGA package¹
- Intel® BD82QM57 platform controller hub in a 1071 FCBGA package
- Intel® Turbo Boost Technology²
- Intel® Hyper-Threading Technology³
- Intel® Advanced Smart Cache
- Dual-channel memory controller supporting DDR3 1066 MHz SO-DIMM

Board Peripheral Features

- x16 PCI Express* for high throughput of high-end graphics
- Dual-channel 24-bit LVDS interface
- Single-channel SDVO port
- CRT connector
- HDMI and display port connectors
- Intel® High-Definition Audio⁴ MDC header
- Eight (8) x1 PCI Express connectors
- Fourteen (14) USB 2.0 ports
- On-board 10/100/1000 Mb/s Ethernet
- RJ45 connector
- Serial IrDA (infrared) port
- Six (6) SATA ports
- PS/2 port for keyboard and mouse
- Scan matrix keyboard header
- XDP debug port
- PCI support via extension card
- LPC connector

Included in the Kit

The Intel Core i5 processor with Mobile Intel QM57 Express chipset development kit ships as a complete system in an ATX chassis and includes the following:

- Development board
- Two (2)x1 GB 1066 MHz SO-DIMMs
- Port80 card
- PCI extension card
- 80 GB SATA hard drive
- DVD-ROM SATA drive
- Power supply
- Pre-installed jumpers
- BIOS pre-installed in flash memory
- Collateral and Drivers CD

Software Overview

The following independent operating systems and BIOS vendors support platforms based on the Intel Core i5 processor with Mobile Intel QM57 Express chipset development kit.

OPERATING SYSTEM	CONTACT	BIOS
Windows Server* 2003/2008	Intel provides drivers ⁵	American Megatrends
Windows* 7	Intel provides drivers ⁵	Insyde Software
Microsoft Windows* XP SP3	Intel provides drivers ⁵	Phoenix Technologies
Microsoft Windows Embedded Standard (XPe)	Intel provides drivers ⁵	
Microsoft Windows POSReady 2009	Intel provides drivers ⁵	
Red Hat Enterprise Linux* 5.1	Red Hat	
Red Hat Fedora Core* 10	Red Hat	
SUSE Enterprise Linux* 11	Novell	
Wind River Linux* 3.0	Wind River	
Wind River VxWorks* 6.8	Wind River	

Intel strives to provide customers with a complete development environment supporting customer applications and operating systems. Any software provided in this development kit is subject to change without notice. Customers are encouraged to check for software updates at intel.com/design/intarch/devkits/index.htm.

Order Information

EMBI57QM57RFDK

Intel in Embedded and Communications: intel.com/embedded

⁴ Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See www.intel.com/products/processor_number for details.

¹ The Intel® Core™ i7-620M Processor at 3.3 GHz max core frequency is also supported. Please contact your Intel sales representative for more information.

² Intel® Turbo Boost Technology requires a Platform with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software and overall system configuration. Check with your platform manufacturer on whether your system delivers Intel Turbo Boost Technology. For more information, see www.intel.com/technology/turboboost.

³ Hyper-Threading Technology requires a computer system with a 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 www.intel.com/info/hyperthreading/ for more information including details on which processors support HT Technology.

⁴ Intel® High Definition Audio requires a system with an appropriate Intel chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers and speakers. For more information about Intel® HD audio, refer to <http://www.intel.com/>.

⁵ Drivers available at: downloadcenter.intel.com (enter chipset name).

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