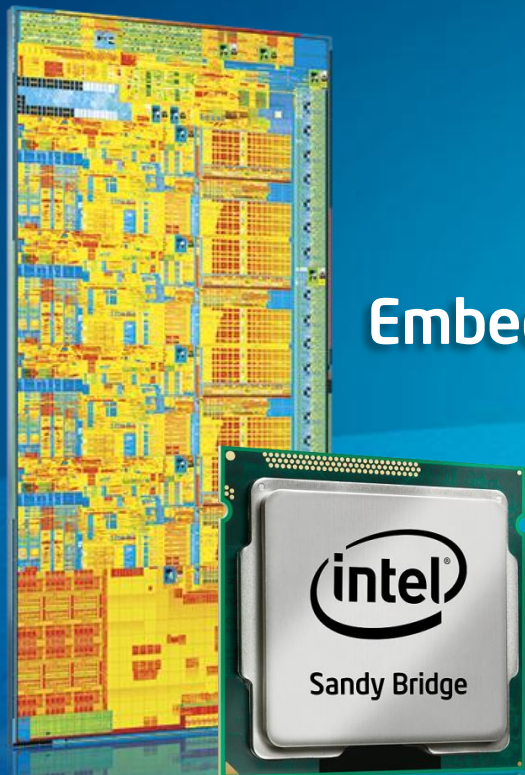


Under Embargo until January 5, 2011



Embedded 2nd Generation Intel® Core™ Processors: Do More Now and in the Future

Jan 5th 2011



Disclaimers

- INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL® PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. INTEL PRODUCTS ARE NOT INTENDED FOR USE IN MEDICAL, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS.
- Intel may make changes to specifications and product descriptions at any time, without notice.
- All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice.
- Intel® processors, chipsets, and desktop boards may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request.
- Any code names featured are used internally within Intel to identify products that are in development and not yet publicly announced for release. Customers, licensees and other third parties are not authorized by Intel to use code names in advertising, promotion or marketing of any product or services and any such use of Intel's internal code names is at the sole risk of the user.
- Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.
- Intel, Intel Inside, the Intel logo, Centrino, Centrino Inside, Intel Core, Intel Atom and Pentium are trademarks of Intel Corporation in the United States and other countries should be Intel, the Intel logo, Intel vPro, Intel Sponsors of Tomorrow, and Intel Sponsors of Tomorrow. logo are trademarks of Intel Corporation in the U.S. and/or other countries.
- Material in this presentation is intended as product positioning and not approved end user messaging.
- This document contains information on products in the design phase of development.
- *Other names and brands may be claimed as the property of others.
- Copyright © 2010 Intel Corporation.

Intel Confidential



What is the News?

- Intel introduces seven 2nd Generation Intel® Core™ processors with extended lifecycle support featuring the first “visibly smart” micro-architecture.
- Dramatically increase in performance and capabilities for video processing and analytics
- Empower faster and easier development of embedded solutions across a range of price points
- Ideal for digital signage, digital security and surveillance, industrial, medical and retail market segments
- The 2nd generation Intel® Core™ processors allow for future technology innovation without the need to redesign hardware

Embedded Environment and Trends

- Demand increasing for richer and instantaneous visual experiences
- Expected to do more with fewer design resources
- More Connected and smarter applications; need more Security and Maintenance



Military



ATM



Medical Imaging



Industrial PC



Point of Sale



Digital Signage



Robotics



IP Cameras



Aerospace



Kiosks



Routing & Switching



Printers



Digital Security Surveillance



Sensors



Factory Automation



Medical Portable

Intel is Targeting January 5th to Announce Embedded Supported 2nd Generation Intel® Core™ Processors

- Intel® Core™ i7/i5/i3 Processor-based Platforms for Embedded
 - New 32nm Intel microarchitecture
 - Impressive leap in energy-efficient performance
 - Optimized Intel® Turbo Boost Technology 2.0 and Intel® Hyper-Threading Technology
 - Significant advances in visual and 3D graphics capabilities
 - New Intel® Advance Vector Extensions for enhanced floating point intensive application performance
 - Lower Cost Of Ownership Through Scalability and BOM Reductions

- 11 long-life SKUs launching; 4 Embedded Specific Offerings (E)
- Dual Product Lines for Core i7 and i5 Processors
- Breadth of solutions available from the Embedded Ecosystem



Analytics



Infrastructure



Comms



Digital Security
and Surveillance



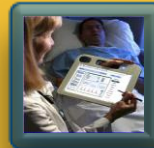
Kiosks
& ATM's



Digital
Signage



Industrial
Automation



Medical Portable
& Imaging

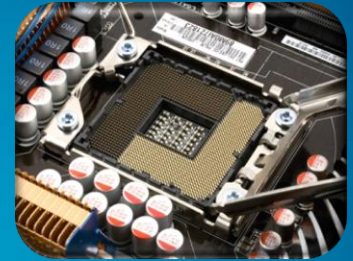
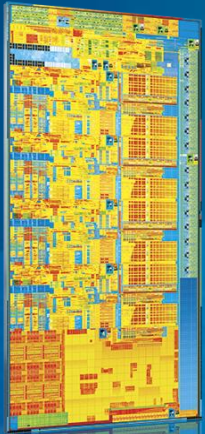


Embedded 2nd Generation Intel® Core™ Processors: Do More Now and in the Future

Leading Edge Technologies Driving
Embedded Innovation

Moving the Connected Continuum
Forward with Manageable and Secure
Solutions

Driving down Cost and
Increasing Ease of Design



The Media Engine For Driving Cutting Edge Embedded Applications



Intel® Quick Sync Video delivers 2X gains on HD Media Processing¹
Intel® HD Graphics sees 2X gain versus previous gen on 3D graphics²



Intel Confidential



1. See Appendix B for details

2. Based on geometric mean of 3DMark* Vantage and 3DMark06*, see Appendix B for details

Performance of 2nd Generation Intel® Core Driving Embedded Advancement

~30%

Performance Improvement

Accomplish more in less time

with Intel® Turbo Boost Technology 2.0,
Intel® Hyper-Threading Technology

Reduce costs

to ease development and help TTM
with Intel® AVX



System Configurations in Appendix A.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more information on performance tests and performance of Intel products, visit <http://www.intel.com/performance>

Intel Confidential



Tremendous Customer Design Activity



Over 55 EBM Board Designs

10 Co-Launching Software
and Tool Vendors

Multiple End User
Announcements including
both Academic and Private

Rich Ecosystem for Embedded For 2nd Generation Intel® Core™

Hardware

AEEON
Computing Platform Service Partner

msi

EMERSON
Network Power

CURTISS WRIGHT Controls
Embedded Computing

a value
Technology Inc.

XES
Extreme Engineering Solutions

bcm
Broadcom

TRENTON



CONCURRENT TECHNOLOGIES

ADVANTECH
Building on Intelligent Plans

EUROTECH
Imagine. Build. Succeed.

Lanner

RadiSys
THE ENABLE OF ICS

Interface



kontron

IBASE

MERCURY
COMPUTER SYSTEMS

ADLINK
TECHNOLOGY INC.

linnoco
An Innovative Foxconn Member!

PFU
a Fujitsu company

Portwell

DFI
www.dfi.com

Software and Tools

American Megatrends

criticalblue
Accelerating Embedded Software

Green Hills
SOFTWARE

insyde

LYNXWORKS™

NAS software Limited
Incorporating InfoSAT

REAL TIME
SYSTEMS GmbH

RunTime
COMPUTING SOLUTIONS

tenAsys

WIND RIVER

medicina a distancia

"Medicina a Distancia currently plans the development of a stereoscopic three dimensional medical video transmission system and as we believe that it can be extremely useful in some situations where a patient's life may be at real risk or that the 3D image can provide details that cannot be transmitted in any other way." Said Dr. Carlos Iglesias, Co-Founder and President of Medicina a Distancia. Source - <http://www.medicinaadistancia.com>

Cornell University

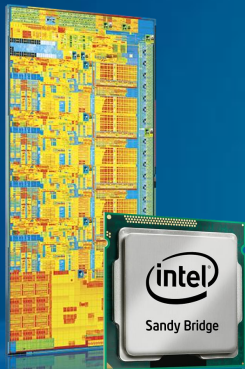
"The additional processing power of the Intel® Core™ 2 Extreme computer allowed us to complete all of the visual elements of the course approximately 25 percent faster than with the previous Intel® Core™ 2 Duo processor-based computer, and we expect to see similar improvements with the second generation Intel® Core™ i7 processor-based hardware," said JB Rajsky, a senior member of Cornell University Autonomous Underwater Vehicle Team. Source - <http://www.cuauv.org>

Embedded 2nd Generation Intel® Core™ Processors: Do More Now and in the Future

Leading Edge Technologies Driving Embedded
Innovation

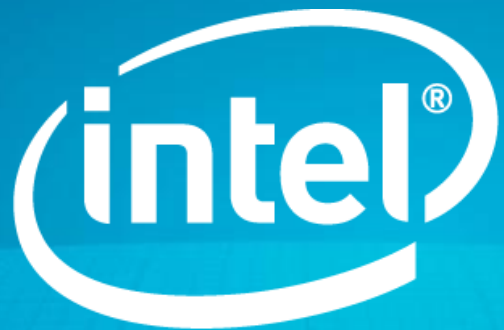
Moving the Connected Continuum Forward with
Manageable and Secure Solutions

Driving down Cost and Increasing Ease of
Design



Intel Confidential





Embedded

Intel Confidential



SKU Fact Sheet

Processor	Cores / Threads	Base Frequency	TDP	Package	ECC	Pricing per thousand units
Mobile						
Intel® Core™ i7-2710QE processor	4/8	2.1 GHz	45 W	FCPGA988	No	\$378
Intel® Core™ i7-2715QE processor	4/8	2.1 GHz	45 W	FCBGA1023	Yes	\$378
Intel® Core™ i5-2510E processor	2/4	2.5 GHz	35 W	FCPGA988	No	\$266
Intel® Core™ i5-2515E processor	2/4	2.5 GHz	35 W	FCBGA1023	Yes	\$266
Desktop						
Intel® Core™ i7-2600 processor	4/8	3.4 GHz	95 W	LGA1155	No	\$294
Intel® Core™ i5-2400 processor	4/4	3.1 GHz	95 W	LGA1155	No	\$184
Intel® Core™ i3-2120 processor	2/4	3.3 GHz	65 W	LGA1155	No	\$138

Appendix A: AVX Test Configuration - Linux

- Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.. For more information on performance tests and performance of Intel products, visit <http://www.intel.com/performance>
- **Intel® Advanced Vector Extensions (AVX) vs SSE Comparison Setup**
 - Single thread execution
 - Emerald Lake Platform (Fab A)
 - BIOS - American Megatrends 4.6.3.2 (Project Version - ASNBCPT1.86C.0023.B00)
 - CPU: Sandybridge D0 stepping (4 core, 2.0GHz, 6MB LLC, Intel® HT Technology off)
 - PCH: Cougarpoint B0 stepping.
 - 2 GB RAM (2x1GB Samsung DIMM DDR3 1333, dual rank, PN: M471B2874EH1-CH9)
 - Western Digital 1TB HDD (WD10EVD5-6)
 - Fedora 13 Linux 2.6.33.3-85.fc13.x86_64
 - Intel® C++ Compiler for Linux version 11.1.073
 - Intel® Integrated Performance Primitives version 7.0, beta build 205.5, July 6, 2010.
 - Intel® IPP Performance Tool version 7.0 (part of the IPP package)
 - All individual Intel® IPP measurements were taken using the Intel® IPP performance tool. Standard batch mode (-B) input was used. The automatic timing mode with an accuracy of 1% was used. The tests were run with high priority (Y=HIGH) and on one thread only (N=1). More information on the command line parameters can be obtained by running the performance applications with the -hh switch. Data averaged among in place and direct, fast & accurate switches.

Frequency domain FIR was compiled in release mode (Release x64) with the ICC compiler. The cache is warmed before the test. Optimizations are enabled using the /O3, -xHost, and -std=c99 compiler flags.

Data is at fixed CPU clock frequency and may change with Intel® Turbo Boost Technology enabled.

Software libraries, drivers, operating systems, and compilers used are not fully certified for performance and additional performance gains may be possible.



Appendix B: Transcode Performance Configurations

- Huron River platform (internal CRB): SandyBridge D1 stepping with GT2: CPU turbo up to 3.2 GHz; graphics dynamic frequency up to 1.3GHz. 8MB cache, 4 cores / 8 threads. CougarPoint B0 stepping. DDR3-1333, 2x2GB, dual channel Win7/32 BR-1008-01YL with 15.21.2191 driver kit
- Transcode video clip characteristics:
 - Source clip: MPEG2 1080P 28.6Mbps
 - Destination clips:
 - VTG destination: AVC 480x272 1Mbps
 - Edit/HD DVR destination: AVC 1080P 10Mbps
 - Authoring/Burn to DVD destination: MPEG2 720x480P 10 Mbps

Appendix B: 3D Performance and Other System Configurations

- System configuration for 2nd Generation Intel® Core Processor Family (quad core) + Intel® HD Graphics 3000: CPU: mobile quad core 2nd Generation Intel® Core Processor Family (ES2 samples) with Intel® Turbo Boost Technology 2.0 enabled up to 3.4GHz. Intel® HD Graphics 3000: dynamic frequency up to 1300MHz. Memory: 2x2GB dual channel DDR3-1600; graphics driver 15.21.2185. Mobile Intel® 6 Series Chipset Family. OS: Microsoft* Windows 7 (64b)
- System configuration for 2nd Generation Intel® Core Processor Family (dual core) + Intel® HD Graphics 3000 : CPU: mobile dual core 2nd Generation Intel® Core Processor Family (ES2 samples) with Intel® Turbo Boost Technology up to 3.2GHz. Intel® HD Graphics 3000: 650MHz turbo up to 1350 MHz. Memory: 2x2GB dual channel DDR3-1333; graphics driver 15.21.2158. Mobile Intel® 6 Series Chipset Family, B0 stepping. OS: Microsoft* Windows 7 (64b)
- System configuration Intel® Core Processor Family: CPU: mobile dual core processor 2.53GHz. Intel HD Graphics: 766MHz. Memory: 2x2GB dual channel DDR3-1066. OS: Microsoft* Windows Vista (32b)

Appendix C: HW Ecosystem Announcements

Company	2nd Gen Platform	Announcement
AAEON Technology	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	One industrial motherboard with Q67 (IMBA-967) and one COM Express module with QM67 (COM-QM67) for POS, KIOSK, NVE, DVR, Surveillance, Gaming applications
ADLINK Technology	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	Three boards for applications including transportation, military, factory automation, medical and gaming <ul style="list-style-type: none"> •Express-H, COM Express with QM67 •cPCI-3970, a 3U CompactPCI blade with QM67 •NuPRO-E340, a PICMG 1.3 System Host Board with Q67
Advantec	2 nd Gen Intel® Core™	COM Express boards
Advantech	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	Series of embedded boards: <ul style="list-style-type: none"> •MicroATX motherboard with Q67—AIMB-581 (244 x 244 mm) •ATX motherboard with Q67—AIMB-781 (304.8 x 244 mm) •PICMG 1.3 SBC—PCE-5126 with Q67 (338.58 x 126.39 mm) •UP industrial server board with Q67 (ASMB-220) for industrial control, automation equipment and surveillance DVR applications •COM-Express basic module with QM67—SOM-5890 (95 x 125 mm) for high processing, graphic intensive demands, and multi-display applications Two other products from Networks & Telecom Group <ul style="list-style-type: none"> •MIC-5603 AdvancedMC™ dual channel design for mission critical applications requiring low latency & reliable memory access •MIC-3395 6U CompactPCI for telecom, semiconductor test & manufacturing equipment, transportation and industrial workstations
Avalue	•Intel® QM67 chipset + Core™ i5/i7 CPUs	EPIC module (EPI-QM67) for range of apps including Medical Instruments, PoS/ Kiosk Machines, Digital Signage, Surveillance Devices, Automation Controllers and Military Systems.
BCM Advanced Research	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	Three industrial motherboards for market segments including gaming, retail, security and surveillance, industrial controls and automation, and medical equipment: <ul style="list-style-type: none"> •MX67QM MiniITX with ATX power uses QM67 •MX67QM2 Mini ITX wide range DC power uses QM67 •RX67Q Micro ATX uses Q67
Concurrent Technologies	•Intel® QM67 chipset + Core™ i5/i7 CPUs	<ul style="list-style-type: none"> •6U VX5 form factor (VX 81x/09x) for apps in real-time systems and military embedded systems for data acquisition, instrumentation, control systems and signal processing. •Other boards coming in Q1'2011 = TR 80x/39x - 3U VPX; TP 86x/39x - 3U CompactPCI; AM 310/0x0 - 3U AMC

Appendix C: HW Ecosystem Announcements (cont.)

Company	2 nd Gen Platform	Announcement
Curtiss Wright	•Intel® QM67 chipset + Core™ i5/i7 CPUs	CHAMP-AV8 6U – its first OpenVPX™ DSP Engine features two quad-core Intel® Core™ i7-2715QE processors and supports Gen2 PCIe-to-sRIO protocol conversion; Available in Rugged air-cooled and conduction-cooled versions for the Aerospace and Defense (A&D) market
DFI	•Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs	Four boards for apps such as industrial control automation, digital signage, kiosk, medical equipment, and gaming. •Mini-ITX form factor HR100-CRM with QM67 •COM Express Module HR900-B with QM67 •Mini-ITX Embedded Board SB100-NRM with Q67 •microATX Embedded Board SB330-NRM with Q67
Emerson Network Power	•Intel® QM67 chipset + Core™ i5/i7 CPUs	Mini-ITX form factor motherboard (MITX-CORE-800 series) for makers of intelligent kiosks, digital signage, medical clinical equipment and gaming machines.
Ennoconn Corporation	Intel® Q67 chipset + Core™ i3/i5/i7 CPUs	Micro-ATX motherboard (ADE-8062) for interactive clients, particularly, ATM, Point of Sale, Digital Displays, and Surveillance, as well as Factory Automation, Gaming and entertainment applications
Eurotech	Intel® QM67 chipset + Core™ i5/i7 CPUs	COM Express module (Adbc8034) for industrial apps
EVOC	•Intel® QM67 chipset + Core™ i5/i7 CPUs	EPI-1817LNAR with EVOC's self-innovated EPI bus technology for embedded and industrial PCs
Extreme Engineering Solutions, Inc. (X-ES)	•Intel® QM67 chipset + Core™ i5/i7 CPUs	•XPedite7470, a conduction- or air-cooled 3U VPX SBC for floating-point intensive applications such as radar, image processing, and signals intelligence •other form factors will be available throughout 2011 including 6U VPX, 3U and 6U CompactPCI, VME, and XMC
GE Intelligent Platforms	2 nd Gen Intel® Core™ processor family	•SBC324 3U OpenVPX single board computer is first of five address mil/aero applications beyond command/control such as signal processing, ISR (intelligence, surveillance, reconnaissance) and radar/sonar. •6U VPX, 6U VME and 6U CompactPCI® single board computers will also be announced in the near future, together with a multiprocessor platform
IBASE Technology	•Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs	•MB960 ATX Motherboard with Q67 for industrial apps such as medical and imaging systems, industrial automation, gaming and multimedia. •M1956F Mini-ITX Motherboard with QM67 for gaming, POS, digital signage and server market segments

Appendix C: HW Ecosystem Announcements (cont.)

Company	2 nd Gen Platform	Announcement
Interface	•Intel® QM67 chipset + Core™ i5/i7 CPUs	MPC-F022Q series, ATX form factor industrial controller
Kontron	2 nd Gen Intel® Core™ processor family	<ul style="list-style-type: none"> Over 10 boards for a variety of embedded applications •Frist product is COM Express™ basic ETXexpress™-SC Computer-on-Module. •In Q1 2011, a mini-ITX, Flex-ATX embedded motherboard and 6U CompactPCI™ blade will follow. •Other platforms planned for 2011 include 3U CompactPCI™, 3U VPX, AdvancedMC™, PCIe/104™, ATX embedded motherboards and several industrial PCs. •Kontron's value-added middleware, and strength in offering market-specific I/Os via FPGA, even more specific applications can be custom-tailored.
Lanner	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	<ul style="list-style-type: none"> •1U appliance (Fw-8770) with Q67delivers a host of new features in a network appliance including generation 3 bypass, IPMI and amazing port density for enterprise security applications. •1U industrial grade appliance (Fw-7572) with QM67, low power consuming network appliance for extreme temperature deployment scenarios such as process line security and SCADA system security.
Mercury Computer Systems	•Intel® QM67 chipset + Core™ i5/i7 CPUs	Ensemble™ Series 6U OpenVPX™ LDS6521 and the 3U OpenVPX SBC3510 modules are available in air-cooled and conduction-cooled rugged versions for extremely demanding ISR, defense, and aerospace applications
MSI	Intel® QM67 chipset + Core™ i5/i7 CPUs	Upgraded version of IM-QM67 for the Industrial Platform Computing (IPC) market segment. Motherboard supports multiple display outputs in a mini-ITX form factor board.
PFU	•Intel® HM65 chipset + Core™ i5/i7 CPUs	Plug-N-Run™ E2, the latest offering in its high performance COM Express product line for industries that require high system performance and low energy consumption including network server appliances, testing and measurement (robotics, industrial automation) and digital signage
Portwell	<ul style="list-style-type: none"> •Intel® Q67 chipset + Core™ i3/i5/i7 CPUs •Intel® QM67 chipset + Core™ i5/i7 CPUs 	<ul style="list-style-type: none"> •WADE-8011, a new Mini-ITX form factor embedded system board is first in a series with Q67 for applications in gaming, kiosk, digital signage, medical/healthcare, defense and industrial automation and control. •RUBY-D712VG2AR industrial ATX motherboard for applications in factory automation, gaming, medical, digital signage, surveillance security monitoring and kiosks.
RadiSys	•Intel® QM67 chipset + Core™ i5/i7 CPUs	Procelerant™ CEQM67, a quad-core performance Type 6 COM Express Revision 2.0 module for industries including medical, enterprise telecom and mil/aero creating a flexible, modular and upgradeable platform for solutions such as ultrasound imaging, radar, command and control devices and security systems."
Trenton	•Intel® Q67 chipset + Core™ i3 CPU	TSB7053, a PICMG™ 1.3 single board computer (SBC) design, enables industrial automation, medical imaging and military & aerospace system designs that deliver high-performance computing flexibility with a greater level of security and built-in support for multiple video connections.

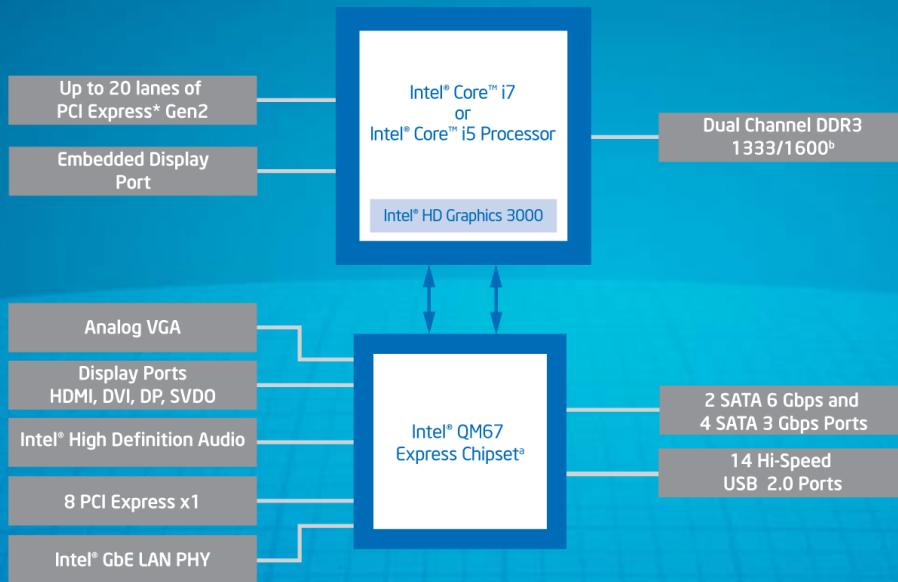
Appendix C: SW & Tools Announcements

Company	Announcement
American Megatrends Inc. (AMI)	Aptio ⁴ .x UEFI BIOS firmware now supports 2nd generation Intel [®] Core [™] processor family. AMI's BIOS solutions cover nearly all of the enterprise, embedded and consumer-oriented processor segments.
CriticalBlue	<ul style="list-style-type: none"> •Optimized support within Prism for the 2nd generation Intel[®] Core[™] processor family; software developers can now analyze their existing SW apps, quickly evaluate the tangible benefits of these new processors, and select the appropriate Intel processor. •Integration with Prism allows Intel's customers to analyze their existing single threaded application code for use in multi-core 2nd generation Intel Core -based devices and follow a simple path through implementation, performance tuning and verification.
Green Hills Software	<ul style="list-style-type: none"> •Will support 2nd generation Intel[®] Core[™] processor family with INTEGRITY[™] real-time operating system, INTEGRITY Secure Virtualization (ISV) technology, MULTI[™] integrated development environment (IDE), optimizing C/C++ compilers, the DoubleCheck[™] static analyzer and complete JTAG hardware probes; •For embedded market segments such as in-vehicle infotainment, industrial control, point-of-sale, medical and automation.
Insyde Software	InsydeH20 [™] UEFI BIOS will support 2nd generation Intel [®] Core [™] processor family for consumer-based desktop, mobile and embedded applications. InsydeH20 delivers comprehensive support for the latest UEFI 2.x industry specifications leveraging the Intel "Tiano" UEFI Framework code architecture.
LynxWorks	LynxSecure 4.0 will provide virtualization solutions for 2 nd generation Intel [®] Core [™] i7 and i5 processor-based embedded and computer systems. LynxSecure is a separation kernel and embedded hypervisor that provides an environment in which multiple guest OSes & their apps can execute at the same time, in their own virtual partitions, without compromising security, reliability or data integrity.
NA Software	Vector Signal/Image Processing (VSIPL) library optimised specifically for new Intel [®] Advanced Vector Extensions (Intel [®] AVX) contained in the 2 nd generation Intel [®] Core [™] processor family. N.A. Software already markets a highly optimised VSIPL Library for Intel [®] processors with Streaming SIMD Extensions (SSE). VSIPL is an application programming interface (API) defined by an open standard (www.vsipl.org) and widely used in military DSP applications.
Real-Time System	Real-Time Hypervisor support for the 2 nd generation Intel [®] Core [™] processors allows the parallel execution of multiple, independent OSes on a single hardware platform. By utilizing the RTS Hypervisor, a traditional embedded system consisting of an industrial PC with additional real-time hardware can now be replaced by a single hardware solution.
Run-Time Computing	VSI/Pro [®] 1.20 optimized to utilize 2nd generation Intel [®] Core [™] Microarchitecture. VSI/Pro [®] supports the Vector Signal and Image Processing (VSIPL) industry standard (www.vsipl.org) for signal and image processing functionality on DSP and COTS processors. VSI/Pro [®] is field-deployed, standard-based software for the Mil/Aero COTS markets.
TenAsys	<ul style="list-style-type: none"> •Validated three key products on 2nd generation Intel[®] Core[™] processor family: INtime[®] for Windows[®] Real-Time Operating System (RTOS), eVM[®] for Windows Embedded Virtualization Manager and INtime Distributed RTOS. •2nd gen Intel[®] Core[™] processor's increased graphic and processing throughput, coupled with INtime's support for real-time determinism, enables complex data and time critical acquisition and processing in apps such as 3-D medical imaging systems.
Wind River	Will expand hardware support for the 2nd generation Intel [®] Core [™] processor family on its VxWorks and Wind River Linux operating system platforms, Wind River Hypervisor, Wind River Workbench and Wind River Workbench On-Chip Debugging multi-core JTAG tools and provide Wind River Simics model library pre-silicon support. For customers in the aerospace and defense, industrial, medical, and networking market segments, for a variety of use cases such as military radar imaging or patient monitoring systems.

Appendix C: Industry Announcements

Company	Announcement
Cornell University	Cornell University Autonomous Underwater Vehicle (CUAUV) Team's latest vehicle, codenamed Zephyr, will upgrade to a 2 nd generation Intel® Core™ processors. The 2 nd generation Intel® Core™ i7 processor will allow CUAUV to continue developing increasingly higher performance machine vision algorithms and explore new techniques with higher computational overhead, such as stereo vision, pose estimation, and structure for motion.
Medicina a Distancia	Will use 2nd generation Intel® Core™ i7 processor to improve image quality and overall performance of the systems they design and build that deliver care to patients who are living in places where access to health systems or medical specialists is limited, insufficient or nonexistent. With capabilities of just the CPU, Medicina can achieve high-quality videoconferencing in systems used in portable telemedicine workstations that have no physical CODEC.

2nd Generation Intel® Core™ i7 and Intel® Core™ i5 Processor-based Platforms for Embedded Computing (formerly codenamed: Huron River)



^aIntel® HM65 Express chipset also available with a subset of features.

^bAll SKUs support 1333 MT/s, 1 DIMM per channel (1 DPC); the PGA 4-core SKU supports 1333 MT/s, 2 DIMM per channel (2 DPC); the PGA 4-core SKU also supports 1600 MT/s but only with 1 DIMM per channel (1DPC).

2nd Generation Intel® Core™ i7, Intel® Core™ i5 and Intel® Core™ i3 Processor-based Platforms for Embedded Computing (formerly codenamed: Sugar Bay)

