Intel® Product Quick Reference Matrix

2H 2013 NON–NDA

intel®

INTEL® TECHNOLOGY PROVIDER
Intel® Technology Provider
Intel® Channel Products

INTEL® vPro™ TECHNOLOGY
Intel® vPro™ Technology Solution

GRAPHICS
Client Graphics

INTEL® SATA SOLID-STATE DRIVES
Intel® SATA Solid-State Drives

DESKTOP
Desktop Highlights
Intel® Small Business Advantage
Desktop Processors
Desktop Wireless
Desktop Thermal Solutions
Desktop Boards
Ethernet Desktop Adapters

MOBILE
Mobile Highlights
Mobile Processors
Mobile Wireless

SERVER
Server Highlights
Server Platforms
Server / Workstation Processors
Server / Workstation Boards
Server / Workstation Systems
Server Storage
Server Chassis
Modular Server
RAID
Server Adapters
Server Management

McAFEE*
McAfee*

All products and dates specified are preliminary based
on current expectations and are subject to change
without notice. Availability in different channels may vary.

Intel® Technology Provider

YOUR SOLUTIONS. OUR TECHNOLOGY. SMARTER TOGETHER.

Whether selling to business or consumers, Intel® Technology Providers get the competitive advantage. Partners access benefits as they progress through the membership tiers, receiving the support, expertise, and recognition they need to succeed in a fast-moving global marketplace.

SUPPORT	EXPERTISE	RECOGNITION
Build your business with online help, dedicated account management, and marketing materials.	Become a trusted advisor to your customers with training, events, newsletters, and online guides.	Be recognized for the business you do with Intel. Earn points on purchases to spend on rewards and access promotions and membership materials.

This product matrix is just one of the partner-only benefits you receive for being an Intel® Technology Provider.

Login to see more at **www.intel.com/technologyprovider**

Technology Provider

Intel® Channel Products

INTEL® CHANNEL PRODUCTS GUIDE

- A new easy and simple smartphone application with product features and comparisons of boxed desktop processors, desktop boards, and Solid-State Drives.

- Find an Intel® Technology Provider based on your location or search criteria.

- Available on iPhone*, iPad*, and Android* mobile devices.

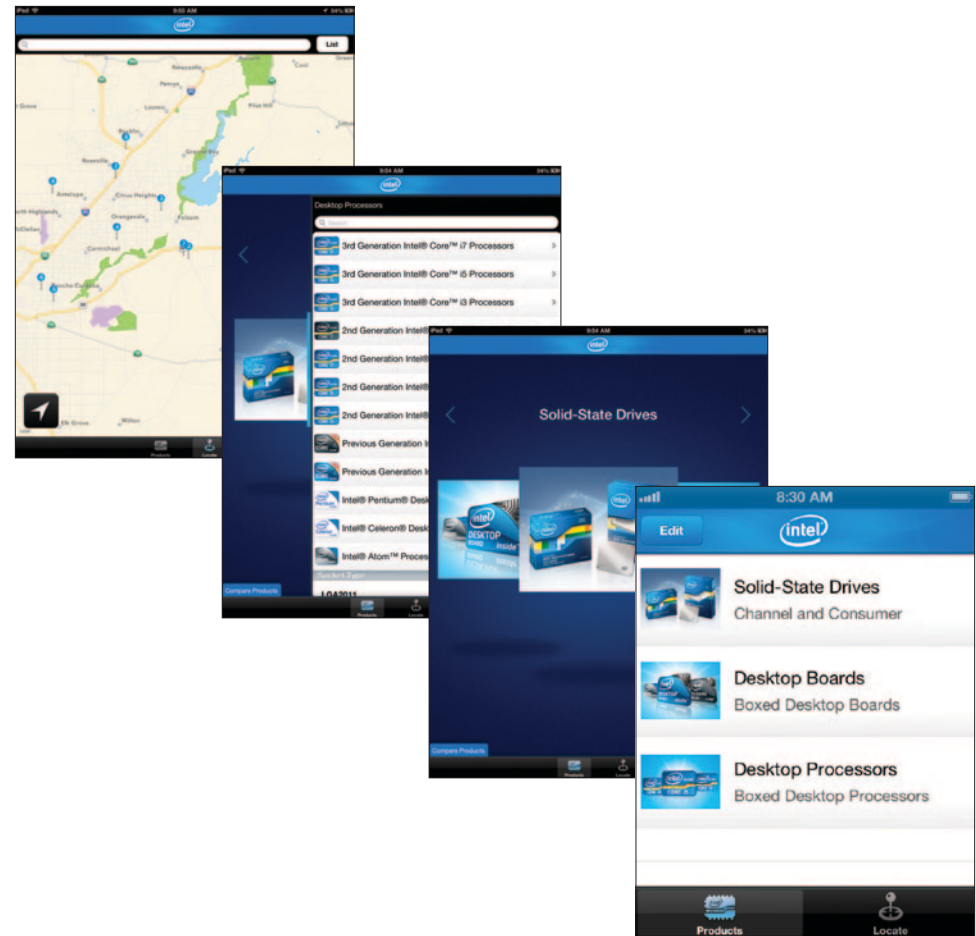## TO DOWNLOAD AND INSTALL THIS SMARTPHONE APPLICATION, PLEASE VISIT THE FOLLOWING LINKS

iTunes:
https://itunes.apple.com/us/app/intel-channel-products-guide/id589643956?mt=8

Google Play:
https://play.google.com/store/apps/details?id=com.intel.masterbrandapp

Intel® vPro™ Technology Solution

2013 INTEL® vPro™ TECHNOLOGY

Processor

Intel® Core™ i7 and Intel® Core™ i5 vPro™ Processors[1]

+

Chipset

Intel® Q87 or QM87 Express Chipsets or Haswell[2] 1-Chip Premium Platform

+

Network

Intel® i217LM Gigabit Network Adapter

SELL INTEL® CORE™ vPro™ TO MORE SMALL- AND MEDIUM-SIZED BUSINESSES INTERESTED IN MANAGED IT SERVICES

1 Intel® Core™ vPro™ processors deliver easy PC care		2 Intel® Core™ vPro™ processors enable smart security		3 Take advantage of money on the table by selling Intel® vPro™	
INTEL KVM REMOTE CONTROL[3]	**HOST-BASED SETUP**	**IDENTITY PROTECTION TECHNOLOGY**	**AES-NI ENCRYPTION**	**PARTNER AND DISTRIBUTION OPPORTUNITIES**	**SMALL- AND MEDIUM-SIZED BUSINESS RETURN ON INVESTMENT**
• Remote troubleshoot regardless of the operating system state • No additional software or hardware is needed on the client PC • No other solution on the market today can do this	• Activate Intel® vPro™ Technology in minutes • As easy as deploying a patch	• Simple way for Web sites and enterprises to allow secure log-in • Easy to use, extra layer of security to protect against online fraud attacks	• Encrypt important business data up to four times faster without slowing performance[4]	• Up to a $10 Intel® vPro™ activation rebate paid per board, directly to system integrators. Visit www.intel.com/go/activate for details. • Recurring revenue by delivering remote PC support services • Stronger customer relationships and repeat business	• Tangible return on investment via reduced support and energy costs[5] • Reduce the need for deskside maintenance visits by 56%[6]

For more information, visit **www.intel.com/go/vpro**

For more information, visit **www.intel.com/go/vpro**

[1] The following SKUs are Intel® vPro™ eligible:
  Desktop—i7-4770, i7-4770S, i7-4770T, i7-4765T, i5-4670, i5-4670S, i5-4670T, i5-4570, i5-4570S, i5-4570T.
  Mobile—i7-4930MX, i7-4900MQ, i7-4800MQ, i7-4950HQ, i7-4850HQ, i7-4650U, i5-4350U.

[2] Haswell is a code name of Intel Corporation.

[3] Intel KVM Remote Control Specifications:
  a. Intel® HD graphics must be active to support Intel KVM Remote Control. KVM is not supported with discrete graphics installed. Systems must be using Intel® Active Management Technology 6.0 (Intel® AMT 6.0) or above.
  b. Intel KVM Remote Control is only available on Intel® vPro™ platforms.
  c. Other requirements are Intel vPro eligible LAN, and Intel vPro eligible chipsets (Q87, QM87, Haswell[2] 1-Chip Premium Platform), along with requisite BIOS enabling.
  d. The client PC does not require additional software.
  e. Remote consoles must be enabled with KVM protocol to remotely control Intel KVM Remote Control capable clients.

[4] Intel® Advanced Encryption Standard-New Instructions (Intel® AES-NI) requires a computer system with an AES-NI enabled processor, as well as non-Intel software to execute the instructions in the correct sequence. For availibility, consult your reseller or system manufacturer. For more information, see http://software.intel.com/en-us/articles/intel-advanced-encryption-standard-instructions-aes-ni.

[5] For more details on the powerful ROI calculations to show end users the value of moving to Intel® vPro™ technology platforms, visit www3.intel.com/cd/channel/distributor/asmo-na/eng/446248.htm

[6] Results shown are from: the 2007 EDS Case Studies "An Analysis of Early Testing of Intel® vPro™ Technology in Large IT Departments," by LeGrand and Salamasick; third-party audit comissioned by Intel, of various enterprise IT environments; and the 2007 Benefits of Intel vPro Technology in the Enterprise, Wipro Technologoies study, commissioned by Intel. The EDS studies compare test environments of Intel vPro Technology-based PC environments vs. non-Intel® Core™ processor technology-based PC environments. Tested PCs were in multiple OS and power states to mirror a typical working environment. The Wipro study models projected ROI of deploying Intel vPro Technology. Actual results may vary and may not be representative of the results that can be expected for smaller businesses.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, Intel Core, Core Inside, Intel vPro, and Intel vPro Inside are trademarks of Intel Corporation in the U.S. and other countries.

(intel) Client Graphics Highlights

ENHANCED BUILT-IN VISUALS ON THE 4TH GENERATION INTEL® CORE™ PROCESSOR FAMILY[1,2]

INTEL® BUILT-IN VISUALS—BUILT FOR MAINSTREAM DESKTOP AND MOBILE PC USERS

Intel® Built-In Visuals provide superb visual performance for sharper images, richer color, and lifelike video and audio. Watch movies and Internet videos in high definition, play popular casual and mainstream game titles, and get full support for Microsoft* Windows* 7 and Windows* 8. There's no need for an extra add-in graphics card—full graphics and media support is already built in. Enhanced Intel Built-In Visuals are available on the 4th gen Intel® Core™ processor family.

Processor	4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
FEATURE — **BENEFIT**		
Intel® Quick Sync Video — Saves valuable time for PC users who want to create and edit video, sync it to other devices, and share it—at home and on the Internet. Intel® Quick Sync Video uses dedicated media processing to accelerate video encoding. Users can also create and edit 3-D videos and convert their 2-D videos into 3-D videos at blazing speed and enjoy premium HD video conferencing at high quality.	Yes (Faster[2])	Yes
Intel® InTru™ 3D — Enjoy the ultimate 3-D visual experience—seamlessly from your PC. Now you can watch your favorite 3-D Blu-ray* movies all delivered in full 1080p resolution on your stereo 3-D monitor.	Yes (HDMI* 1.4 and DisplayPort* 1.2)	Yes (HDMI* 1.4)
Intel® Clear Video HD Technology — Provides visual quality and color fidelity enhancements for spectacular 1080p HD playback and immersive Web browsing.	Yes	Yes
Intel® Wireless Display — Intel® Wireless Display lets you beam your apps, personal, and online content such as movies, photos, or music to TV with a simple wireless connection.	Yes *New features include:* ▪ Brand new touch user interface ▪ Context-aware user experience ▪ Lower latency for gaming ▪ Cinematic sync for smoother video playback ▪ USB over WiFi*	Yes
Intel® Insider™ — Stream or download 1080p HD premium movies on your PC through participating distributor sites across the world. Enables users to purchase content and view later across multiple platforms using UltraViolet* support.	Yes (More content and storefronts)	Yes
Intel® Iris™ graphics — Intel® Iris™ graphics and Iris™ Pro graphics are new trademarked names for the two highest levels of graphics in select upcoming 4th gen Intel® Core™ processors. Iris graphics is included in 28 W 4th gen Intel Core processors geared for Ultrabook™. Iris™ Pro graphics is focused on higher performance notebooks and desktop All-in-One PCs (47 W processors and higher) delivering up to 2X[3] graphics performance.	Yes	No
Intel® HD graphics — Intel® HD graphics is built into the processor and delivers immersive mainstream gaming, 3-D experiences, and a smooth and fast next-generation browser experience.	Yes (Improved performance, support for DirectX* 11.1, OpenCL* 1.2, OpenGL* 4.0)	Yes (Support for DirectX* 11, OpenCL* 1.1, OpenGL* 4.0) (Support for DirectX* 11.1, OpenCL* 1.2 is available with latest graphics drivers)

INTEL® QUICK SYNC VIDEO

Intel® Quick Sync Video makes fast work of creating, editing, syncing, and sharing your videos—at home and online. Intel Quick Sync Video, built into 4th and 3rd gen Intel® Core™ processors, delivers breakthrough hardware acceleration that lets you complete in minutes what used to take hours. Create DVDs or Blu-ray* discs, edit videos, convert video files for your portable media device, and convert videos for upload to your favorite social networking sites—all in a flash.

FEATURE	BENEFIT	Processor 4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
AVC/H.264 Encode	Saves valuable time when creating and editing Blu-ray* discs, and other videos in h.264 format.	Yes	Yes
MPEG2 Encode	Saves valuable time when creating and editing DVDs, and other videos in MPEG2 format.	Yes (Full) (Faster encode)	Yes (Partial)
MVC HW Encode	Saves valuable time when creating and editing stereoscopic 3-D videos.	Yes (Full) (Faster encode)	Yes (Partial)
SVC HW Encode[4]	Smoother video streaming and conferencing.	Yes	No
JPEG/MJPEG Hardware Encode	Saves time encoding high resolution JPEG images and motion JPEG images (video) from webcam.	Yes (Faster)	No (Software only)

INTEL® CLEAR VIDEO HD TECHNOLOGY

Intel® Clear Video HD Technology delivers seamless video and brings imagery to life with rich, accurate colors when you are browsing the Web, watching videos, and enjoying your favorite HD programs. Intel Clear Video HD Technology in 4th and 3rd gen Intel® Core™ processors lets you view images as they were meant to be seen.

	Processor	4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
FEATURE	**BENEFIT**		
Blu-ray* Disc Playback	High-density optical disc format designed for the storage of data and high-definition video.	Yes	Yes
Blu-ray Stereo 3-D Disc Playback	Playback of Blu-ray* stereo 3-D content on your PC.	Yes (with HDMI* 1.4)	Yes (with HDMI* 1.4)
Intel® Clear Video HD Technology	Delivers enhanced high-definition video playback, sharper images, and precise color control.	Yes	Yes
DVD Upscaling	Provides high-quality DVD upscaling through Windows* 7.	Yes	Yes
HD Hardware Acceleration			
AVC/H.264, MPEG2, VC1 Decode	Enables smoother playback and longer battery life when viewing h.264, MPEG2, or VC1 DVD, Blu-ray, or streaming content.	Yes	Yes
Dual Video Decode	Enables Blu-ray picture-in-picture hardware acceleration.	Yes	Yes
HW Decode MFTs	Enables faster Windows 7 drag and drop transcoding for MPEG2, VC1, and h.264 content.	Yes	Yes
Video Sharpness / Detail			
Skin Tone Enhancement	Enhances skin tones to look more real and natural.	**New**	Yes
Total Color Control	Enables adjustment of saturation levels per base color for brighter, richer colors.	**New**	Yes
Auto Contrast Enhancement	Fixes underexposed or overexposed areas of your videos.	**New**	Yes
De-interlacing	Reduces static and motion artifacts, improving the clarity and stability of the video picture.	Advanced	Advanced
Sharpness Detail	Sharpens the image to provide finer detail and improved image quality.	Yes	Yes
Noise Reduction	Filters out unwanted noise to provide finer detail and cleaner images.	Yes	Yes
Film Mode Detection	Detects film cadence and recovers original film content to improve image quality.	Yes	Yes
Video Scaling / Panel Scalar	Provides high-quality scaling to view content clearly in non-native resolution.	Yes (8x8 polyphase)	Yes (8x8 polyphase)
Vibrant Color			
Deep Color and x.v.Color	Together, Deep Color and x.v.Color enable future HDTVs to display more natural, accurate, and vivid colors.	Yes	Yes
ProcAmp / Color Control	Enhances fine detail of video playback and allows for user control over brightness, contrast, and saturation.	Yes	Yes

INTEL® WIRELESS DISPLAY

	Processor	4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
FEATURE	**BENEFIT**		
First Touch User Interface for Intel® WiDi	Brand new touch-friendly modern user interface so you can push PC to TV by just using touch.	Yes	No
Context-Aware User Experience for Intel WiDi	The new context aware Intel WiDi automatically detects what the user is doing and adjusts its settings, delivering the best possible experience. (For example, it auto-connects a laptop to a TV, auto-minimizes the application, cinematic sync auto-adjusts your display frame rate to the movie to give you smoother video playback, and low-power panel refresh saves your laptop battery while beaming content.)	Yes	No
Premium Protected Content over Intel WiDi	Bring your movie theater experience home and wirelessly send protected premium content in full HD and 5.1 surround such as your Blu-ray* DVDs, UltraViolet* movies, full-resolution S3D content from PC to TV.	Yes (HDCP 2.1)	Limited (HDCP 2.0 only)
Low Delay Mode for Intel WiDi	Real-time interaction between your PC and TV screens with no lag time, allowing for usages such as PC gaming on TV without any wires.	Yes (<66ms for games)	Limited (<150ms for games)
WiFi Display User Input Back Channel (UIBC) over Intel WiDi	Wirelessly connect your PC's peripherals such as a keyboard, mouse, gamepad or a webcam directly to your TV without any wires.	Yes (USB 2 supports more devices such as a webcam or a TV remote)	Limited (HID devices only such as keyboard / mouse)

DISPLAY AND AUDIO FEATURES COMPARISON

Connect to a wide range of digital displays and resolutions, including the latest digital interfaces such as HDMI* and DisplayPort*. In addition, the 4th and 3rd gen Intel® Core™ processors support high-definition resolutions, including 720p, 1080i, and 1080p.

	Processor	4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
FEATURE	**BENEFIT**		
Maximum Display Resolution	Higher pixel resolutions allow the PC to show more image detail.	DisplayPort* 1.2 / eDP* H-Processors: 3840 x 2160 @ 60 Hz (Ultra-HD) U-Processors: 3200 x 2000 @ 60 Hz, 3840 x 2160 @ 30Hz Y-Processors: 2560 x 1600 @ 60 Hz HDMI* 4096 x 2304, 3840 x 2160 @ 24Hz / 24bpp DVI 1920 x 1200 @ 60Hz	DisplayPort* 1.1 2560 x 1600, HDMI*, VGA
Display Support			
Independent Digital Displays	Allows a user to connect multiple displays to the PC.	3	3 (with restrictions on display types)
HDMI* with HDCP	Provides a user-friendly, single-cable connector that enables transmission of superior, uncompressed digital video and audio.	Version 1.4 (3-D, Deep Color, premium audio, auto lip-sync, Ultra-HD)	Version 1.4 (3-D, Deep Color, premium audio, auto lip-sync)
DisplayPort* with HDCP	Highly scalable and efficient display interface for the PC.	Version 1.2 (with audio)	Version 1.1 (with audio)
Embedded DisplayPort	Highly scalable and efficient display interface for notebooks.	Yes (eDP version 1.2 on Desktop and eDP version 1.3 on Mobile)	Yes
LVDS	Low-voltage digital display interface.	Yes[4]	Yes
DVI with HDCP	Digital video interface that maximizes the visual quality of digital displays such as LCD displays and digital projectors.	Yes	Yes
VGA	Analog display interfaces, such as VGA, provide basic visual quality when connected to CRTs, LCDs, or HDTVs.	Yes	Yes
Audio Support			
Dolby* TrueHD, DTS* Premium Suite*	Supported on a significant number of Blu-ray* titles for the highest quality audio.	Yes	Yes

3-D FEATURES COMPARISON

Intel® Core™ processors deliver a responsive, attractive 3-D visual experience for casual and mainstream PC games. When you buy a PC equipped with Intel® Iris™ graphics or Intel® HD graphics, you get a cost-effective solution with the performance for more gaming fun.

Processor	4th generation Intel® Core™ processor family (Intel® Iris™ Pro graphics 5200 / Intel® Iris™ graphics 5100, Intel® HD graphics 5000 / 4600 / 4400 / 4200)	3rd generation Intel® Core™ processor family (Intel® HD graphics 4000 / 2500)
FEATURE / **BENEFIT**		
Video Memory	Up to 1.70 GB	Up to 1.70 GB
DirectX* Support — Standardized programming interface used in games as an interface to the system's graphics through Microsoft* Windows*.	DirectX* 11.1	DirectX* 11
OpenGL* Support — Standardized programming interface used by 2-D and 3-D graphics applications.	4.0	4.0
OpenCL* Support — Standard programming interface for accessing Compute units in CPU and GPU.	1.2	1.1 (1.2 available with latest graphics drivers)

For more information, visit
www.intel.com/graphics
www.intel.com/go/biv

CLIENT GRAPHICS HIGHLIGHTS

intel® SATA Solid-State Drives

INTEL® SATA SOLID-STATE DRIVES (side margin)

INTEL® SOLID-STATE DRIVES FOR CLIENT APPLICATIONS

INTEL® SOLID-STATE DRIVE	INTEL® SSD 525 SERIES	INTEL® SSD 520 SERIES	INTEL® SSD 335 SERIES	INTEL® SSD 320 SERIES
Position vs. other Intel® SSDs	Optimized for small form factors clients	Overall client performance	Mainstream client value	Mainstream client value, quality of service
Interface	SATA 6.0 Gb/s	SATA 6.0 Gb/s	SATA 6.0 Gb/s	SATA 3.0 Gb/s
Form Factor	mSATA, full size	2.5" drive	2.5" drive	2.5" / 1.8" drive
Capacities	240 GB / 180 GB / 120 GB / 90 GB / 60 GB / 30 GB	480 GB / 240 GB / 180 GB / 120 GB / 60 GB	240 GB / 180 GB / 80 GB	600 GB / 300 GB / 160 GB / 120 GB / 80 GB / 40 GB
Maximum Random Performance[1]	Reads: up to 50K IOPs Writes: up to 80K IOPs[2]	Reads: up to 60K IOPs Writes: up to 80K IOPs[2]	Reads: up to 22.5K IOPs Writes: up to 33K IOPs[2]	Reads: up to 39.5K IOPs Writes: up to 23K IOPs
Maximum Sequential Performance	Reads: up to 550 MB/s Writes: up to 520 MB/s	Reads: up to 550 MB/s Writes: up to 520 MB/s	Reads: up to 500 MB/s Writes: up to 450 MB/s	Reads: up to 270 MB/s Writes: up to 220 MB/s
AES Encryption	Yes	256 bit	No	128 bit
Data Reliability	End-to-end data protection	Surplus NAND array, end-to-end data protection	Surplus NAND array	Surplus NAND array
Endurance[1] (Minimum Useful Life)	Up to 20 GB written per day for 5 years	5 years, up to 20 GB written per day	3 years, up to 20 GB written per day	5 years, up to 20 GB written per day
Warranty	5 years (3 year warranty for 30 GB capacity)	5 years[3]	3 years	5 years[3]

INTEL® DATA MIGRATION SOFTWARE

- Transfer operating system, applications, and files from an old HDD or SSD to a new Intel® Solid-State Drive[4]
- Easy to use
- Free

  Download now at **www.intel.com/go/ssdinstallation**

INTEL® SSD TOOLBOX v3.1

- Update Intel® SSD firmware and Intel drivers on host PC
- Optimize PC configuration for Intel SSDs, run drive diagnostics, and secure erase
- View SMART attributes, such as host writes and media wear out
- Supported in multiple languages

  Download now at **www.intel.com/go/ssdtoolbox**

For more information, visit the Intel Reseller Center Web site at **www.intel.com/go/channelssd**

INTEL® SOLID-STATE DRIVES FOR ENTERPRISE AND DATA CENTER APPLICATIONS

INTEL® SOLID-STATE DRIVE	INTEL® SSD 910 SERIES	INTEL® SSD DC S3700 SERIES	INTEL® SSD DC S3500 SERIES (NEW)	INTEL® SSD 710 SERIES	INTEL® SSD 320 SERIES
Position vs. other Intel® SSDs	PCI Express* SSDs optimized for highest performance and endurance	SATA SSD with fast, consistent performance and endurance for write-intensive applications	SATA SSD with fast, consistent performance for read-intensive applications	SATA SSDs optimized for high endurance	Mainstream SSDs optimized for performance and capacity
Interface	PCI Express gen 2 x8	SATA 6.0 Gb/s, ATA8-ACS2	SATA 6.0 Gb/s, ATA8-ACS2	SATA 3.0 Gb/s ATA8	SATA 3.0 Gb/s ATA8
Form Factor	Half-height, half-length	2.5" / 1.8" drive	2.5" / 1.8" drive	2.5" drive	2.5" / 1.8" drive
Capacities	800 GB / 400 GB	800 GB / 400 GB / 200 GB / 100 GB (2.5") 400 GB / 200 GB (1.8")	480 GB / 300 GB / 240 GB / 160 GB / 120 GB (2.5") 80 GB (1.8")	300 GB / 200 GB / 100 GB	600 GB / 300 GB / 160 GB / 120 GB / 80 GB / 40 GB
Maximum Random Performance[1] (4KB files)	Reads: up to 180K IOPs Writes: up to 75K IOPs	Reads: up to 75K IOPs Writes: up to 36K IOPs	Reads: up to 75K IOPs Writes: up to 11.5K IOPs	Reads: up to 38.5K IOPs Writes: up to 2.7K IOPs	Reads: up to 39.5K IOPs[3] Writes: up to 600 IOPs[3]
Maximum Sequential Performance	Reads: up to 2 GB/s Writes: up to 1 GB/s	Reads: up to 500 MB/s Writes: up to 460 MB/s	Reads: up to 500 MB/s Writes: up to 450 MB/s	Reads: up to 270 MB/s Writes: up to 210 MB/s	Reads: up to 270 MB/s[4] Writes: up to 200 MB/s[4]
Power	25 W max. / 8 W standby	Up to 6 W active / 650 mW typical	Up to 5 W active / 650 mW typical	3.7 W active / 700 mW standby	4 W active / 95 mW standby
Latency	Reads: <65µs Writes: <65µs	Reads: 50µs (typical) Writes: 65µs (typical)	Reads: 50µs (average)	Reads: 75µs Writes: 85µs	Reads: 75µs Writes: 95µs
Endurance[1]	10 drive writes per day for 5 years	10 drive writes per day for 5 years	Up to 450 TB (4 KB random writes)	Up to 1.8 PB	Up to 60 TB
Data Path Protection	Yes	Yes	Yes	LBA tag checking	LBA tag checking
Power Safe Write Cache	Yes	Yes, enhanced	Yes, enhanced	Yes	Yes
Temperature Sensor	Yes	Yes, with thermal throttling	Yes, with thermal throttling	Yes	No
Current In-Rush Limiter	Yes	Yes	Yes	Yes	Yes
Security	No	AES 128-bit encryption End-to-end data protection Power loss data protection	AES 256-bit encryption End-to-end data protection Power loss data protection	AES 128-bit encryption	AES 128-bit encryption
Warranty	10 drive writes / day 5 years	5 years	5 years or E9=1 wear out indicator	3 years or E9=1 wear out indicator	5 years or E9=1 wear out indicator

NEW
INTEL® CACHE ACCELERATION SOFTWARE (INTEL® CAS)

- Server software that caches the most active data on Intel® Data Center SSDs
- Multi-level cache integrates with system DRAM to deliver optimal performance
- Accelerates applications or files on physical or virtual machines

Download 30-day trial at **www.intel.com/content/www/us/en/software/intel-cache-acceleration-software.html**

NEW	PRODUCT NAME	CAPACITY	PRODUCT CODE	PRODUCT DESCRIPTION	PACKAGE TYPE	PACKAGE CONTENTS	QUANTITY PER BOX
	Intel® SSD DC S3700 Series	800 GB	**SSDSC2BA800G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		400 GB	**SSDSC2BA400G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		200 GB	**SSDSC2BA200G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		100 GB	**SSDSC2BA100G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		400 GB	**SSDSC1NA400G301**	25nm HET MLC / 1.8" / 5mm	OEM box	SSD only	1
		200 GB	**SSDSC1NA200G301**	25nm HET MLC / 1.8" / 5mm	OEM box	SSD only	1
✓	**Intel® SSD DC S3500 Series**	800 GB	SSDSC2BB800G401	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		600 GB	**SSDSC2BB600G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		480 GB	**SSDSC2BB480G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		300 GB	**SSDSC2BB300G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		240 GB	**SSDSC2BB240G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		160 GB	**SSDSC2BB160G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		120 GB	**SSDSC2BB120G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		80 GB	**SSDSC2BB080G401**	20nm MLC / 2.5" / 7mm	OEM box	SSD only	1
✓		800 GB	**SSDSC1NB800G401**	20nm MLC / 1.8" / 5mm	OEM box	SSD only	1
✓		400 GB	**SSDSC1NB400G401**	20nm MLC / 1.8" / 5mm	OEM box	SSD only	1
✓		240 GB	**SSDSC1NB240G401**	20nm MLC / 1.8" / 5mm	OEM box	SSD only	1
✓		80 GB	**SSDSC1NB080G401**	20nm MLC / 1.8" / 5mm	OEM box	SSD only	1
	Intel® SSD 910 Series	800 GB	SSDPEDPX800G301	25nm HET MLC / PCI Express*	OEM box	SSD only	1
		400 GB	SSDPEDOX400G301	25nm HET MLC / PCI Express	OEM box	SSD only	1
	Intel® SSD 710 Series	300 GB	SSDSA2BZ300G301	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		200 GB	**SSDSA2BZ200G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1
		100 GB	**SSDSA2BZ100G301**	25nm HET MLC / 2.5" / 7mm	OEM box	SSD only	1

NEW	PRODUCT NAME	CAPACITY	PRODUCT CODE	PRODUCT DESCRIPTION	PACKAGE TYPE	PACKAGE CONTENTS	QUANTITY PER BOX
	Intel® SSD 525 Series	240 GB	**SSDMCEAC240B301**	25nm MLC / mSATA	OEM box	SSD only	1
		180 GB	**SSDMCEAC180B301**	25nm MLC / mSATA	OEM box	SSD only	1
		120 GB	**SSDMCEAC120B301**	25nm MLC / mSATA	OEM box	SSD only	1
		90 GB	**SSDMCEAC090B301**	25nm MLC / mSATA	OEM box	SSD only	1
		60 GB	**SSDMCEAC060B301**	25nm MLC / mSATA	OEM box	SSD only	1
		30 GB	**SSDMCEAC030B301**	25nm MLC / mSATA	OEM box	SSD only	1
	Intel® SSD 520 Series	480 GB	SSDSC2CW480A310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSC2CW480A3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		240 GB	SSDSC2CW240A310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSC2CW240A3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		180 GB	SSDSC2CW180A310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSC2CW180A3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		120 GB	SSDSC2CW120A310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSC2CW120A3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		60 GB	SSDSC2CW060A310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSC2CW060A3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
	Intel® SSD 335 Series	240 GB	SSDSC2CT240A4K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		180 GB	**SSDSC2CT180A4K5**	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
		80 GB	**SSDSC2CT080A4K5**	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1

INTEL® SATA SOLID-STATE DRIVES

INTEL® SATA SOLID-STATE DRIVES

NEW	PRODUCT NAME	CAPACITY	PRODUCT CODE	PRODUCT DESCRIPTION	PACKAGE TYPE	PACKAGE CONTENTS	QUANTITY PER BOX
	Intel® SSD 320 Series	600 GB	SSDSA2CW600G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CW600G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CW600G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1
		300 GB	SSDSA2CW300G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CW300G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CW300G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1
			SSDSA1NW300G301	25nm MLC / 1.8" / 5mm	OEM box	SSD only	1
		160 GB	SSDSA2CW160G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CW160G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CW160G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1
			SSDSA1NW160G301	25nm MLC / 1.8" / 5mm	OEM box	SSD only	1
		120 GB	SSDSA2CW120G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CW120G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CW120G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1
		80 GB	SSDSA2CW080G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CW080G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CW080G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1
			SSDSA1NW080G301	25nm MLC / 1.8" / 5mm	OEM box	SSD only	1
		40 GB	SSDSA2CT040G310	25nm MLC / 2.5" / 9.5mm	OEM box	SSD only	1
			SSDSA2CT040G3K5	25nm MLC / 2.5" / 9.5mm	Reseller box	SSD with desktop installation kit[5]	1
			SSDSA2CT040G3B5	25nm MLC / 2.5" / 9.5mm	Retail box	SSD with desktop and notebook installation kits[6]	1

For more information, visit the Intel Reseller Center Web site at
www.intel.com/go/channelssd

[1] IOPS and endurance specifications are for client-based workloads.

[2] Random 4 KB write performance measured using out-of-box SSD. Performance varies by capacity and form factor. Performance specifications apply to both compressible and non-compressible data.

[3] Warranties for OEM box versions of 520 Series and 320 Series are subject to E9 attribute wear indication.

[4] Designed to work with any Intel® Solid-State Drive as the target drive for cloning. Other brands of SSDs are not supported as target drives. Extra cables or other hardware items are required for complete data migration solution.

[5] Desktop installation kit contents: SATA power and signal cables, 3.5-inch desktop drive bay to 2.5-inch SSD adapter bracket, screws, installation guide, and warranty documentation.

[6] See footnote above for desktop installation kit contents. Notebook installation kit contents: USB to SATA adapter cable, protective drive sleeve, and screwdriver.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

Desktop Highlights
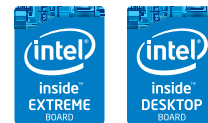
COMPARING THE INTEL® CORE™ PROCESSOR FAMILY FOR ENTHUSIASTS
DECIDE WHAT'S IMPORTANT TO YOUR CUSTOMERS (AND TO YOU)

| 4TH GEN INTEL® CORE™ PROCESSOR FAMILY (LGA1150 SOCKET)	2ND GEN INTEL® CORE™ PROCESSOR FAMILY (LGA2011 SOCKET)
Recommend Usages ▪ Gaming and media transcoding with Intel® Iris™ Pro graphics or Intel® HD graphics ▪ Mainstream overclocking[1] (K SKUs only)	**Recommend Usages** ▪ Best discrete graphics option for gaming ▪ Heavily-threaded media editing
Why? ▪ Intel's best mainstream processor performance ▪ Intel® Quick Sync Video (transcoding acceleration) ▪ Potential for higher maximum air-cooled overclocking[1] frequency (K SKUs only)	**Why?** ▪ 4 cores / 8 threads provide 6 cores / 12 threads upgrade path ▪ Full support for two PCI Express* x16 graphics cards ▪ Largest cache size of any Intel® processor ▪ Four-channel memory and larger maximum memory capacity
Intel® Technology Provider Program Benefits ▪ Offer Intel's newest microarchitecture ▪ Offers fastest transition to newest microachitecture	**Intel® Technology Provider Program Benefits** ▪ Higher margin potential through system customization and premium MB offerings
Processor Intel® Core™ i7-4770K processor[1] (4 cores / 8 threads) Intel Core i7-4770 processor (4 cores / 8 threads) Intel® Core™ i5-4670K processor[1] (4 cores / 4 threads) Intel Core i5-4670 processor (4 cores / 4 threads) Intel Core i5-4570 processor (4 cores / 4 threads) Intel Core i5-4430 processor (4 cores / 4 threads)	**Processor** Intel® Core™ i7-3970X processor[1] (6 cores / 12 threads) Intel Core i7-3960X processor[1] (6 cores / 12 threads) Intel Core i7-3930K processor[1] (6 cores / 12 threads) Intel Core i7-3820 processor (4 cores / 8 threads)
Chipset Intel® Z87 Chipset (recommended) Intel® H87 Chipset	**Chipset** Intel® X79 Chipset

INTEL® DESKTOP BOARDS

SUPPORT FOR THE NEXT GENERATION WITH GENUINE INTEL® DESKTOP BOARDS

The latest PCs may surprise you with a set of unique and expanded capabilities, from security to battery life. Powered by the 4th generation Intel® Core™ processors, these new PCs deliver amazing performance, stunning visuals, and built-in security for deeper protection. These genuine Intel® Desktop Boards give you the ability to integrate new smart features that adapt to your wants and needs. The latest Intel Desktop Boards offer numerous new features to improve your PC experience. The Intel® Desktop Board DZ87KLT-75 offers more SATA ports for high-speed Hard Disk Drives (HDD) connection, and support for Intel® Smart Response Technology to improve system response time. You will get Solid-State Drive-like performance using traditional HDD storage. The Intel® Desktop Boards DH87RL and DH87MC offer the same high-speed HDD connections plus additional ports and slots for peripheral devices and card expansions. An HDMI* connector for digital video output for sharper images and additional memory slots for twice as much memory are features of the new Intel® Desktop Board DB85FL—all for a budget-conscious price.

NEW INTEL® DESKTOP BOARDS FOR 2H 2013
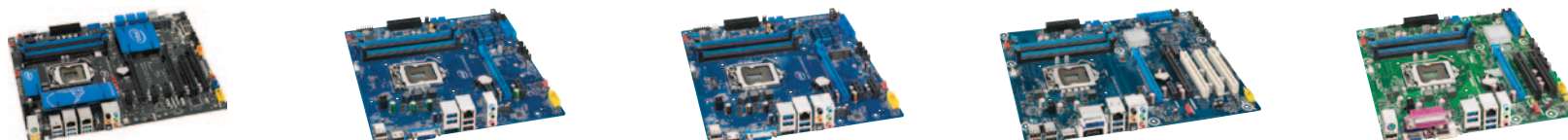
Intel® Desktop Board	INTEL® DESKTOP BOARD DZ87KLT-75K	INTEL® DESKTOP BOARD DB85FL	INTEL® DESKTOP BOARD DH87RL	INTEL® DESKTOP BOARD DH87MC	INTEL® DESKTOP BOARD DQ87PG
Form Factor	ATX	MicroATX	MicroATX	ATX	MicroATX
Chipset	Intel® Z87 chipset	Intel® B85 chipset	Intel® H87 chipset	Intel® H87 chipset	Intel® Q87 chipset
What's NEW?	Thunderbolt™ Interface	HDMI* connector, additional memory slots	High-speed Hard Disk Drive connections, additional ports	Additional ports and connectors for expansion	Additional SATA and USB 3.0 ports, DisplayPort*
Featured Intel® Technologies	Intel® Smart Response Technology Intel® Rapid Storage Technology Core and graphics tuning	Intel® Smart Connect Technology Intel® Small Business Advantage	Intel® Smart Response Technology Intel® Rapid Start Technology Intel® Smart Connect Technology Intel® Rapid Storage Technology	Intel® Smart Response Technology Intel® Rapid Start Technology Intel® Smart Connect Technology Intel® Rapid Storage Technology	Intel® Active Management Technology 9.0 Intel® Identity Protection Technology Intel® Anti-Theft Technology Intel® Smart Response Technology Intel® Rapid Storage Technology

For more information, visit **www.intel.com/go/desktopprocessors** and **www.intel.com/desktopboards**

Intel® Small Business Advantage

2013 INTEL® SMALL BUSINESS ADVANTAGE

Processor + **Desktop Chipset** OR **Mobile Chipset** + **5 MB Firmware**

Intel® Core™ i7, Intel® Core™ i5, or Intel® Core™ i3 processor

Intel® H87, B85, Q85, or Q87 Express Chipset

Intel® HM87 or QM87 Express Chipset or Haswell[1] 1-Chip Premium Platform

SELL INTEL® SMALL BUSINESS ADVANTAGE TO MORE SMALL-SIZE BUSINESSES WITH NO FORMAL IT SUPPORT

1 Intel® Small Business Advantage addresses small business security concerns			2 Intel® Small Business Advantage delivers free productivity tools	
USB BLOCKER[2]	**SOFTWARE MONITOR**	**DATA BACKUP AND RESTORE[3]**	**ENERGY SAVER**	**PC HEALTH CENTER**
▪ Prevent data theft via USB ports by blocking selected USB device types and/or create white list exceptions	▪ Monitor local security software or other mission-critical software ▪ Automatic e-mail notification when monitored software is disabled	▪ Reliable after hours[4] backup—even if PC is powered off ▪ Simple UI guides user through configuration ▪ Alert business owner to warnings, errors, and missed backups	▪ Reduce energy usage by scheduling automatic PC sleep time ▪ Schedule PC to power on before employee arrives to work	▪ Automate PC maintenance tasks to run after hours from powered off state ▪ Perform regular maintenance with no impact to employee productivity

For more information, visit **www.intel.com/go/SBA-Reseller**

[1] Haswell is a code name of Intel Corporation.

[2] Requires an Intel® Small Business Advantage enabled system with USB Blocker and Microsoft Windows 7* or later. USB Blocker is a software-based USB device blocking solution that depends upon the device properly identifying itself. Consult your system manufacturer.

[3] Requires an Intel® Small Business Advantage enabled system and proper configuration. Data Backup and Restore may be replaced by your PC manufacturer. Consult your system manufacturer.

[4] Requires an Intel® Small Business Advantage enabled system and a third party security application pre-configured by your PC manufacturer as long as the PC is on. Certain maintenance tasks require internet access. For after-hours feature to work, the PC must be connected to AC power.

Requires an Intel® Small Business Advantage enabled system and proper configuration. Availability of features will depend upon the setup and configuration by your PC manufacturer. Consult your system manufacturer. Visit www.intel.com/content/www/us/en/small-business/small-business-collection.html

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.
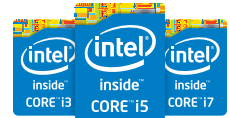
Intel, the Intel logo, Intel Inside, Intel Core, and Core Inside are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

INTEL® SMALL BUSINESS ADVANTAGE
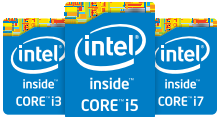
Intel® Desktop Processors

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® TURBO BOOST TECHNOLOGY[1]	INTEL® HD GRAPHICS	MEMORY SPEED	CACHE	PACKAGE
	Intel® Core™ i7-3970X processor Extreme Edition	BX80619I73970X	3.50 GHz	4 GHz	N/A	1600 MHz	15 MB L3 shared	LGA2011
	Intel Core i7-3960X processor Extreme Edition	BX80619I73960X	3.30 GHz	3.90 GHz	N/A	1600 MHz	15 MB L3 shared	LGA2011
	Intel® Core™ i7-3930K processor[2]	BX80619I73930K	3.20 GHz	3.80 GHz	N/A	1600 MHz	12 MB L3 shared	LGA2011
	Intel Core i7-3820 processor	BX80619I73820	3.60 GHz	3.80 GHz	N/A	1600 MHz	10 MB L3 shared	LGA2011

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® TURBO BOOST TECHNOLOGY[1]	INTEL® HD GRAPHICS	MEMORY SPEED	CACHE	PACKAGE
✓	Intel® Core™ i7-4770K processor[2]	BX80646I74770K	3.50 GHz	3.90 GHz	4600	1600 MHz	8 MB L3 shared	LGA1150
✓	Intel Core i7-4770 processor	BX80646I74770	3.40 GHz	3.90 GHz	4600	1600 MHz	8 MB L3 shared	LGA1150
	Intel Core i7-3770K processor[2]	BX80637I73770K	3.50 GHz	3.90 GHz	4000	1600 MHz	8 MB L3 shared	LGA1155
	Intel Core i7-3770 processor	BX80637I73770	3.40 GHz	3.90 GHz	4000	1600 MHz	8 MB L3 shared	LGA1155

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® TURBO BOOST TECHNOLOGY[1]	INTEL® HD GRAPHICS	MEMORY SPEED	CACHE	PACKAGE
✓	Intel® Core™ i5-4670K processor[2]	BX80646I54670K	3.40 GHz	3.80 GHz	4600	1600 MHz	6 MB L3 shared	LGA1150
✓	Intel Core i5-4670 processor	BX80646I54670	3.40 GHz	3.80 GHz	4600	1600 MHz	6 MB L3 shared	LGA1150
✓	Intel Core i5-4570 processor	BX80646I54570	3.20 GHz	3.60 GHz	4600	1600 MHz	6 MB L3 shared	LGA1150
✓	Intel Core i5-4430 processor	BX80646I54430	3 GHz	3.20 GHz	4600	1600 MHz	6 MB L3 shared	LGA1150
	Intel Core i5-3570K processor[2]	BX80637I53570K	3.40 GHz	3.80 GHz	4000	1600 MHz	6 MB L3 shared	LGA1155
	Intel Core i5-3570 processor	BX80637I53570	3.40 GHz	3.80 GHz	2500	1600 MHz	6 MB L3 shared	LGA1155
	Intel Core i5-3550 processor	BX80637I53550	3.30 GHz	3.70 GHz	2500	1600 MHz	6 MB L3 shared	LGA1155
	Intel Core i5-3470 processor	BX80637I53470	3.20 GHz	3.60 GHz	2500	1600 MHz	6 MB L3 shared	LGA1155
	Intel Core i5-3450 processor	BX80637I53450	3.10 GHz	3.50 GHz	2500	1600 MHz	6 MB L3 shared	LGA1155

NEW	LOW-POWER PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® TURBO BOOST TECHNOLOGY[1]	INTEL® HD GRAPHICS	MEMORY SPEED	CACHE	PACKAGE
✓	Intel® Core™ i7-4770S processor	BX80646I74770S	Up to 3.90 GHz	Yes	4600	1600 MHz	8 MB L3 shared	LGA1150
	Intel Core i7-3770S processor	BX80637I73770S	Up to 3.90 GHz	Yes	4000	1600 MHz	8 MB L3 shared	LGA1155
✓	Intel® Core™ i5-4570S processor	BX80646I54570S	Up to 3.60 GHz	Yes	4600	1600 MHz	6 MB L3 shared	LGA1150
	Intel Core i5-3470S processor	BX80637I53470S	Up to 3.60 GHz	Yes	2500	1600 MHz	6 MB L3 shared	LGA1155
	Intel Core i5-3450S processor	BX80637I53450S	Up to 3.50 GHz	Yes	2500	1600 MHz	6 MB L3 shared	LGA1155
	Intel® Core™ i3-3220T processor	BX80637I33220T	2.80 GHz	N/A	2500	1600 MHz	3 MB L3 shared	LGA1155

INTEL® DESKTOP PROCESSORS

INTEL® DESKTOP PROCESSORS FOR MAINSTREAM AND ENTRY-LEVEL SEGMENTS (22NM MANUFACTURING PROCESS)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® HD GRAPHICS	MEMORY SPEED	CACHE	PACKAGE
✓	Intel® Core™ i3-3250 processor	BX80637I33250	3.50 GHz	2500	1600 MHz	3 MB L3 shared	LGA1155
✓	Intel Core i3-3245 processor	BX80637I33245	3.40 GHz	4000	1600 MHz	3 MB L3 shared	LGA1155
	Intel Core i3-3240 processor	BX80637I33240	3.40 GHz	2500	1600 MHz	3 MB L3 shared	LGA1155
	Intel Core i3-3225 processor	BX80637I33225	3.30 GHz	4000	1600 MHz	3 MB L3 shared	LGA1155
	Intel Core i3-3220 processor	BX80637I33220	3.30 GHz	2500	1600 MHz	3 MB L3 shared	LGA1155
	Intel Core i3-3210 processor	BX80637I33210	3.20 GHz	2500	1600 MHz	3 MB L3 shared	LGA1155
✓	Intel® Pentium® G2140 processor	BX80637G2140	3.30 GHz	Yes	1600 MHz	3 MB L3 shared	LGA1155
	Intel Pentium G2130 processor	BX80637G2130	3.20 GHz	Yes	1600 MHz	3 MB L3 shared	LGA1155
	Intel Pentium G2120 processor	BX80637G2120	3.10 GHz	Yes	1600 MHz	3 MB L3 shared	LGA1155
✓	Intel Pentium G2030 processor	BX80637G2030	3 GHz	Yes	1333 MHz	3 MB L3 shared	LGA1155
	Intel Pentium G2020 processor	BX80637G2020	2.90 GHz	Yes	1333 MHz	3 MB L3 shared	LGA1155
	Intel Pentium G2010 processor	BX80637G2010	2.80 GHz	Yes	1333 MHz	3 MB L3 shared	LGA1155
	Intel® Celeron® G1620 processor	BX80637G1620	2.70 GHz	Yes	1333 MHz	2 MB L3 shared	LGA1155
	Intel Celeron G1610 processor	BX80637G1610	2.60 GHz	Yes	1333 MHz	2 MB L3 shared	LGA1155

For more information, visit **www.intel.com/go/desktopprocessors**

[1] Intel® Turbo Boost Technology—maximum single-core turbo frequency (GHz). Intel Turbo Boost Technology requires a PC 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 PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

[2] Overclocking enabled. Warning: Altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

Please refer to the product quick reference matrix located on Intel® Reseller Center: www.intel.com/reseller

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 more information.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, Intel Core, Core Inside, Pentium, Pentium Inside, and Celeron are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

# Intel® Desktop Wireless

INTEL® WIRELESS

Intel® wireless networking solutions for desktop platforms enable network connectivity without wires. These traditional desktop-focused solutions are based on the PCI Express* form factor and include an external antenna. Intel® products provide uncompromising performance, enhanced security, and scalability for fast, flexible connectivity at work and home.

SEGMENT	MAINSTREAM CONSUMER	BUSINESS, EDUCATION, PERFORMANCE CONSUMER
Product (Intel Code Name)	**Intel® Centrino® Wireless-N 2200 for Desktop** (Marble Peak)	**Intel® Centrino® Advanced-N 6205 for Desktop** (Taylor Peak)
Form Factor	PCI Express* x1	PCI Express* x1
Antenna	Included	Included
Speed Spatial Streams (Tx and Rx)	300 Mb/s (2x2)	300 Mb/s (2x2)
Bands	Single Band – 2.40 GHz	Dual Band – 2.40 GHz and 5 GHz
Enterprise / SMB Features	Intel® PROSet / Wireless Software	Intel® PROSet / Wireless Software
Intel® Connect Center	✓	✓
Intel® Wireless Display[1]	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display
Laplink* PCsync* Software	✓	✓
Intel® Smart Connect Technology	✓	✓
Wi-Fi* Certification (802.11)	Wi-Fi CERTIFIED 802.11n	Wi-Fi CERTIFIED 802.11n
Order Codes 20 piece Bulk Pack, Full-Height Bracket 20 piece Bulk Pack, Half-Height Bracket 5 piece Retail Box, Full and Half-Height Brackets	2200BNHMWDTX1G 2200BNHMWDTX1H 2200BNHMWDTX1	62205ANHMWDTX1G 62205ANHMWDTX1H 62205ANHMWDTX1

For more information, visit **www.intel.com/go/wireless**

INTEL® BOXED THERMAL SOLUTIONS

Intel® Thermal Solution RTS2011AC	Intel® Thermal Solution TS13X	Intel® Thermal Solution HTS1155LP
The Intel® Thermal Solution RTS2011AC (air cooling) is ideal if you are looking for performance while still meeting your budget. Targeted users include business, government, and entry workstation.	If you are into extreme gaming and overclocking,[2] the Intel® Thermal Solution TS13X (liquid cooling) is the perfect fit. It is designed for all high-end desktop performance overclocking.	Intel now offers the new low-profile thin mini-ITX Intel® Thermal Solution HTS1155LP for All-In-One and tiny PC desktop systems.
FEATURES ▪ Low cost ▪ Shock and vibe compliant and keep out safe ▪ Supports the LGA2011 socket only ▪ Compatible with Sandy Bridge-E[1] and Ivy Bridge-E[1] processors ▪ 3 year limited warranty	**FEATURES** ▪ Optimized performance – 120mm x 25mm fan – Updated cooler block – Supports 130 W processors – Supports the LGA1366, LGA115X, and LGA2011 sockets ▪ Visual improvements – Low-profile pump – Blue LED lighting with ON / OFF switch ▪ 3 year limited warranty	**FEATURES** ▪ New low-profile All-in-One / Small Form Factor thermal solution ▪ Supports all 65 W processors in the LGA1155 socket (Sandy Bridge[1] and Ivy Bridge[1]) ▪ Compatible with the Intel® Desktop Board DH61AG and all ODM thin mini-ITX H6X-based boards ▪ Multiple options for fan placement ▪ Available now from authorized Intel distributors ▪ 3 year limited warranty
MM# 918700 Product code: **BXRTS2011AC**	MM# 929672 Product code: **BXTS13X**	MM# 917752 Product code: **BXHTS1155LP**

[1] Sandy Bridge-E, Ivy Bridge-E, Sandy Bridge, and Ivy Bridge are code names of Intel Corporation.

[2] WARNING: Altering clock frequency and/or voltage may: (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications. Intel assumes no responsibility that the processor, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose. For more information, visit http://www.intel.com/consumer/game/gaming-power.htm

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel® Desktop Boards
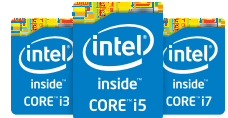
GENUINE INTEL® DESKTOP BOARDS

Focus	Intel® Desktop Board	Form Factor	Package	Memory	DIMMS	Integrated Graphics[1]	PCIe* x16	PCIe x4	PCIe x1	Mini PCIe	PCI	SATA 3 6.0 Gb/s (eSATA)	SATA 2 3.0 Gb/s (eSATA)	RAID	Audio	TOSLINK+ S/PDIF	USB 3 ext+int	USB 2 ext+int	1394 ext+int	LAN	i7 Extreme Edition	i7 4th Gen	i7 3rd Gen	i5 4th Gen	i5 3rd Gen	i3 4th Gen	i3 3rd Gen	Included Processors
Enthusiast & Gaming	DX79SR	ATX	LGA2011	DDR3 2400+	8		3		2		1	4	4	•	10-ch	1+1	4+2	6+8	1+1	Dual	•		•					
	DX79TO	ATX	LGA2011	DDR3 1600+	8		2		3		1	2	4	•	6-ch		2+0	6+8	1+1	Single	•							
NEW!	DZ87KLT-75K	ATX	LGA1150	DDR3 2400+	4	HDMI*+ Thunderbolt™	2	1[2]	3	1	1	8		•	10-ch	1+1	6+2	2+6	1+1	Dual		•		•		•		
	DZ77RE-75K	ATX	LGA1155	DDR3 1600+	4	HDMI+ Thunderbolt	2	1	2		2	4 (1)	4	•	10-ch	1+1	4+4	4+6	1+1	Dual			•		•		•	
	DZ77BH-55K	ATX	LGA1155	DDR3 1333	4	DisplayPort*+ HDMI	2		3		2	4	3 (1)	•	10-ch	1+1	4+2	4+6	1+1	Single			•		•		•	
	DZ77SL-50K	ATX	LGA1155	DDR3 1333	4	HDMI	1	1	1		3	2	3 (1)	•	10-ch	1+1	2+2	4+4	1+1	Single			•		•		•	
NEW!	DH87MC	ATX	LGA1150	DDR3 1600/1333	4	DisplayPort+ HDMI+DVI-I	1	1[2]	2	1[3]	3	5		•	10-ch	1+1	2+2	4+5		Single		•		•		•		
NEW!	DH87RL	MicroATX	LGA1150	DDR3 1600/1333	4	DisplayPort+ HDMI+DVI-I	1		3	1[3]		5		•	10-ch	1+1	4+2	2+5		Single		•		•		•		
Media Creation	DH77DF	mini-ITX	LGA1155	DDR3 1600	2	DisplayPort+ HDMI+DVI-I	1			1		2	2 (1)	•	10-ch	1+1	2+2	4+4	1+1	Single			•		•		•	
	DH77KC	ATX	LGA1155	DDR3 1600	4	DisplayPort+ HDMI+DVI-I	1	1	1	1	3	2	3 (1)	•	10-ch	1+1	2+2	4+4		Single			•		•		•	
	DH77EB	MicroATX	LGA1155	DDR3 1600	4	DisplayPort+ HDMI+DVI-I	1		3	1		2	3 (1)	•	10-ch	1+1	2+2	4+6		Single			•		•		•	
	DH61AGL	Thin mini-ITX	LGA1155	DDR3 1600 SODIMM	2	HDMI+LVDS				1					4-ch			4+5		Single			•		•		•	
Business NEW!	DQ87PG	MicroATX	LGA1150	DDR3 1600/1333	4	DisplayPort+ DVI-D+VGA	1		1		2	6		•	8-ch		4+2	2+6		Single		•		•		•		
	DQ77CP	MicroATX	LGA1155	DDR3 1600	4	VGA+DVI-D	1		1		2	2	3 (1)	•	8-ch		2+2	4+4		Single			•		•		•	
	DQ77KB	Thin mini-ITX	LGA1155	DDR3 1600 SODIMM	2	eDP*+ DisplayPort+ HDMI+LVDS		1		2		2	2	•	4-ch		4+0	0+5		Dual			•		•		•	
	DQ77MK	MicroATX	LGA1155	DDR3 1600	4	DisplayPort+ DVI-D+DVI-I	1	1	1	1	1	2	3 (1)	•	8-ch		2+2	4+4	1+1	Dual			•		•		•	
NEW!	DB85FL	MicroATX	LGA1150	DDR3 1600/1333	4	HDMI+DVI-I	1		2			4	2		8-ch		2+2	4+4		Single		•		•		•		
	DB75EN	MicroATX	LGA1155	DDR3 1600	4	DVI-D+VGA	1		1		2	1	4 (1)		8-ch		2+2	4+4		Single			•		•		•	
	DQ67EP	mini-ITX	LGA1155	DDR3 1333	2	DisplayPort+ DVI-D+DVI-I	1			1		2	2 (2)	•	8-ch		2	4+6		Single			•		•		•	
General Purpose	DH61BF	MicroATX	LGA1155	DDR3 1333	2	DVI-D+VGA	1		2			4	4		6-ch		4+4	4+4		Single					•		•	
	DH61BE	MicroATX	LGA1155	DDR3 1333	2	DVI-D+VGA	1		2	1		2	4		8-ch		2	2+8		Single					•		•	
	DH61CR	MicroATX	LGA1155	DDR3 1333	2	DVI-D+VGA	1		2		1		4		6-ch			4+6		Single					•		•	
	DH61DL	mini-ITX	LGA1155	DDR3 1333	2	DVI-D+VGA			1	1			3		6-ch		2	2+6		Single					•		•	

continued on next page

continued from previous page

Focus	Intel® Desktop Board	Form Factor	Package	Memory	DIMMS	Integrated Graphics¹	PCIe* x16	PCIe x4	PCIe x1	Mini PCIe	PCI	SATA 3 6.0 Gb/s (eSATA)	SATA 2 3.0 Gb/s (eSATA)	RAID	Audio	TOSLINK+ S/PDIF	USB 3 ext+int	USB 2 ext+int	1394 ext+int	LAN	Intel® Core™ i7 processor Extreme Edition		Intel® Core™ i7 processor		Intel® Core™ i5 processor		Intel® Core™ i3 processor		Included Processors
																							4th Gen	3rd Gen	4th Gen	3rd Gen	4th Gen	3rd Gen	
Intel® NUC⁴	D33217GKE/ D33217YE kit⁴	4" x 4"		DDR3 SODIMM	2	Dual HDMI*				2								3+2		Single									Intel® Core™ i3-3217U processor
	D33217CK/ DC33217BY kit⁴	4" x 4"		DDR3 SODIMM	2	Single HDMI				2								3+2		Thunder-bolt™									Intel® Core™ i3-3217U processor
	DCP847SKE/ DCCP847DYE kit⁴	4" x 4"		DDR3 SODIMM	2	Dual HDMI				2								3+2		Single									Intel® Celeron® processor 847
Intel® Atom™	DN2800MT	Thin mini-ITX		DDR3 SODIMM	2	eDP*+HDMI+VGA+LVDS			1	2			2		4-ch			4+4		Single									Intel® Atom™ processor N2800
	D2500CC	mini-ITX		DDR3 SODIMM	2	DVI-I+VGA+LVDS				1	1		2		8-ch			4+3		Dual									Intel® Atom™ processor D2500
	D2500HN	mini-ITX		DDR3 SODIMM	2	VGA					1		2		4-ch			4+4		Single									Intel® Atom™ processor D2500

NEW

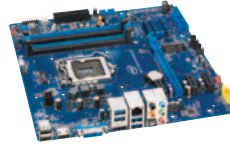|	Intel® Desktop Board DX79SR	Intel® Desktop Board DX79TO	Intel® Desktop Board DZ87KLT-75K
Product Family	Intel® Desktop Board DX79SR	Intel® Desktop Board DX79TO	Intel® Desktop Board DZ87KLT-75K
Form Factor	ATX	ATX	ATX
Product Code / UPC	**BOXDX79SR / 00735858242851**	**BOXDX79TO / 00735858225175**	**BOXDZ87KLT75K / 00735858263412**
5-pack Outercase UPC	N/A	N/A	00735858263429
10-pack Product Code / UPC	N/A	BLKDX79TO / 00735858225199	N/A
Processor Support	**Intel® Core™ i7 processor Extreme Edition and Intel® Core™ i7 processors in the LGA2011 package**	**Intel® Core™ i7 processor Extreme Edition and Intel® Core™ i7 processors in the LGA2011 package**	**4th gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1150 package, highly optimized for the Intel® K SKU processors**
Chipset	Intel® X79 Express Chipset	Intel® X79 Express Chipset	Intel® Z87 chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	N/A	N/A	HDMI*
Discrete Graphics Connector	Three PCI Express* 3.0 x16 connectors ATI* CrossFireX* and NVIDIA* SLI* multi-GPU platform support	Two PCI Express* 2.0 x16 connectors ATI* CrossFireX* and NVIDIA* SLI* multi-GPU platform support	Two PCI Express* 3.0 x16 connectors (switchable to x8 or x4) PCI Express* 2.0 x16 connector ATI* CrossFire* and NVIDIA* SLI* multi-GPU platform support
Memory Support	Quad-channel DDR3 with eight connectors for 2400 MHz memory (overclocked[7]) (64 GB[8] max) Intel® Extreme Memory Profiles support	Quad-channel DDR3 with eight connectors for 1600+ MHz memory (64 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with four connectors for 2400+ MHz (overclocked[7]) or DDR3 1600 / 1333 MHz (32 GB[8] max) Intel® Extreme Memory Profiles support
Expansion Connectors	Two PCI Express x1 connectors and one PCI connector	Three PCI Express 2.0 x1 connectors and one PCI connector	Three PCI Express* 2.0 x1 connectors, one PCI connector One full-size / half-size PCI Express Mini Card connector
Audio[6]	Eight-channel Intel® High Definition Audio (four back panel analog ports and one optical port)	Six-channel Intel® High Definition Audio (three back panel analog ports)	Ten-channel Intel® High Definition Audio (7.1+2 independent multi-streaming) Five analog audio outputs and one optical S/PDIF out port Internal S/PDIF header and front panel audio header
USB Ports	Fourteen Hi-Speed USB 2.0 ports (six external ports and eight additional ports via internal headers) and six USB 3.0 ports	Fourteen Hi-Speed USB 2.0 ports (six external ports and eight additional ports via internal headers) and two USB 3.0 ports	Eight Super-Speed USB 3.0 ports (six external ports and two additional ports via internal header) and eight Hi-Speed USB 2.0 ports (two external ports and six additional ports via internal headers)
1394 Ports	Two IEEE 1394a ports (one external port and one additional port via internal header)	Two IEEE 1394a ports (one external port and one additional port via internal header)	Two IEEE 1394a ports (one external port and one additional port via internal header)
Storage	Four SATA ports (3.0 Gb/s) and four SATA ports (6.0 Gb/s)	Four SATA ports (3.0 Gb/s) and two SATA ports (6.0 Gb/s)	Eight SATA ports (6.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10, Intel® Rapid Recovery Technology, and Matrix RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10
Onboard LAN	Dual Intel® PRO 10/100/1000 Network Connection Bluetooth* / Wi-Fi* module	Intel® PRO 10/100/1000 Network Connection	Dual Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	N/A	Yes	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit Intel® Visual BIOS ESET* Smart Security 4 Laplink* PCmover Express* McAfee* AntiVirus Plus* Razerzone.com* Discount — Splashtop* Remote Desktop Steam*	Intel® Desktop Utilities Intel® Extreme Tuning Utility[9] Intel® Integrator Assistant ESET* Smart Security 4 Laplink* PCmover Express* Razerzone.com* Discount Steam*	Intel® Desktop Utilities Intel® Integrator Toolkit Intel® Visual BIOS ESET* Smart Security 4
BIOS	N/A	SIX7910J.86A	Intel Visual BIOS 64Mb Flash EEPROM with Intel Platform Innovation Framework for EFI Plug and Play Advanced Configuration and Power Interface V3.0b, SMBIOS 2.5 Intel Express BIOS update support Fast Boot BIOS
Windows* and WHQL Support	Windows* WHQL certified	Windows* WHQL certified	Windows* 8 Hardware certification Windows* WHQL certified
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

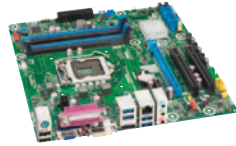|	Intel® Desktop Board DZ77RE-75K	Intel® Desktop Board DZ77BH-55K	Intel® Desktop Board DZ77SL-50K
Product Family	**Intel® Desktop Board DZ77RE-75K**	**Intel® Desktop Board DZ77BH-55K**	**Intel® Desktop Board DZ77SL-50K**
Form Factor	ATX	ATX	ATX
Product Code / UPC	**BOXDZ77RE-75K / 00735858244251**	**BOXDZ77BH-55K / 00735858244305**	**BOXDZ77SL-50K / 00735858247900**
5-pack Outercase UPC	N/A	N/A	N/A
10-pack Product Code / UPC	BLKDZ77RE-75K / 00735858244237	BLKDZ77BH-55K / 00735858244329	BLKDZ77SL-50K / 00735858247924
Processor Support	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package** **Highly optimized for the Intel® K SKU processors**	**2nd and 3rd gen Intel® Core™ i7 (95 W TDP), Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package** **Highly optimized for the Intel® K SKU processors**	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package (95 W TDP)** **Highly optimized for the Intel® K SKU processors**
Chipset	Intel® Z77 Express Chipset	Intel® Z77 Express Chipset	Intel® Z77 Express Chipset
Supports HT Technology[5]	Yes	N/A	N/A
Integrated Graphics Core[1]	Intel® HD graphics (HDMI*)	Intel® HD graphics (DisplayPort* + HDMI*)	Intel® HD graphics (HDMI*)
Discrete Graphics Connector	One PCI Express* 3.0 x16 connector or switchable to two PCI Express 2.0 x8 connectors ATI* CrossFireX* and NVIDIA* SLI* multi-GPU platform support	One PCI Express* 3.0 x16 connector or switchable to two PCI Express 2.0 x8 connectors ATI* CrossFireX* and NVIDIA* SLI* multi-GPU platform support	One PCI Express* 2.0 x16 connector
Memory Support	Dual-channel DDR3 with four connectors for 1600+ MHz memory (32 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory (32 GB[8] max) 1.2 V to 1.8 V memory voltage control for max DIMM compatibility	Dual-channel DDR3 with four connectors for 1333 / 1066 MHz memory (32 GB[8] max) 1.2 V to 1.8 V memory voltage control for max DIMM compatibility
Expansion Connectors	Thunderbolt™ Connector, one PCI Express x4 connector, two PCI Express x1 connectors, and two PCI connectors	Three PCI Express 2.0 x1 connectors and two PCI connectors	One PCI Express x4 connector, one PCI Express 2.0 x1 connector, and three PCI connectors
Audio[6]	Ten-channel Intel® High Definition Audio	Ten-channel Intel® High Definition Audio	Ten-channel Intel® High Definition Audio
USB Ports	Ten Hi-Speed USB 2.0 ports (six external ports and four additional ports via internal headers) and eight USB 3.0 ports	Ten Hi-Speed USB 2.0 ports (four external ports and six additional ports via internal headers) and six USB 3.0 ports	Eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers) and four USB 3.0 ports
1394 Ports	Two IEEE 1394a ports (one external port and one additional port via internal header)	Two IEEE 1394a ports (one external port and one additional port via internal header)	Two IEEE 1394a ports (one external port and one additional port via internal header)
Storage	Four SATA ports (3.0 Gb/s), four SATA ports (6.0 Gb/s), and one eSATA port (6.0 Gb/s)	Three SATA ports (3.0 Gb/s), four SATA ports (3.0 Gb/s), and one eSATA port (3.0 Gb/s)	Three SATA ports (3.0 Gb/s), two SATA ports (6.0 Gb/s), and one eSATA port
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10
Onboard LAN	Dual Intel® PRO 10/100/1000 Network Connection	Integrated 10/100/1000 Network Connection Integrated NIC	Integrated 10/100/1000 Network Connection Integrated NIC
Trusted Platform Module	N/A	N/A	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security 4 Lucidlogix* Universal McAfee* AntiVirus Plus* Razerzone.com* Discount Splashtop* Remote Desktop	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS Dolby* Home Theater ESET* Smart Security 4 Lucidlogix* Universal McAfee* AntiVirus Plus* Razerzone.com* Discount Splashtop* Remote Desktop	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security 4 Lucidlogix* Universal McAfee* AntiVirus Plus* Razerzone.com* Discount Splashtop* Remote Desktop
BIOS	N/A	N/A	N/A
Windows* and WHQL Support	Windows* WHQL certified	Windows* WHQL certified	Windows* WHQL certified
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

NEW NEW

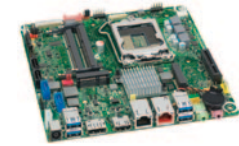|	Intel® Desktop Board DH87MC	Intel® Desktop Board DH87RL	Intel® Desktop Board DH77DF
Product Family	Intel® Desktop Board DH87MC	Intel® Desktop Board DH87RL	Intel® Desktop Board DH77DF
Form Factor	ATX	MicroATX	Mini-ITX
Product Code / UPC	**BOXDH87MC / 00735858263474**	**BOXDH87RL / 00735858263443**	**BOXDH77DF / 00735858241861**
5-pack Outercase UPC	00735858263481	00735858263450	N/A
10-pack Product Code / UPC	BLKDH87MC / 00735858263498	BLKDH87RL / 00735858263467	BLKDH77DF / 00735858241885
Processor Support	**4th gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1150 package**	**4th gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1150 package**	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**
Chipset	Intel® H87 chipset	Intel® H87 chipset	Intel® H77 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DisplayPort* + HDMI* + DVI-I), supports triple independent display	Intel® HD graphics (DisplayPort* + HDMI* + DVI-I), supports triple independent display	Intel® HD graphics (DisplayPort* + HDMI* + DVI-I)
Discrete Graphics Connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector
Memory Support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz (32 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz (32 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with two connectors for 1600 / 1333 MHz memory (16 GB[8] max)
Expansion Connectors	Two PCI Express 2.0 x1 connectors, one PCI Express 2.0 x4 connector, and three PCI connectors One full-size / half-size PCI Express Mini Card connector	Three PCI Express 2.0 x1 connectors One full-size / half-size PCI Express Mini Card connector	One PCI Express Mini Card connector with support for mSATA Solid-State Drive and dual-channel TV tuner card
Audio[6]	Ten-channel Intel® High Definition Audio (7.1+2 independent multi-streaming) Five analog audio outputs and one optical S/PDIF out port Internal S/PDIF header and front panel audio header	Ten-channel Intel® High Definition Audio (7.1+2 independent multi-streaming) Five analog audio outputs and one optical S/PDIF out port Internal S/PDIF header and front panel audio header	Ten-channel Intel® High Definition Audio with 110dB DAC SNR
USB Ports	Four Super-Speed USB 3.0 ports (two external ports and two additional ports via internal header) and ten Hi-Speed USB 2.0 ports (four external ports and five additional ports via internal headers, one via PCI Express Mini Card connector)	Six Super-Speed USB 3.0 ports (four external ports and two additional ports via internal header) and eight Hi-Speed USB 2.0 ports (two external ports and five additional ports via internal headers, one via PCI Express Mini Card connector)	Ten Hi-Speed USB 2.0 ports (four external ports, four additional ports via internal headers, and two ports via PCI Express Mini Card connector) and four USB 3.0 ports
1394 Ports	No	No	Two IEEE 1394a ports (one external port and one via internal header)
Storage	Five SATA ports (6.0 Gb/s)	Five SATA ports (6.0 Gb/s)	Two SATA ports (3.0 Gb/s), two SATA ports (6.0 Gb/s), and one eSATA back panel port (3.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10
Onboard LAN	Intel® PRO 10/100/1000 integrated NIC	Intel® PRO 10/100/1000 integrated NIC	Intel® PRO 10/100/1000 Network Connection Integrated NIC
Trusted Platform Module	Yes, via internal header	Yes, via internal header	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS Dolby* Home Theater ESET* Smart Security McAfee* AntiVirus Plus* Splashtop* Remote Desktop
BIOS	Intel® Visual BIOS 64Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play Advanced Configuration and Power Interface V3.0b, SMBIOS 2.5 Intel® Express BIOS update support Fast Boot BIOS	Intel® Visual BIOS 64Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play Advanced Configuration and Power Interface V3.0b, SMBIOS 2.5 Intel® Express BIOS update support Fast Boot BIOS	N/A
Windows* and WHQL Support	Windows* 8 Hardware certification Windows* WHQL certified	Windows* 8 Hardware certification Windows* WHQL certified	Windows* 7
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

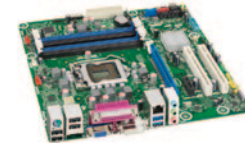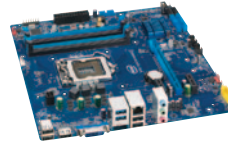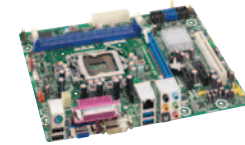|	Intel® Desktop Board DH77KC	Intel® Desktop Board DH77EB	Intel® Desktop Board DH61AGL
Product Family	Intel® Desktop Board DH77KC	Intel® Desktop Board DH77EB	Intel® Desktop Board DH61AGL
Form Factor	ATX	MicroATX	Thin Mini-ITX
Product Code / UPC	**BOXDH77KC / 00735858241830**	**BOXDH77EB / 00735858241793**	**N/A**
5-pack Outercase UPC	N/A	N/A	N/A
10-pack Product Code / UPC	BLKDH77KC / 00735858241854	BLKDH77EB / 00735858241816	BLKDH61AGL / 00735858250498
Processor Support	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**
Chipset	Intel® H77 Express Chipset	Intel® H77 Express Chipset	Intel® H61 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DisplayPort* + HDMI* + DVI-I)	Intel® HD graphics (DisplayPort* + HDMI* + DVI-I)	Intel® HD graphics (HDMI* + LVDS)
Discrete Graphics Connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector	N/A
Memory Support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max)	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max)	Dual-channel DDR3 SODIMM with two connectors for 1600 / 1333 / 1066 MHz memory (16 GB[8] max)
Expansion Connectors	One PCI Express Mini Card connector with support for mSATA Solid-State Drive and dual-channel TV tuner card, one PCI Express 2.0 x1 connector, one PCI Express 2.0 x4 connector, and three PCI connectors	One PCI Express Mini Card connector with support for mSATA Solid-State Drive and three PCI Express 2.0 x1 connectors	One half-length PCI Express* Mini Card connector
Audio[6]	Ten-channel Intel® High Definition Audio	Ten-channel Intel® High Definition Audio	Eight-channel Intel® High Definition Audio
USB Ports	Ten Hi-Speed USB 2.0 ports (four external ports, four additional ports via internal headers, and two ports via PCI Express Mini Card connector) and four USB 3.0 ports	Ten Hi-Speed USB 2.0 ports (four external ports and six additional ports via internal headers) and four USB 3.0 ports	Ten Hi-Speed USB 2.0 ports (four external ports, five additional ports via internal headers, one via internal PCI Express Mini Card connector)
1394 Ports	N/A	N/A	N/A
Storage	Three SATA ports (3.0 Gb/s) (one port shared with PCI Express Mini Card connector), two SATA ports (6.0 Gb/s), and one eSATA back panel port (3.0 Gb/s)	Three SATA ports (3.0 Gb/s) (one port shared with PCI Express Mini Card connector), two SATA ports (6.0 Gb/s), and one eSATA back panel port (3.0 Gb/s)	Two SATA ports (3.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	N/A
Onboard LAN	Intel® PRO 10/100/1000 Network Connection Integrated NIC	Intel® PRO 10/100/1000 Network Connection Integrated NIC	Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	N/A	N/A	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security LucidLogix* Universal McAfee* AntiVirus Plus* Splashtop* Remote Desktop	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security LucidLogix* Universal McAfee* AntiVirus Plus* Splashtop* Remote Desktop	Intel® Core Utilities Bundle[10] Intel® Desktop Utilities ESET* Smart Security 5 Laplink* PCmover Express* McAfee* AntiVirus Plus* Splashtop* Remote Desktop
BIOS	N/A	N/A	N/A
Windows* and WHQL Support	Windows* 7	Windows* 7	Windows* Vista* Premium Windows* 7
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

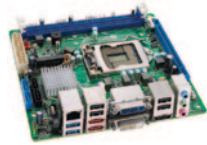|	Intel® Desktop Board DQ87PG	Intel® Desktop Board DQ77CP	Intel® Desktop Board DQ77KB
Product Family	Intel® Desktop Board DQ87PG	Intel® Desktop Board DQ77CP	Intel® Desktop Board DQ77KB
Form Factor	MicroATX	MicroATX	Thin Mini-ITX
Product Code / UPC	**N/A**	**N/A**	**BOXDQ77KB / 00735858240796**
5-pack Outercase UPC	N/A	N/A	N/A
10-pack Product Code / UPC	BLKDQ87PG / 00735858263672	BLKDQ77CP / 00735858249805	BLKDQ77KB / 00735858240819
Processor Support	**4th gen Intel® Core™ vPro™ processors in the LGA1150 package**	**2nd and 3rd gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1555 package**	**Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package**
Chipset	Intel® Q87 chipset	Intel® Q77 Express Chipset	Intel® Q77 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DisplayPort* + DVI-D + VGA)	Intel® HD graphics (VGA + DVI-D)	Intel® HD graphics (eDisplayPort* + DisplayPort* + HDMI* + LVDS)
Discrete Graphics Connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector
Memory Support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max)	Dual-channel DDR3 with two connectors for 1600 / 1333 MHz memory (16 GB[8] max)
Expansion Connectors	One PCI Express 2.0 x1 connector and two PCI connectors	One PCI Express 2.0 x1 connector and two PCI connectors	One PCI Express 2.0 x4 connector and two PCI Express Mini Card connectors
Audio[6]	Eight-channel Intel® High Definition Audio (5.1+2 independent multi-streaming) Three analog audio outputs Internal S/PDIF header, front panel audio header and internal speaker header	Eight-channel Intel® High Definition Audio	Four-channel Intel® High Definition Audio codec with multi-streaming support
USB Ports	Six Super-Speed USB 3.0 ports (four external ports and two additional ports via internal header) and eight Hi-Speed USB 2.0 ports (two external ports and six additional ports via internal headers)	Four Super-Speed USB 3.0 ports (two external ports and two additional ports via internal header) and eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)	Five Hi-Speed USB 2.0 ports (via internal headers) and four USB 3.0 ports (back panel ports)—two ports support high current
1394 Ports	N/A	N/A	N/A
Storage	Six SATA ports (6.0 Gb/s)	Two SATA ports (3.0 Gb/s), two SATA ports (6.0 Gb/s), and one eSATA back panel port (3.0 Gb/s)	Two SATA ports (6.0 Gb/s) and two SATA ports (3.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10
Onboard LAN	Intel® PRO 10/100/1000 integrated NIC	Intel® PRO 10/100/1000 Network Connection Integrated NIC	Dual Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	Yes	Yes (discrete)	Yes (discrete)
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Desktop Utilities Intel® Identity Protection Technology Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security Laplink* PCmover Professional* McAfee* AntiVirus Plus* RealVNC* Viewer Plus Spiceworks* IT Desktop Splashtop* Remote Desktop
BIOS	Intel® Visual BIOS 96Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play Advanced Configuration and Power Interface V3.0b, SMBIOS 2.5 Intel® Express BIOS update support Fast Boot BIOS	N/A	N/A
Windows* and WHQL Support	Windows* 7 and Windows* 8 WHCK Certification	Windows* 7 WHQL certified with plans to support Windows* 8	Windows* 7 WHQL certified with plans to support Windows* 8
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

NEW

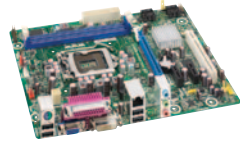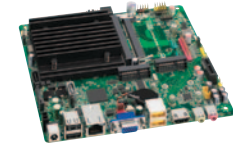|	Intel® Desktop Board DQ77MK	Intel® Desktop Board DB85FL	Intel® Desktop Board DB75EN
Product Family	Intel® Desktop Board DQ77MK	Intel® Desktop Board DB85FL	Intel® Desktop Board DB75EN
Form Factor	MicroATX	MicroATX	MicroATX
Product Code / UPC	**BOXDQ77MK / 00735858240727**	**BOXDB85FL / 00735858263627**	**BOXDB75EN / 00735858240536**
5-pack Outercase UPC	N/A	00735858263634	N/A
10-pack Product Code / UPC	BLKDQ77MK / 00735858240734	BLKDB85FL / 00735858263641	BLKDB75EN / 00735858240550
Processor Support	Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package	4th gen Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1150 package	Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package
Chipset	Intel® Q77 Express Chipset	Intel® B85 chipset	Intel® B75 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DisplayPort* + DVI-D + DVI-I)	Intel® HD graphics (HDMI* + DVI-I), supports dual independent display	Intel® HD graphics (DVI-D + VGA)
Discrete Graphics Connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector	One PCI Express* 3.0 x16 connector
Memory Support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max)	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max) Intel® Extreme Memory Profiles support	Dual-channel DDR3 with four connectors for 1600 / 1333 MHz memory (32 GB[8] max)
Expansion Connectors	One Mini PCI Express connector, one PCI Express 2.0 x4 connector, one PCI Express 2.0 x1 connector, and one PCI connector	Two PCI Express 2.0 x1 connector	One PCI Express 2.0 x1 connector and two PCI connectors
Audio[6]	Eight-channel Intel® High Definition Audio Codec with multi-streaming support	Eight-channel Intel® High Definition Audio (5.1+2 independent multi-streaming) Three analog audio outputs Internal S/PDIF header, front panel audio header and internal speaker header	Eight-channel Intel® High Definition Audio
USB Ports	Eight Hi-Speed USB 2.0 ports (four external ports; two support high power, four ports via internal header) and four USB 3.0 ports	Four Super-Speed USB 3.0 ports (two external ports and two additional ports via internal header) and eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)	Eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers) and four USB 3.0 ports
1394 Ports	Two IEEE 1394a ports (one external port and one via internal header)	N/A	N/A
Storage	Two SATA ports (6.0 Gb/s), three SATA (3.0 Gb/s), and one eSATA back panel port (3.0 Gb/s)	Four SATA ports (6.0 Gb/s) and two SATA ports (3.0 Gb/s)	One SATA port (6.0 Gb/s), three SATA ports (3.0 Gb/s), and one eSATA port (3.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10		N/A
Onboard LAN	Dual Intel® PRO 10/100/1000 Network Connection	Intel® PRO 10/100/1000 integrated NIC	Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	Yes (discrete)	Yes, via internal header	Yes (discrete)
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Identity Protection Technology Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security Laplink* PCmover Professional* McAfee* AntiVirus Plus* RealVNC* Viewer Plus Spiceworks* IT Desktop Splashtop* Remote Desktop	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Desktop Utilities Intel® Integrator Toolkit 5 Intel® Visual BIOS ESET* Smart Security Laplink* PCmover Professional* McAfee* AntiVirus Plus* RealVNC* Viewer Plus Spiceworks* IT Desktop Splashtop* Remote Desktop
BIOS	N/A	Intel® Visual BIOS 96Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play Advanced Configuration and Power Interface V3.0b, SMBIOS 2.5 Intel® Express BIOS update support Fast Boot BIOS	N/A
Windows* and WHQL Support	Windows* 7 WHQL certified with plans to support Windows* 8	Windows* 7 and Windows* 8 WHCK Certification	Windows* 7 WHQL certified with plans to support Windows* 8
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

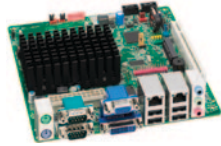|	Intel® Desktop Board DQ67EP	Intel® Desktop Board DH61BF	Intel® Desktop Board DH61BE
Product Family	Intel® Desktop Board DQ67EP	Intel® Desktop Board DH61BF	Intel® Desktop Board DH61BE
Form Factor	Mini-ITX	MicroATX	MicroATX
Product Code / UPC	**BOXDQ67EPB3 / 00735858221269**	**BOXDH61BF / 00735858257107**	**BOXDH61BEB3 / 00735858220910**
5-pack Outercase UPC	N/A	00735858257114	N/A
10-pack Product Code / UPC	BLKDQ67EPB3 / 00735858221276	BLKDH61BF / 00735858257121	BLKDH61BEB3 / 00735858220927
Processor Support	**Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**	**Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**	**Intel® Core™ i7, Intel® Core™ i5, and other Intel® processors in the LGA1155 package**
Chipset	Intel® Q67 Express Chipset	Intel® H61 Express Chipset	Intel® H61 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DisplayPort*+DVI-D + DVI-I)	Intel® HD graphics (DVI-D + VGA)	Intel® HD graphics (DVI-D + VGA)
Discrete Graphics Connector	One PCI Express* 2.0 x16 connector	One PCI Express* x16 connector	One PCI Express* x16 connector
Memory Support	Dual-channel DDR3 with two connectors for 1333 / 1066 MHz memory (16 GB[8] max)	Dual-channel DDR3 with two connectors for 1333 / 1066 / 800 MHz memory (16 GB[8] max)	Dual-channel DDR3 with two connectors for 1333 / 1066 / 800 MHz memory (16 GB[8] max)
Expansion Connectors	PCI Express Mini Card connector (half length)	Two PCI Express 2.0 x1 connectors	Two PCI Express 2.0 x1 connectors and one PCI connector
Audio[6]	Eight-channel Intel® High Definition Audio	Six-channel Intel® High Definition Audio	Eight-channel Intel® High Definition Audio
USB Ports	Four Super-Speed USB 3.0 ports (two external ports and two additional ports via internal headers) and eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)	Eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)	Ten Hi-Speed USB 2.0 ports (two external ports and eight additional ports via internal headers) and two USB 3.0 ports
1394 Ports	N/A	N/A	N/A
Storage	Two SATA ports (3.0 Gb/s), two SATA ports (6.0 Gb/s), and two eSATA back panel ports (3.0 Gb/s)	Four SATA ports (3.0 Gb/s)	Four SATA ports (3.0 Gb/s) and two SATA ports (6.0 Gb/s)
RAID	Intel® Rapid Storage Technology for RAID 0, 1, 5, and 10	N/A	N/A
Onboard LAN	Intel® PRO 10/100/1000 Network Connection Integrated NIC	Integrated 10/100/1000 Network Connection	Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	Yes (discrete)	N/A	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Desktop Utilities Intel® Integrator Toolkit	Intel® Core Utilities Bundle[10] Intel® Desktop Utilities ESET* Smart Security 5 (45-day license) Laplink* PCmover Express* McAfee* AntiVirus Plus* (60-day license) Splashtop* Remote Desktop	Intel® Core Utilities Bundle[10] Intel® Desktop Utilities ESET* Smart Security 4 Laplink* PCmover Express*
BIOS	N/A	N/A	BIOS Vault Technology
Windows* and WHQL Support	Windows* Vista* Premium Windows* 7	Windows* 7 Windows* 8 WHCK Certification	Windows Vista* Premium Windows* 7
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

	Intel® Desktop Board DH61CR	Intel® Desktop Board DH61DL	D33217GKE
Product Family	Intel® Desktop Board DH61CR	Intel® Desktop Board DH61DL	D33217GKE
Form Factor	MicroATX	Mini-ITX	4"x4"
Product Code / UPC	**BOXDH61CRB3 / 00735858220880**	**BOXDH61DLB3 / 00735858220941**	**BOXD33217IYE / N/A**
5-pack Outercase UPC	N/A	N/A	N/A
10-pack Product Code / UPC	BLKDH61CRB3 / 00735858220897	BLKDH61DLB3 / 00735858220958	N/A
Processor Support	**Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package**	**Intel® Core™ i7, Intel® Core™ i5, and Intel® Core™ i3 processors in the LGA1155 package**	**Intel® Core™ i3-3217U processor (soldered down) with active thermal solution**
Chipset	Intel® H61 Express Chipset	Intel® H61 Express Chipset	Intel® QS77 Express Chipset
Supports HT Technology[5]	Yes	Yes	Yes
Integrated Graphics Core[1]	Intel® HD graphics (DVI-D + VGA)	Intel® HD graphics (DVI-D + VGA)	Intel® HD graphics (Dual HDMI*)
Discrete Graphics Connector	One PCI Express* x16 connector	N/A	N/A
Memory Support	Dual-channel DDR3 with two connectors for 1333 / 1066 / 800 MHz memory (16 GB[8] max)	Dual-channel DDR3 with two connectors for 1333 / 1066 / 800 MHz memory (16 GB[8] max)	Dual-channel DDR3 with two connectors for 1600 / 1333 MHz memory (16 GB[8] max)
Expansion Connectors	Two PCI Express 2.0 x1 connectors and one PCI connector	One PCI Express* 2.0 x1 connector and one PCI Express Mini Card connector (full length)	One full-size PCI Express* Mini Card with mSATA support and one half-size PCI Express Mini Card
Audio[6]	Six-channel Intel® High Definition Audio	Six-channel Intel® High Definition Audio	Eight-channel (7.1) digital audio via two HDMI 1.4a outputs
USB Ports	Ten Hi-Speed USB 2.0 ports (four external ports and six additional ports via internal headers)	Eight Hi-Speed USB 2.0 ports (two external ports and six additional ports via internal headers) and two USB 3.0 ports	Five USB 2.0 ports (three external ports and two additional ports via internal headers)
1394 Ports	N/A	N/A	N/A
Storage	Four SATA ports (3.0 Gb/s)	Three SATA ports (3.0 Gb/s)	One full-size PCI Express Mini Card with mSATA support
RAID	N/A	N/A	N/A
Onboard LAN	Intel® PRO 10/100/1000 Network Connection	Intel® PRO 10/100/1000 Network Connection	Intel® PRO 10/100/1000 Network Connection
Trusted Platform Module	N/A	N/A	N/A
Lead Free	Yes	Yes	Yes
Software	Intel® Core Utilities Bundle[10] Intel® Desktop Utilities ESET* Smart Security 4 Laplink* PCmover Express*	Intel® Core Utilities Bundle[10] Intel® Desktop Utilities ESET* Smart Security 4 Laplink* PCmover Express*	N/A
BIOS	BIOS Vault Technology	BIOS Vault Technology	BIOS Vault Technology Visual BIOS Fast Boot
Windows* and WHQL Support	Windows Vista* Premium Windows* 7	Windows Vista* Premium Windows* 7	Windows* 7 and Windows* 8 WHCK Certification
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

	D33217CK	DCP847SKE	Intel® Desktop Board DN2800MT
Product Family	D33217CK	DCP847SKE	Intel® Desktop Board DN2800MT
Form Factor	4"x4"	4"x4"	Thin Mini-ITX
Product Code / UPC	BOXD33217BY / N/A	BOXDCCP847DYE / N/A	BOXDN2800MT / 00735858240376
5-pack Outercase UPC	N/A	N/A	N/A
10-pack Product Code / UPC	N/A	N/A	BLKDN2800MT / 00735858240383
Processor Support	Intel® Core™ i3-3217U processor (soldered down) with active thermal solution	Intel® Celeron® processor 847	Intel® Atom™ processor N2800 integrated
Chipset	Intel® QS77 Express Chipset	Intel® QS77 Express Chipset	Intel® NM10 Express Chipset
Supports HT Technology[5]	Yes	N/A	Yes
Integrated Graphics Core[1]	Intel® HD graphics (HDMI* + Thunderbolt™)	Intel® HD graphics (Dual HDMI*)	Intel® Graphics Media Accelerator 3650 (Embedded DisplayPort* + HDMI* + VGA + LVDS)
Discrete Graphics Connector	N/A	N/A	N/A
Memory Support	Dual-channel DDR3 with two connectors for 1600 / 1333 MHz memory (16 GB[8] max)	Dual-channel DDR3 with two connectors for 1600 / 1333 MHz memory (16 GB[8] max)	DDR3 with two SODIMM connectors for 1066 / 800 MHz memory (4 GB[8] max)
Expansion Connectors	One full-size PCI Express* Mini Card with mSATA support and one half-size PCI Express Mini Card	One full-size PCI Express* Mini Card with mSATA support and one half-size PCI Express Mini Card	One PCI Express* 2.0 x1 connector and two PCI Express Mini Card connectors
Audio[6]	Eight-channel (7.1) digital audio via two HDMI 1.4a outputs	Eight-channel (7.1) digital audio via two HDMI 1.4a outputs	Four-channel Intel® High Definition Audio
USB Ports	Five USB 2.0 ports (three external ports and two additional ports via internal headers)	Five USB 2.0 ports (three external ports and two additional ports via internal headers)	Eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)
1394 Ports	N/A	N/A	N/A
Storage	One full-size PCI Express Mini Card with mSATA support	One full-size PCI Express Mini Card with mSATA support	Two SATA ports (3.0 Gb/s)
RAID	N/A	N/A	N/A
Onboard LAN	Thunderbolt	Intel® PRO 10/100/1000 Network Connection	Integrated 10/100/1000 Network Connection
Trusted Platform Module	N/A	N/A	N/A
Lead Free	Yes	Yes	Yes
Software	N/A	N/A	Intel AppUp℠ Intel® Integrator Assistant ESET* Smart Security 4 Laplink* PCmover Express* Spiceworks* System Manageability*
BIOS	BIOS Vault Technology Visual BIOS Fast Boot	BIOS Vault Technology Visual BIOS Fast Boot	Intel® Easy Update Intel® Fast Boot Intel® Smart Recovery Unified Firmware Interface (UEFI)
Windows* and WHQL Support	Windows* 7 and Windows* 8 WHCK Certification	Windows* 7 and Windows* 8 WHCK Certification	Windows* WHQL certified
Warranty	3 year limited warranty	3 year limited warranty	3 year limited warranty

	Intel® Desktop Board D2500CC	Intel® Desktop Board D2500HN
Product Family	**Intel® Desktop Board D2500CC**	**Intel® Desktop Board D2500HN**
Form Factor	Mini-ITX	Mini-ITX
Product Code / UPC	**N/A**	**BOXD2500HN / 00735858221733**
5-pack Outercase UPC	N/A	N/A
10-pack Product Code / UPC	BLKD2500CC / 00735858223935	BLKD2500HN / 00735858221740
Processor Support	**Intel® Atom™ processor D2500 integrated**	**Intel® Atom™ processor D2500 integrated**
Chipset	Intel® NM10 Express Chipset	Intel® NM10 Express Chipset
Supports HT Technology[5]	N/A	N/A
Integrated Graphics Core[1]	Intel® Graphics Media Accelerator 3600 (DVI-I + VGA + LVDS)	Intel® Graphics Media Accelerator 3600 (VGA)
Discrete Graphics Connector	N/A	N/A
Memory Support	DDR3 with two SODIMM connectors for 1066 / 800 MHz memory (4 GB[8] max)	DDR3 with two SODIMM connectors for 1066 / 800 MHz memory (4 GB[8] max)
Expansion Connectors	One PCI connector and one PCI Express* Mini Card connector	One PCI connector
Audio[6]	Eight-channel Intel® High Definition Audio	Four-channel Intel® High Definition Audio
USB Ports	Seven Hi-Speed USB 2.0 ports (four external ports and three additional ports via internal headers)	Eight Hi-Speed USB 2.0 ports (four external ports and four additional ports via internal headers)
1394 Ports	N/A	N/A
Storage	Two SATA ports (3.0 Gb/s)	Two SATA ports (3.0 Gb/s)
RAID	N/A	N/A
Onboard LAN	Dual Integrated 10/100/1000 Network Connection	Integrated 10/100/1000 Network Connection
Trusted Platform Module	Yes	N/A
Lead Free	Yes	Yes
Software	Intel AppUp℠ Intel® Integrator Assistant ESET* Smart Security 4 Laplink* PCmover Express* Spiceworks* System Manageability*	Intel AppUp℠ Intel® Integrator Assistant ESET* Smart Security 4 Laplink* PCmover Express* Spiceworks* System Manageability*
BIOS	Intel® Easy Update Intel® Fast Boot Intel® Smart Recovery Unified Firmware Interface (UEFI)	Intel® Easy Update Intel® Fast Boot Intel® Smart Recovery Unified Firmware Interface (UEFI)
Windows* and WHQL Support	Windows* WHQL certified	Windows* WHQL certified
Warranty	3 year limited warranty	3 year limited warranty

For more information, visit **www.intel.com/desktopboards**

[1] Requires a processor with Intel® HD graphics.

[2] Connector is x16 in length, but only x4 electrically.

[3] Mini PCI* Express connector has SATA 6.0 Gb/s.

[4] Next Unit of Computing kits: Each kit contains motherboard, chassis, and power supply.

[5] Intel® Hyper-Threading Technology requires a computer system with a processor supporting HT Technology and an HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. For more information including details on which processors support HT Technology, see www.intel.com/info/hyperthreading

[6] 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 www.intel.com/design/chipsets/hdaudio.htm

[7] Warning: Altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

[8] System resources and hardware (such as PCI and PCI Express*) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.

[9] Intel® Extreme Tuning Utility is only compatible with Intel® Desktop Boards based on the Intel® X38 Express Chipset and newer. Auto-tuning capabilities may not be available for all Extreme Series Desktop Boards.

[10] The Intel® Core Utilities Bundle includes Intel® Integrator Assistant, Intel® Integrator Toolkit, Intel® Express Installer, and Intel® Express BIOS Update.

Intel® Ethernet Desktop Adapters

Intel offers an award-winning line of Ethernet, Fast Ethernet, and Gigabit Ethernet desktop adapters. Choose from a variety of adapters designed to extend Gigabit Ethernet performance to the desktop, enhance desktop management, and provide flexible connectivity for your legacy PCs.

10/100/1000 Mb/s-OVER-COPPER
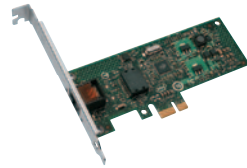
	Intel® Gigabit CT Desktop Adapter	Intel® PRO/1000 GT Desktop Adapter
Product Code—Singles	EXPI9301CT	PWLA8391GT
Product Code—Bulk Twenty Packs (Full-Height End Brackets)	EXPI9301CTBLK[1]	PWLA8391GTBLK
Product Code—Bulk Twenty Packs (Low-Profile End Brackets)	EXPI9301CTBLK[1]	PWLA8391GTLBLK
Connector	1 RJ-45	1 RJ-45
Ethernet Controllers	Intel® 82574L	Intel® 82541PI
Bus Width and Type	PCI Express* x1	32-bit PCI 2.3

For more information, visit the Intel Web site at: **www.intel.com/go/ethernet**

[1] Full-height bracket installed, low-profile bracket added in package.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

Mobile Highlights

| NEW | PROCESSOR NAME | PRODUCT CODE | BASE FREQ. (GHz) | INTEL® TURBO BOOST TECHNOLOGY 2.0[1] | | | GRAPHICS | GRAPHICS BASE / MAX. FREQ. (MHz) | DDR3 MEMORY (MHz) | DDR3L MEMORY (MHz) | L3 CACHE | TDP | PACKAGE / TYPE |
				MAX. SINGLE CORE TURBO (GHz)	MAX. DUAL CORE TURBO (GHz)	MAX. QUAD CORE TURBO (GHz)							
✓	i7-4900MQ	BX80647I74900MQ	2.80	3.80	3.70	3.60	Intel® HD graphics 4600	400 / 1300	1600	1600	8 MB	47 W	rPGA
✓	i7-4800MQ	BX80647I74800MQ	2.70	3.70	3.60	3.50	Intel HD graphics 4600	400 / 1300	1600	1600	6 MB	47 W	rPGA

MOBILE HIGHLIGHTS

For more information, visit **www.intel.com/go/notebooks**

Intel® Mobile Processors

Unlock your on-the-go computing experience with mobile-optimized processor technologies from Intel. Providing revolutionary levels of performance, long battery life, and expansive connectivity, along with enhanced security and manageability for business, Intel® technologies enable a powerful computing experience in sleek, thin, and light notebook designs.

| NEW | PROCESSOR NAME | PRODUCT CODE | BASE FREQ. (GHz) | INTEL® TURBO BOOST TECHNOLOGY 2.0[1] | | | GRAPHICS | GRAPHICS BASE / MAX. FREQ. (MHz) | DDR3 MEMORY (MHz) | DDR3L MEMORY (MHz) | L3 CACHE | TDP | PACKAGE / TYPE |
				MAX. SINGLE CORE TURBO (GHz)	MAX. DUAL CORE TURBO (GHz)	MAX. QUAD CORE TURBO (GHz)							
INTEL® CORE™ i7 – QC PROCESSORS													
✓	i7-4900MQ	BX80647I74900MQ	2.80	3.80	3.70	3.60	Intel® HD graphics 4600	400 / 1300	1600	1600	8 MB	47 W	rPGA
✓	i7-4800MQ	BX80647I74800MQ	2.70	3.70	3.60	3.50	Intel HD graphics 4600	400 / 1300	1600	1600	6 MB	47 W	rPGA
INTEL® CORE™ i7 – EXTREME EDITION PROCESSORS													
	i7-3920XM	AW8063801009606	2.90	3.80	3.70	3.60	Intel® HD graphics 4000	650 / 1300	1600	1600	8 MB	55 W	rPGA
INTEL® CORE™ i7 – QC PERFORMANCE PROCESSORS													
	i7-3820QM	BX80638I73820QM	2.70	3.70	3.60	3.50	Intel HD graphics 4000	650 / 1250	1600	1600	8 MB	45 W	rPGA, BGA 1224
	i7-3720QM	BX80638I73720QM	2.60	3.60	3.50	3.40	Intel HD graphics 4000	650 / 1250	1600	1600	6 MB	45 W	rPGA, BGA 1224
INTEL® CORE™ i7 – QC PROCESSORS													
	i7-3612QM	AV8063801130704	2.10	3.10	3	2.80	Intel HD graphics 4000	650 / 1100	1600	1600	6 MB	35 W	rPGA, BGA 1224
	i7-3610QM	AW8063801013511	2.30	3.30	3.20	3.10	Intel HD graphics 4000	650 / 1100	1600	1600	6 MB	45 W	rPGA 1224
	i7-3615QM	AV8063801013608	2.30	3.30	3.20	3.10	Intel HD graphics 4000	650 / 1200	1600	1600	6 MB	45 W	BGA 1224
INTEL® CORE™ i7 – DC POWER-OPTIMIZED PERFORMANCE PROCESSORS													
	i7-3520M	AW8063801028703	2.90	3.60	3.40	N/A	Intel HD graphics 4000	650 / 1250	1600	1600	4 MB	35 W	rPGA, BGA

For more information, visit **www.intel.com/go/notebooks**

| NEW | PROCESSOR NAME | PRODUCT CODE | BASE FREQ. (GHz) | INTEL® TURBO BOOST TECHNOLOGY 2.0[1] | | | GRAPHICS | GRAPHICS BASE / MAX. FREQ. (MHz) | DDR3 MEMORY (MHz) | DDR3L MEMORY (MHz) | L3 CACHE | TDP | PACKAGE / TYPE |
				MAX. SINGLE CORE TURBO (GHz)	MAX. DUAL CORE TURBO (GHz)	MAX. QUAD CORE TURBO (GHz)							
INTEL® CORE™ i5 – DC POWER-OPTIMIZED PERFORMANCE PROCESSORS													
	i5-3360M	AW8063801031002	2.80	3.50	3.30	N/A	Intel® HD graphics 4000	650 / 1200	1600	1600	3 MB	35 W	rPGA, BGA
	i5-3320M	AW8063801031700	2.60	3.30	3.10	N/A	Intel HD graphics 4000	650 / 1200	1600	1600	3 MB	35 W	rPGA, BGA
INTEL® CORE™ i5 – DC PROCESSORS													
	i5-3210M	AW8063801032301	2.50	3.10	2.90	N/A	Intel HD graphics 4000	650 / 1100	1600	1600	3 MB	35 W	rPGA, BGA
INTEL® CORE™ i3 – DC PROCESSORS													
	i3-3110M	AW8063801032700	2.40	N/A	N/A	N/A	Intel HD graphics 4000	650 / 1000	1600	1600	3 MB	35 W	rPGA, BGA
INTEL® CORE™ i7 – ULTRA-LOW VOLTAGE PROCESSORS													
	i7-3667U	AV8063801057405	2	3.20	3	N/A	Intel HD graphics 4000	350 / 1150	1600	1600	4 MB	17 W	BGA
	i7-3517U	AV8063801057605	1.90	3	2.80	N/A	Intel HD graphics 4000	350 / 1150	1600	1600	4 MB	17 W	BGA
INTEL® CORE™ i5 – ULTRA-LOW VOLTAGE PROCESSORS													
	i5-3317U	AV8063801058002	1.70	2.60	2.40	N/A	Intel HD graphics 4000	350 / 1050	1600	1600	3 MB	17 W	BGA
	i5-3427U	AV8063801057801	1.80	2.80	2.60	N/A	Intel HD graphics 4000	350 / 1150	1600	1600	3 MB	17 W	BGA
INTEL® CORE™ i3 – ULTRA-LOW VOLTAGE PROCESSORS													
	i3-3217U	AV8063801058401	1.80	N/A	N/A	N/A	Intel HD graphics 4000	350 / 1050	1600	1600	3 MB	17 W	BGA

For more information, visit **www.intel.com/go/notebooks**

[1] Intel® Turbo Boost Technology—maximum single-core turbo frequency (GHz). Intel Turbo Boost Technology requires a PC 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 PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

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

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, Intel Core, and Core Inside are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

intel® Mobile Wireless

SEGMENT	SIMPLE CONNECTIVITY		DUAL-STREAM		
Intel® Wireless (Intel Code Name)	Intel® Centrino® Wireless-N 105 (Canyon Peak)	Intel® Centrino® Wireless-N 135 (Canyon Peak + Bluetooth*)	Intel® Centrino® Wireless-N 2200 (Marble Peak)	Intel® Centrino® Wireless-N 2230 (Jackson Peak 1)	Intel® Centrino® Wireless-N 7260BN (Wilkins Peak 2)
Speed Spatial Streams (Tx and Rx)	150 Mb/s (1x1)	150 Mb/s (1x1)	300 Mb/s (2x2)	300 Mb/s (2x2)	300 Mb/s (2x2)
Bands	Single Band – 2.40 GHz	Single Band – 2.40 GHz	Single Band – 2.40 GHz	Single Band – 2.40 GHz	Single Band – 2.40 GHz
Form Factor	Half Mini-Card	Half Mini-Card	Half Mini-Card	Half Mini-Card	Half Mini-Card, M.2
Enterprise / SMB Features	Intel® PROSet / Wireless Software	Intel® PROSet / Wireless Software	Intel® PROSet / Wireless Software	Intel® PROSet / Wireless Software	Intel® PROSet / Wireless Software Cisco* CCXv4
Intel® vPro™ Technology					
Intel® Connect Center	✓	✓	✓	✓	✓
Intel® Wireless Display			Intel® WiDi Wireless Display	Intel® WiDi Wireless Display	Intel® WiDi Wireless Display
Laplink* PCsync* Software			✓	✓	✓
Intel® Smart Connect Technology			✓	✓	✓
Bluetooth* 4		Bluetooth®		Bluetooth®	Bluetooth®
WiFi* Certification (802.11)	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n
Order Codes - HMC 100 pieces 10 pieces	105BN.HMWG 105BN.HMWWB	135BN.HMWG 135BN.HMWWB	2200BN.HMWG 2200BN.HMWWB	2230BN.HMWG 2230BN.HMWWB	7260.HMWBNG 7260.HMWBNWB
Order Codes - M.2 100 pieces 10 pieces					7260.NGWBNG 7260.NGWBNWB

SEGMENT	DUAL BAND		ADVANCED FEATURES		ULTIMATE	
Intel® Wireless (Intel Code Name)	Intel® Centrino® Wireless-N 7260NB (Wilkins Peak 2)	Intel® Centrino® Wireless-N 7260AN (Wilkins Peak 2)	Intel® Centrino® Advanced-N 6205 (Taylor Peak)	Intel® Centrino® Advanced-N 6235 (Jackson Peak 2)	Intel® Centrino® Ultimate-N 6300 (Puma Peak 3x3)	Intel® Dual Band Wireless-AC 7260 (Wilkins Peak 2)
Speed Spatial Streams (Tx and Rx)	300 Mb/s (2x2)	300 Mb/s (2x2)	300 Mb/s (2x2)	300 Mb/s (2x2)	450 Mb/s (3x3)	867 Mb/s (2x2)
Bands	Dual Band – 2.40 GHz and 5 GHz	Dual Band – 2.40 GHz and 5 GHz	Dual Band – 2.40 GHz and 5 GHz	Dual Band – 2.40 GHz and 5 GHz	Dual Band – 2.40 GHz and 5 GHz	Dual Band – 2.40 GHz and 5 GHz
Form Factor	Half Mini-Card, M.2	Half Mini-Card, M.2	Half Mini-Card	Half Mini-Card	Half Mini-Card	Half Mini-Card, M.2
Enterprise / SMB Features	Intel® PROSet / Wireless Software Cisco* CCXv4	Intel® PROSet / Wireless Software Cisco* CCXv4	Intel® PROSet / Wireless Software Cisco* CCXv4	Intel® PROSet / Wireless Software Cisco* CCXv4	Intel® PROSet / Wireless Software Cisco* CCXv4	Intel® PROSet / Wireless Software Cisco* CCXv4
Intel® vPro™ Technology	✓	✓	✓	✓	✓	✓
Intel® Connect Center	✓	✓	✓	✓	✓	✓
Intel® Wireless Display	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display	(intel) WiDi Wireless Display
Laplink* PCsync* Software	✓	✓	✓	✓	✓	✓
Intel® Smart Connect Technology	✓	✓	✓	✓	✓	✓
Bluetooth* 4		Bluetooth®		Bluetooth®		Bluetooth®
WiFi* Certification (802.11)	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11n	WiFi CERTIFIED 802.11ac, 802.11n
Order Codes - HMC 100 pieces 10 pieces	7260.HMWNBG 7260.HMWNBWB	7260.HMWANG 7260.HMWANWB	62205AN.HMWG 62205AN.HMWWB	6235AN.HMWG 6235AN.HMWWB	633AN.HMWG 633AN.HMWWB	7260.HMWG 7260.HMWWB
Order Codes - M.2 100 pieces 10 pieces	7260.NGWNBG 7260.NGWNBWB	7260.NGWANG 7260.NGWANWB				7260.NGWG 7260.NGWWB

For more information, visit **www.intel.com/go/wireless**

(intel) Server Highlights

NEW SERVER PROCESSOR PRODUCT FAMILY

INTEL® XEON® PROCESSOR E3-1200 V3 PRODUCT FAMILY[1]
The Intel® Xeon® processor E3-1200 v3 product family supports a range of business needs. Platforms based on the Intel Xeon processor E3-1200 v3 product family can be used as an entry server for small business applications or as an entry workstation for CAD and financial services. New low-power SKUs are uniquely suited to support scale-out workloads in microserver platforms and graphics-enabled SKUs support remote/virtual graphics capabilities and media transcode usages in the data center.

GET REAL SERVER POWER WITH A NEW FAMILY OF ENTRY-LEVEL SERVER BOARDS AND SYSTEMS

Intel has a new line of server products optimized for the Intel Xeon processor E3-1200 v3 product family. Four server boards customized for rack or pedestal systems provide the flexibility required to meet your customers small business needs.

Intel® Server Board S1200V3RPS: lowest-cost pedestal solution with basic server features
Intel® Server Board S1200V3RPL: pedestal solution with optional management
Intel® Server Board S1200V3RPO: rack optimized with I/O expansion
Intel® Server Board S1200V3RPM: rack optimized with I/O expansion and enhanced processor graphics support

See the Server Board and Server System sections of this matrix for product specific information or go online to **www.intel.com/go/serverproducts**

INTEL® SERVER PRODUCTS: STOCKED, FOCUSED, AND READY TO SELL

Intel is taking action in 2013 to streamline their server products roadmap and improve availability of high-demand SKUs by creating new Focus SKUs targeted at SMB, storage, cloud / datacenter, and HPC segments.

For more information, contact your Intel Sales Representative or visit
www.IntelServerEdge.com/promo
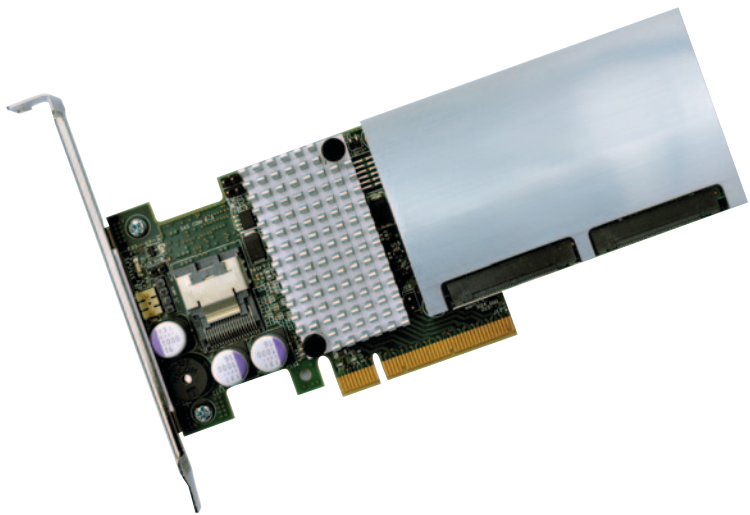
INTEL® RAID AND INTEGRATED SOLID-STATE DRIVES: BETTER TOGETHER

The Intel® RAID SSD Cache Controller RCS25ZB040 delivers up to 1 TB of onboard Flash-based cache and two 800 MHz RAID-On-Chip processor cores to help accelerate business applications. The Intel® RCS25ZB040, powered by LSI* Nytro MegaRAID technology, unleashes the IOPS and throughput potential afforded by solid-state memory without requiring a full array of SSD drives.

With SSDs built right into the RAID controller, the Intel RCS25ZB040 utilizes intelligent caching algorithms to help identify frequently accessed data or "hot spots" and to promote them to the fast on-board Flash. This greatly increases performance of most applications—especially applications that rely on small-size transfers where the latency inherent in hard disk drives becomes a bottleneck.

For product specifications see the RAID section of this Matrix or **www.intelraid.com**

EXPLORE EVEN GREATER PERFORMANCE FROM INTEL® XEON PHI™ COPROCESSORS WITH INTEL® SERVER BOARDS AND SYSTEMS

Intel® Server Boards and Systems, an ideal platform for Intel® Xeon Phi™ coprocessor deployments.

Featuring:
- Full board support, including half-width options
- System support for up to 4 Intel® Xeon Phi™ coprocessors
- 1U, 2U, and 4U configurations
- 1, 2, and 4 socket solutions

Intel Xeon Phi coprocessors, combined with a broad range of Infiniband* solutions, make Intel® systems the foundation for performance hungry clusters.

CONFIGURATION	INTEL® SERVER SYSTEM	MAX NUMBER OF INTEL® XEON PHI™ COPROCESSORS SUPPORTED
1U	R1000JP	1 (passive)
2U	R2000GZ	2 (active or passive)
	R2000BB	2 (active)
	R2000LH	2 (active)
4U	P4000IP	4 (active)
	P4000CR	4 (active)
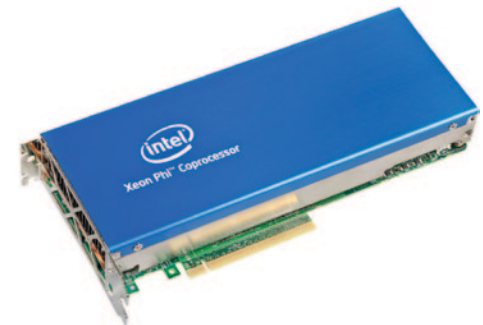
BIG DATA. BIG BUNDLE. BIG SAVINGS.

INTEL IS MAKING BIG DATA MORE AFFORDABLE FOR YOU AND YOUR CUSTOMERS
Receive a discount of 30 percent or more when you purchase select high-performance computing SKUs from Intel's Server Boards and Systems Group together with the recently released Intel® Manager and Distribution for Apache Hadoop* Software.[3]

How the Bundle Works:
Purchase the recommended Intel® Server Products together with a four-node license (1 year) of Intel Manager and Distribution for Apache Hadoop to receive special pricing. Optional Professional Services offered in affordable, smaller-sized packages.

For a current list of products offered or for more information, go to
intelserveredge.com/big-data

NEXT-GENERATION SERVER CONFIGURATOR TOOL

NEW TOOL. NEW CAPABILITIES. NEW EXPERIENCE.
Intel has launched a completely revitalized Server Configurator Tool with features such as save and share, integrated technical documents, THOL reporting, and more.

Come check it out at **http://serverconfigurator.intel.com**

PASS-THROUGH CERTIFICATIONS AVAILABLE

Pass-Through-Certifications for Microsoft*, Red Hat*, VMware*, Suse* and Intel® Cluster Ready are still available for existing Intel® Server Products. Support for Oracle*, Citrix* and EMC Certification are also available through the end of 2013.

Open access at **www.esaa-members.com**

For more information, visit **www.intel.com/xeon** and **www.intel.com/go/serverproducts**

[1] 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.

[2] Memory transfer rate of 1600 MHz is the full capacity of the Intel® Xeon® processor E5-4600.

[3] 30% savings is based on comparison of components being purchasing separately. Promotion requires products be purchased together.

Intel® Server Platforms

BETTER TOGETHER: RECOMMEND THE BEST INTEL® XEON® PROCESSOR AND INTEL® CHIPSET

SEGMENT	POSITIONING	RECOMMENDED PROCESSOR SERIES[1]	MAX. SOCKETS PER SYSTEM	NO. OF CORES	MAX. FREQ.[2]	POWER	INTEL® QPI (GT/S)[3]	CACHE	RECOMMENDED INTEL® CHIPSET
EXPANDABLE **Leading performance, reliability, and scalability** **Target usage:** Optimized for large enterprises, data centers, and server consolidation **Recommended configuration:** 4+ processors	Best	Intel® Xeon® processor E7 product family	Up to 8	Up to 10	2.66 GHz	95–130 W	Up to 6.40 GT/s	Up to 30 MB L3	Intel® 7500 Chipset
	Better	Intel® Xeon® processor E5-4600 product family	4	Up to 8	2.90 GHz	95–130 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
EFFICIENT PERFORMANCE **Energy efficient, cost effective** **Target usage:** Optimized for general purpose servers (e-mail, Web, file, business applications), IT infrastructure virtualization, and cloud computing **Recommended configuration:** 2 processors	Best	Intel® Xeon® processor E5-2600 product family	2	Up to 8	3.10 GHz	60–150 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
	Better	Intel® Xeon® processor E5-2400 product family	2	Up to 8	2.30 GHz	60–95 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
	Good	Intel® Xeon® processor 5600 series	2	Up to 6	3.46 GHz	40–130 W	Up to 6.40 GT/s	Up to 12 MB L3 shared	Intel® 5520 Chipset
ENTRY **Cost optimized** **Target usage:** Small businesses with fewer than 100 employees, basic needs (e-mail, network, file / print) **Recommended configuration:** 1–2 processors	Best	Intel® Xeon® processor E5-2400 product family	2	Up to 8	2.30 GHz	60–95 W	Up to 5.86 GT/s	Up to 12 MB L3 shared	Intel® C600 Chipset
	Better	Intel® Xeon® processor E3-1200 v3 product family	1	4	3.70 GHz	16–95 W	N/A	Up to 8 MB Intel® Smart Cache	Intel® C222, C224, or C226 Chipset
	Good	Intel® Xeon® processor E3-1200 v2 product family	1	4	3.50 GHz	17–95 W	N/A	Up to 8 MB Intel® Smart Cache	Intel® C202, C204, or C206 Chipset

INTEL® SERVER PLATFORMS

For more information, visit **www.intel.com/xeon**

INTEL® SERVER PLATFORMS

BETTER TOGETHER: RECOMMEND THE BEST INTEL® XEON® PROCESSOR AND INTEL® CHIPSET

SEGMENT	POSITIONING	RECOMMENDED PROCESSOR SERIES[1]	MAX. SOCKETS PER SYSTEM	NO. OF CORES	MAX. FREQ.[2]	POWER	INTEL® QPI (GT/S)[3] / MAX. BUS (MHZ)	CACHE	RECOMMENDED INTEL® CHIPSET
HPC **Optimized for high-performance analytics** **Target usage:** Bandwidth-intensive applications, high-performance clusters, and complex computation	Best	Intel® Xeon® processor E7 product family	Up to 8	Up to 10	2.66 GHz	95–130 W	1066 MHz	Up to 30 MB L3	Intel® 7500 Chipset
	Better	Intel® Xeon® processor E5-2600 product family	2	Up to 8	3.10 GHz	60–150 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
	Good	Intel® Xeon® processor E5-2400 product family	2	Up to 8	2.30 GHz	60–95 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
WORKSTATION **Optimized for complex analysis / visualization** **Target usage:** Graphics rendering, multimedia content development, engineering applications (CAD / CAM), software development	Best	Intel® Xeon® processor E5-2600 product family	2	Up to 8	3.10 GHz	60–150 W	Up to 8 GT/s	Up to 20 MB L3 shared	Intel® C600 Chipset
	Better	Intel® Xeon® processor E5-1600 product family	1	Up to 6	3.30 GHz	130 W	N/A	Up to 15 MB L3 shared	Intel® C600 Chipset
	Good	Intel® Xeon® processor E3-1200 v3 product family	1	4	3.70 GHz	95 W	N/A	Up to 8 MB Intel® Smart Cache	Intel® C226 Chipset

For more information, visit **www.intel.com/xeon**

[1] 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.

[2] Processor frequency as shown represents maximum frequency specification for the respective processor number family.

[3] Intel® QPI–Intel® QuickPath Interconnect; GT/s–Gigatransfers per second.

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.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel® Xeon® processors are the preferred choice for demanding server and workstation applications. Intel® server processors deliver enhanced, energy-efficient performance for data-intensive business applications and enable users to optimize and scale computing environments that maximize server utilization to workload, while providing headroom for growth. Workstation users can design, model, create, and visualize faster on innovation platforms powered by Intel Xeon processors.

INTEL® XEON® PROCESSOR E3-1200 v3 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1150 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
✓	Intel® Xeon® processor E3-1280 v3	CM8064601467001 (tray only)	3.60 GHz	4 GHz	8 MB	1600 MHz	4 / 8		✓	✓	80 W	N/A
✓	Intel Xeon processor E3-1270 v3	BX80646E31270V3 (box) CM8064601467101 (tray)	3.50 GHz	3.90 GHz	8 MB	1600 MHz	4 / 8		✓	✓	80 W	7 35858 25952 1
✓	Intel Xeon processor E3-1240 v3	BX80646E31240V3 (box) CM8064601467102 (tray)	3.40 GHz	3.80 GHz	8 MB	1600 MHz	4 / 8		✓	✓	80 W	7 35858 25958 3
✓	Intel Xeon processor E3-1230 v3	BX80646E31230V3 (box) CM8064601467202 (tray)	3.30 GHz	3.70 GHz	8 MB	1600 MHz	4 / 8		✓	✓	80 W	7 35858 25970 5
✓	Intel Xeon processor E3-1220 v3	BX80646E31220V3 (box) CM8064601467204 (tray)	3.10 GHz	3.50 GHz	8 MB	1600 MHz	4 / 4			✓	80 W	7 35858 25976 7
✓	Intel Xeon processor E3-1275 v3	BX80646E31275V3 (box) CM8064601466508 (tray)	3.50 GHz	3.90 GHz	8 MB	1600 MHz	4 / 8	Intel® HD graphics P4600	✓	✓	95 W	7 35858 25934 7
✓	Intel Xeon processor E3-1245 v3	BX80646E31245V3 (box) CM8064601466509 (tray)	3.40 GHz	3.80 GHz	8 MB	1600 MHz	4 / 8	Intel HD graphics P4600	✓	✓	95 W	7 35858 25940 8

INTEL® SERVER / WORKSTATION PROCESSORS

For more information, visit **www.intel.com/xeon**

INTEL® XEON® PROCESSOR E3-1200 v3 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1150 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
✓ NEW	**Intel® Xeon® processor E3-1225 v3**	**BX80646E31225V3** (box) **CM8064601466507** (tray)	3.20 GHz	3.60 GHz	8 MB	1600 MHz	4 / 4	Intel® HD graphics P4600		✓	95 W	7 35858 25946 0
✓	**Intel Xeon processor E3-1265L v3**	**CM8064601467406** (tray only)	2.50 GHz	3.70 GHz	8 MB	1600 MHz	4 / 8	Intel® HD graphics	✓	✓	45 W	N/A
✓	**Intel Xeon processor E3-1230L v3**	**CM8064601467601** (tray only)	1.80 GHz	2.80 GHz	8 MB	1600 MHz	2 / 4		✓	✓	25 W	N/A
✓	**Intel Xeon processor E3-1285 v3**	**CM8064601466703** (tray only)	3.60 GHz	4 GHz	8 MB	1600 MHz	4 / 8	Intel® HD graphics P4700	✓	✓	95 W	N/A
✓	**Intel Xeon processor E3-1285L v3**	**CM8064601466804** (tray only)	3.10 GHz	3.90 GHz	8 MB	1600 MHz	4 / 8	Intel HD graphics P4700	✓	✓	65 W	N/A

INTEL® XEON® PROCESSOR E3-1200 v2 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1155 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	**Intel® Xeon® processor E3-1290 v2**	**CM8063701099102** (tray only)	3.70 GHz	4.10 GHz	8 MB	1600 MHz	4 / 8		✓	✓	87 W	N/A
	Intel Xeon processor E3-1280 v2	**BX80637E31280V2** (box) **CM8063701098404** (tray)	3.60 GHz	4 GHz	8 MB	1600 MHz	4 / 8		✓	✓	69 W	7 35858 24236 3
	Intel Xeon processor E3-1270 v2	**BX80637E31270V2** (box) **CM8063701098301** (tray)	3.50 GHz	3.90 GHz	8 MB	1600 MHz	4 / 8		✓	✓	69 W	7 35858 24242 4
	Intel Xeon processor E3-1240 v2	**BX80637E31240V2** (box) **CM8063701098201** (tray)	3.40 GHz	3.80 GHz	8 MB	1600 MHz	4 / 8		✓	✓	69 W	7 35858 24249 3

INTEL® SERVER / WORKSTATION PROCESSORS

INTEL® XEON® PROCESSOR E3-1200 v2 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1155 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

INTEL® SERVER / WORKSTATION PROCESSORS

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor E3-1230 v2	BX80637E31230V2 (box) CM8063701098101 (tray)	3.30 GHz	3.70 GHz	8 MB	1600 MHz	4 / 8		✓	✓	69 W	7 35858 24255 4
	Intel Xeon processor E3-1220 v2	BX80637E31220V2 (box) CM8063701160503 (tray)	3.10 GHz	3.50 GHz	8 MB	1600 MHz	4 / 4			✓	17 W	7 35858 24261 5
	Intel Xeon processor E3-1275 v2	BX80637E31275V2 (box) CM8063701098702 (tray)	3.50 GHz	3.90 GHz	8 MB	1600 MHz	4 / 8	Intel® HD graphics P4000	✓	✓	77 W	7 35858 24212 7
	Intel Xeon processor E3-1265L v2	BX80637E31265L2 (box) CM8063701098602 (tray)	2.50 GHz	3.50 GHz	8 MB	1600 MHz	4 / 8	Intel® HD graphics	✓	✓	45 W	7 35858 24218 9
	Intel Xeon processor E3-1245 v2	BX80637E31245V2 (box) CM8063701098602 (tray)	3.40 GHz	3.80 GHz	8 MB	1600 MHz	4 / 8	Intel HD graphics P4000	✓	✓	77 W	7 35858 24224 0
	Intel Xeon processor E3-1225 v2	BX80637E31225V2 (box) CM8063701160603 (tray)	3.20 GHz	3.60 GHz	8 MB	1600 MHz	4 / 4	Intel HD graphics P4000		✓	77 W	7 35858 24230 1
	Intel Xeon processor E3-1220L v2	CM8063701099001 (tray only)	2.30 GHz	3.50 GHz	3 MB	1600 MHz	2 / 4		✓	✓	20 W	N/A

INTEL® XEON® PROCESSOR E3-1200 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1155 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
	Intel® Xeon® processor E3-1290	CM8062301071705 (tray only)	3.60 GHz	4 GHz	8 MB	1333 MHz	4 / 8		✓	✓	95 W (thermal solution not included)	N/A
	Intel Xeon processor E3-1280	BX80623E31280 (box) CM8062307261903 (tray)	3.50 GHz	3.90 GHz	8 MB	1333 MHz	4 / 8		✓	✓	95 W	7 35858 21763 7
	Intel Xeon processor E3-1270	BX80623E31270 (box) CM8062307262403 (tray)	3.40 GHz	3.80 GHz	8 MB	1333 MHz	4 / 8		✓	✓	80 W	7 35858 21764 4
	Intel Xeon processor E3-1240	BX80623E31240 (box) CM8062307262503 (tray)	3.30 GHz	3.70 GHz	8 MB	1333 MHz	4 / 8		✓	✓	80 W	7 35858 21765 1
	Intel Xeon processor E3-1230	BX80623E31230 (box) CM8062307262610 (tray)	3.20 GHz	3.60 GHz	8 MB	1333 MHz	4 / 8		✓	✓	80 W	7 35858 21766 8
	Intel Xeon processor E3-1220	BX80623E31220 (box) CM8062300921702 (tray)	3.10 GHz	3.40 GHz	8 MB	1333 MHz	4 / 4			✓	80 W	7 35858 21767 5
	Intel Xeon processor E3-1275	BX80623E31275 (box) CM8062307262003 (tray)	3.40 GHz	3.80 GHz	8 MB	1333 MHz	4 / 8	Intel® HD graphics P3000	✓	✓	95 W	7 35858 21763 7
	Intel Xeon processor E3-1245	BX80623E31245 (box) CM8062307262103 (tray)	3.30 GHz	3.70 GHz	8 MB	1333 MHz	4 / 8	Intel HD graphics P3000	✓	✓	95 W	7 35858 21764 4
	Intel Xeon processor E3-1235	BX80623E31235 (box) CM8062307262206 (tray)	3.20 GHz	3.60 GHz	8 MB	1333 MHz	4 / 8	Intel HD graphics P3000	✓	✓	95 W	7 35858 21769 9

INTEL® XEON® PROCESSOR E3-1200 PRODUCT FAMILY FOR SERVER AND WORKSTATION SYSTEMS FEATURING ONE LGA1155 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	SINGLE-CORE TURBO MAX. SPEED	INTEL® SMART CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® GRAPHICS ENGINE	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor E3-1225	BX80623E31225 (box) CM8062307262304 (tray)	3.10 GHz	3.40 GHz	8 MB	1333 MHz	4 / 4	Intel® HD graphics P3000		✓	95 W	7 35858 21765 1
	Intel Xeon processor E3-1260L	CM8062301061800 (tray only)	2.40 GHz	3.30 GHz	8 MB	1333 MHz	4 / 8	Intel® HD graphics 2000	✓	✓	45 W	N/A
	Intel Xeon processor E3-1220L	CM8062307262828 (tray only)	2.20 GHz	3.40 GHz	3 MB	1333 MHz	2 / 4		✓	✓	20 W	N/A

INTEL® THERMAL SOLUTION FOR SERVER / WORKSTATION SYSTEMS FEATURING ONE LGA1155 SOCKET

PRODUCT NAME	BOXED PRODUCT CODE	DESCRIPTION	RECOMMENDED USAGE[3]	MAX. THERMAL DESIGN POWER
Intel® Thermal Solution XTS100H	**BXXTS100H**	Active thermal solution with fixed fan	High-end Intel® Thermal Solution supporting processors up to 95 W in pedestal chassis; for use with the Intel® Xeon® processor E3-1290.	95 W

INTEL® XEON® PROCESSOR W3600 SERIES FOR WORKSTATION SYSTEMS FEATURING ONE LGA1366 SOCKET (THERMAL SOLUTION INCLUDED)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor W3690	BX80613W3690 (box) AT80613005931AB (tray)	3.46 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	130 W	7 35858 21786 6
	Intel Xeon processor W3680	BX80613W3680 (box) AT80613003543AF (tray)	3.33 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	130 W	7 35858 21408 7
	Intel Xeon processor W3670	BX80613W3670 (box) AT80613005490AC (tray)	3.20 GHz	4.80 GT/s	12 MB	1066 MHz	6 / 12	✓	✓	130 W	7 35858 21409 4

INTEL® SERVER / WORKSTATION PROCESSORS

INTEL® XEON® PROCESSOR W3500 SERIES FOR WORKSTATION SYSTEMS FEATURING ONE LGA1366 SOCKET (THERMAL SOLUTION INCLUDED WITH BOX SKUS)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor W3580	BX80601W3580 (box) AT80601002274AB (tray)	3.33 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	✓	✓	130 W	7 35858 21004 1
	Intel Xeon processor W3570	BX80601W3570 (box) AT80601000918AB (tray)	3.20 GHz	6.40 GT/s	8 MB	1333 MHz	4 / 8	✓	✓	130 W	7 35858 20633 4
	Intel Xeon processor W3565	BX80601W3565 (box) AT80601002727AB (tray)	3.20 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 8	✓	✓	130 W	7 35858 21200 7
	Intel Xeon processor W3550	BX80601W3550 (box) AT80601002112AB (tray)	3.06 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 8	✓	✓	130 W	7 35858 21005 8
	Intel Xeon processor W3540	BX80601W3540 (box) AT80601000921AB (tray)	2.93 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 8	✓	✓	130 W	7 35858 20634 1
	Intel Xeon processor W3530	BX80601W3530 (box) AT80601000897AB (tray)	2.80 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 8	✓	✓	130 W	7 35858 21384 4
	Intel Xeon processor W3520	BX80601W3520 (box) AT80601000741AB (tray)	2.66 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 8	✓	✓	130 W	7 35858 20635 8

INTEL® SERVER / WORKSTATION PROCESSORS

INTEL® XEON® PROCESSOR E5-2600 PRODUCT FAMILY FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
Intel® Xeon® processor E5-2687W	BX80621E52687W (box) CM8062107184308 (tray)	3.10 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	150 W	7 35858 22396 6
Intel Xeon processor E5-2690	BX80621E52690 (box) CM8062101122501 (tray)	2.90 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	135 W	7 35858 24086 4
Intel Xeon processor E5-2680	BX80621E52680 (box) CM8062107184424 (tray)	2.70 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	130 W	7 35858 22397 3
Intel Xeon processor E5-2670	BX80621E52670 (box) CM8062101082713 (tray)	2.60 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	115 W	7 35858 22398 0
Intel Xeon processor E5-2667	CM8062100854802 (tray only)	2.90 GHz	7.20 GT/s	15 MB	1600 MHz	6 / 12	✓	✓	130 W	N/A
Intel Xeon processor E5-2665	BX80621E52665 (box) CM8062101143101 (tray)	2.40 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	155 W	7 35858 22400 0
Intel Xeon processor E5-2660	BX80621E52660 (box) CM8062107184801 (tray)	2.20 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	95 W	7 35858 22401 7

INTEL® XEON® PROCESSOR E5-2600 PRODUCT FAMILY FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
Intel® Xeon® processor E5-2658	CM8062101042805 (tray only)	2.10 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	95 W	N/A
Intel Xeon processor E5-2650	BX80621E52650 (box) CM8062100856218 (tray)	2 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	95 W	7 35858 22402 4
Intel Xeon processor E5-2643	CM8062107185605 (tray only)	3.30 GHz	6.40 GT/s	10 MB	1600 MHz	4 / 8	✓	✓	130 W	N/A
Intel Xeon processor E5-2640	BX80621E52640 (box) CM8062100856401 (tray)	2.50 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 22403 1
Intel Xeon processor E5-2630	BX80621E52630 (box) CM8062101038801 (tray)	2.30 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 22404 8
Intel Xeon processor E5-2620	BX80621E52620 (box) CM8062101048401 (tray)	2 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 22405 5
Intel Xeon processor E5-2609	BX80621E52609 (box) CM8062107186604 (tray)	2.40 GHz	6.40 GT/s	10 MB	1066 MHz	4 / 4			80 W	7 35858 23265 4
Intel Xeon processor E5-2603	BX80621E52603 (box) CM8062100856501 (tray)	1.80 GHz	6.40 GT/s	10 MB	1066 MHz	4 / 4			80 W	7 35858 23270 8
Intel Xeon processor E5-2650L	CM8062107185309 (tray only)	1.80 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	70 W	N/A
Intel Xeon processor E5-2648L	CM8062100854905 (tray only)	1.80 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	70 W	N/A
Intel Xeon processor E5-2630L	CM8062107185405 (tray only)	2 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	65 W	N/A

INTEL® SERVER / WORKSTATION PROCESSORS

INTEL® XEON® PROCESSOR E5-1600 PRODUCT FAMILY FOR WORKSTATION SYSTEMS FEATURING ONE LGA2011 SOCKET (THERMAL SOLUTION SOLD SEPARATELY)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
	Intel® Xeon® processor E5-1660	BX80621E51660 (box) CM8062107284111 (tray)	3.30 GHz	15 MB	1600 MHz	6 / 12	✓	✓	130 W	7 35858 22440 6
	Intel Xeon processor E5-1650	CM8062101102002 (tray only)	3.20 GHz	12 MB	1600 MHz	6 / 12	✓	✓	150 W	N/A
	Intel Xeon processor E5-1620	CM8062101038606 (tray only)	3.60 GHz	10 MB	1600 MHz	4 / 8	✓	✓	130 W	N/A

INTEL® XEON® PROCESSOR E5-2400 PRODUCT FAMILY FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
	Intel® Xeon® processor E5-2470	BX80621E52470 (box) CM8062007187242 (tray)	2.30 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	95 W	7 35858 23023 9
	Intel Xeon processor E5-2450	BX80621E52450 (box) CM8062000862501 (tray)	2.10 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	95 W	7 35858 23003 1
	Intel Xeon processor E5-2440	BX80621E52440 (box) CM8062000862604 (tray)	2.40 GHz	7.20 GT/s	15 MB	1333 MHz	8 / 16	✓	✓	95 W	7 35858 23008 6
	Intel Xeon processor E5-2430	BX80621E52430 (box) CM8062001122601 (tray)	2.20 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 23013 0
	Intel Xeon processor E5-2420	BX80621E52420 (box) CM8062001183000 (tray)	1.90 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	80 W	7 35858 23018 5

INTEL® XEON® PROCESSOR E5-2400 PRODUCT FAMILY FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI⁴ SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY¹	INTEL® TURBO BOOST TECHNOLOGY²	POWER	UPC CODE
	Intel® Xeon® processor E5-2407	BX80621E52407 (box) CM8062001048200 (tray)	2.20 GHz	6.40 GT/s	10 MB	1066 MHz	4 / 4			70 W	7 35858 23029 1
	Intel Xeon processor E5-2403	BX80621E52403 (box) CM8062001048300 (tray)	1.80 GHz	6.40 GT/s	10 MB	1066 MHz	4 / 4			70 W	7 35858 23041 3
	Intel Xeon processor E5-2450L	CM8062007283711 (tray only)	1.80 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	70 W	N/A
	Intel Xeon processor E5-2430L	CM8062000862912 (tray only)	2 GHz	7.20 GT/s	15 MB	1600 MHz	6 / 12	✓	✓	60 W	N/A

INTEL® THERMAL SOLUTION STS200 SERIES FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA2011 SOCKETS

NEW	PRODUCT NAME	BOXED PRODUCT CODE	DESCRIPTION	TDP SUPPORT	UPC CODE
	Intel® Thermal Solution STS200P	BXSTS200P	Passive	Up to 130 W	7 35858 22179 5
	Intel Thermal Solution STS200PNRW	BXSTS200PNRW	Passive narrow	Up to 130 W	7 35858 22180 1
	Intel Thermal Solution STS200C	BXSTS200C	Combo with removable fan	Up to 150 W	7 35858 22181 8

INTEL® SERVER / WORKSTATION PROCESSORS

INTEL® XEON® PROCESSOR 5600 SERIES FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA1366 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor X5690	BX80614X5690 (box) AT80614005913AB (tray)	3.46 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	130 W	7 35858 21629 6
	Intel Xeon processor X5680	BX80614X5680 (box) AT80614005124AA (tray)	3.33 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	130 W	7 35858 21412 4
	Intel Xeon processor X5675	BX80614X5675 (box) AT80614006696AA (tray)	3.06 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 21630 2
	Intel Xeon processor X5670	BX80614X5670 (box) AT80614005130AA (tray)	2.93 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 21413 1
	Intel Xeon processor X5660	BX80614X5660 (box) AT80614005127AA (tray)	2.80 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 21414 8
	Intel Xeon processor X5650	BX80614X5650 (box) AT80614004320AD (tray)	2.66 GHz	6.40 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 21415 5
	Intel Xeon processor E5649	BX80614E5649 (box) AT80614006783AB (tray)	2.53 GHz	5.86 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	80 W	7 35858 21631 9
	Intel Xeon processor E5645	BX80614E5645 (box) AT80614003597AC (tray)	2.40 GHz	5.86 GT/s	12 MB	1333 MHz	6 / 12	✓	✓	80 W	7 35858 21632 6
	Intel Xeon processor E5640	BX80614E5640 (box) AT80614005466AA (tray)	2.66 GHz	5.86 GT/s	12 MB	1066 MHz	4 / 8	✓	✓	80 W	7 35858 21416 2
	Intel Xeon processor E5630	BX80614E5630 (box) AT80614005463AA (tray)	2.53 GHz	5.86 GT/s	12 MB	1066 MHz	4 / 8	✓	✓	80 W	7 35858 21417 9
	Intel Xeon processor E5620	BX80614E5620 (box) AT80614005073AB (tray)	2.40 GHz	5.86 GT/s	12 MB	1066 MHz	4 / 8	✓	✓	80 W	7 35858 21418 6

INTEL® XEON® PROCESSOR 5600 SERIES FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA1366 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

INTEL® SERVER / WORKSTATION PROCESSORS

NEW	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
	Intel® Xeon® processor E5607	BX80614E5607 (box) AT80614006789AA (tray)	2.26 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 4			80 W	7 35858 21633 3
	Intel Xeon processor E5606	BX80614E5606 (box) AT80614007290AE (tray)	2.13 GHz	4.80 GT/s	8 MB	1066 MHz	4 / 4			80 W	7 35858 21634 0
	Intel Xeon processor E5603	BX80614E5603 (box) AT80614006954AA (tray)	1.60 GHz	4.80 GT/s	4 MB	1066 MHz	4 / 4			80 W	7 35858 21635 7
	Intel Xeon processor X5687	AT80614005919AB (tray only)	3.60 GHz	6.40 GT/s	12 MB	1333 MHz	4 / 8	✓	✓	130 W	N/A
	Intel Xeon processor X5677	AT80614005145AB (tray only)	3.46 GHz	6.40 GT/s	12 MB	1333 MHz	4 / 8	✓	✓	130 W	N/A
	Intel Xeon processor X5672	AT80614005922AA (tray only)	3.20 GHz	6.40 GT/s	12 MB	1333 MHz	4 / 8	✓	✓	95 W	N/A
	Intel Xeon processor X5667	AT80614005154AB (tray only)	3.06 GHz	6.40 GT/s	12 MB	1333 MHz	4 / 8	✓	✓	95 W	N/A
	Intel Xeon processor X5647	AT80614006780AA (tray only)	2.93 GHz	5.86 GT/s	12 MB	1066 MHz	4 / 8	✓	✓	130 W	N/A
	Intel Xeon processor L5640	BX80614L5640 (box) AT80614005133AB (tray)	2.40 GHz	5.86 GT/s	12 MB	1066 MHz	6 / 12	✓	✓	60 W	7 35858 21411 7
	Intel Xeon processor L5630	BX80614L5630 (box) AT80614005484AA (tray)	2.13 GHz	5.86 GT/s	12 MB	1066 MHz	4 / 8	✓	✓	40 W	7 35858 21419 3
	Intel Xeon processor L5609	AT80614005940AA (tray only)	1.86 GHz	4.80 GT/s	12 MB	1066 MHz	4 / 4			40 W	N/A

INTEL® THERMAL SOLUTION STS100 SERIES FOR SERVER / WORKSTATION SYSTEMS FEATURING TWO LGA1366 SOCKETS

PRODUCT NAME	BOXED PRODUCT CODE	DESCRIPTION	RECOMMENDED USAGE[3]	MAX. THERMAL DESIGN POWER
Intel® Thermal Solution STS100C	BXSTS100C	Passive / active combination thermal solution with removable fan	**With fan installed:** ▪Pedestal chassis that provide adequate ventilation and correct temperature air to the thermal solution. **With fan removed:** ▪Pedestal chassis that provide ducted airflow to the thermal solution. ▪2U or larger rack chassis that provide ducted airflow to the thermal solution.	130 W
Intel Thermal Solution STS100A	BXSTS100A	Active thermal solution with fixed fan	Pedestal chassis that provide adequate ventilation and correct temperature air to the thermal solution.	80 W
Intel Thermal Solution STS100P	BXSTS100P	25.5mm-tall passive thermal solution	1U, 2U, or blade chassis that provide ducted airflow to the thermal solution.	95 W

INTEL® XEON® PROCESSOR E5-4600 PRODUCT FAMILY FOR SERVER SYSTEMS FEATURING FOUR LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

	PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI[4] SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
NEW	Intel® Xeon® processor E5-4650	BX80621E54650 (box) CM8062101229200 (tray)	2.70 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	130 W	7 35858 23290 6
	Intel Xeon processor E5-4640	BX80621E54640 (box) CM8062101229400 (tray)	2.40 GHz	8 GT/s	20 MB	1600 MHz	6 / 12	✓	✓	95 W	7 35858 23350 7
	Intel Xeon processor E5-4620	BX80621E54620 (box) CM8062101145500 (tray)	2.20 GHz	7.20 GT/s	16 MB	1333 MHz	8 / 16	✓	✓	95 W	7 35858 23295 1

INTEL® XEON® PROCESSOR E5-4600 PRODUCT FAMILY FOR SERVER SYSTEMS FEATURING FOUR LGA2011 SOCKETS (THERMAL SOLUTION SOLD SEPARATELY)

NEW

PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI⁴ SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
Intel® Xeon® processor E5-4617	CM8062101145700 (tray only)	2.90 GHz	7.20 GT/s	15 MB	1600 MHz	6 / 6		✓	95 W	N/A
Intel Xeon processor E5-4610	BX80621E54610	2.40 GHz	7.20 GT/s	15 MB	1333 MHz	6 / 12	✓	✓	95 W	7 35858 23300 2
Intel Xeon processor E5-4607	BX80621E54607	2.20 GHz	6.40 GT/s	12 MB	1066 MHz	6 / 12	✓	✓	95 W	7 35858 23310 1
Intel Xeon processor E5-4603	BX80621E54603	2 GHz	6.40 GT/s	10 MB	1066 MHz	4 / 8	✓	✓	95 W	7 35858 23315 6
Intel Xeon processor E5-4650L	BX80621E54650L (box) CM8062101229300 (tray)	2.60 GHz	8 GT/s	20 MB	1600 MHz	8 / 16	✓	✓	115 W	7 35858 23305 7

INTEL® XEON® PROCESSOR E7-4800 PRODUCT FAMILY FOR SERVER / WORKSTATION SYSTEMS FEATURING FOUR LGA1567 SOCKETS

NEW

PROCESSOR NAME	PRODUCT CODE	CLOCK SPEED	INTEL® QPI⁴ SPEED	SHARED L3 CACHE	MAX. MEMORY SPEED	NO. OF CORES / THREADS	INTEL® HYPER-THREADING TECHNOLOGY[1]	INTEL® TURBO BOOST TECHNOLOGY[2]	POWER	UPC CODE
Intel® Xeon® processor E7-4870	BX80615E74870	2.40 GHz	6.40 GT/s	30 MB	1066 MHz	10 / 20	✓	✓	130 W	7 35858 21849 8
Intel Xeon processor E7-4860	AT80615007254AA (tray only)	2.26 GHz	6.40 GT/s	24 MB	1066 MHz	10 / 20	✓	✓	130 W	N/A
Intel Xeon processor E7-4850	AT80615007449AA (tray only)	2 GHz	6.40 GT/s	24 MB	1066 MHz	10 / 20	✓	✓	130 W	N/A
Intel Xeon processor E7-4830	BX80615E74830	2.13 GHz	6.40 GT/s	24 MB	1066 MHz	8 / 16	✓	✓	105 W	7 35858 21850 4
Intel Xeon processor E7-4820	AT80615005772AC (tray only)	2 GHz	5.86 GT/s	18 MB	1066 MHz	8 / 16	✓	✓	105 W	N/A
Intel Xeon processor E7-4807	AT80615006432AB (tray only)	1.86 GHz	4.80 GT/s	18 MB	1066 MHz	6 / 12	✓		95 W	N/A

For more information, visit **www.intel.com/xeon**

[1] Intel® Hyper-Threading Technology requires a computer system with a processor supporting HT Technology and an HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. For more information including details on which processors support HT Technology, see www.intel.com/info/hyperthreading

[2] Intel® Turbo Boost Technology requires a PC 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 PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

[3] Contact your chassis supplier for compatibility details.

[4] Intel® QPI–Intel® QuickPath Interconnect; GT/s–Gigatransfers per second.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

Intel® Server / Workstation Boards
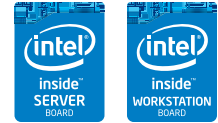
INTEL® SERVER BOARDS SUPPORTING THE INTEL® XEON® PROCESSOR E5-2600 FAMILY

GET POWERFUL. GET FLEXIBLE. GET EFFICIENT.

Designed to optimize the features of the Intel® Xeon® processor E5-2600 product family, Intel has unleashed an entirely new portfolio of boards and systems purpose-built with your needs in mind. Ranging from high-performance to half-width, HPC-focused to specialized workstation, Intel is committed to quality performance and innovative design.
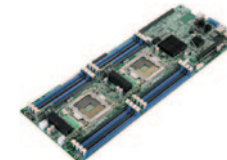
Product Name	Intel® Compute Module HNS2600JF	Intel® Compute Module HNS2600WP
Description	The Intel® Compute Module HNS2600JF family provides cost-optimized performance and memory throughput with optional integrated QDR / FDR InfiniBand*. Support for up to 3 PCI Express* 3.0 x16 slots. (Extended life product.)	The ideal solution for high-performance computing, the Intel® Compute Module HNS2600WP family delivers a larger memory footprint and support for up to 4 PCI Express* 3.0 x16 slots in a half-width form factor. Integrated QDR / FDR InfiniBand* is available. (Extended life product.)
Target Market	HPC	HPC
Order Code	**HNS2600JF: no Infiniband*** **HNS2600JFF: integrated InfiniBand FDR (56 Gb/s)** **HNS2600JFQ: integrated InfiniBand QDR (40 Gb/s)**	**HNS2600WP: no Infiniband*** **HNS2600WPF: integrated InfiniBand FDR (56 Gb/s)** **HNS2600WPQ: integrated InfiniBand QDR (40 Gb/s)**
Form Factor	Custom (6.42" x 17.7")	Custom (6.8" x 18.9")
Intel® Server Chassis or System	Intel® Server Chassis H2000JR/KR family	Intel® Server Chassis H2000JR/KR family
Processor Support[1]	**2 Intel® Xeon® processors E5-2600 product family**	**2 Intel® Xeon® processors E5-2600 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	3	4
PCI Slot Types	3 PCI Express 3.0 x16	4 PCI Express 3.0 x16
Memory Capacity	8 LR / U / RDIMMs 1333 / 1600 MHz ECC DDR3 256 GB max	16 LR / U / RDIMMs 1333 / 1600 MHz ECC DDR3 512 GB max
SATA Ports	6-port SATA (2 6.0 Gb/s)	6-port SATA (2 6.0 Gb/s)
SAS Options	4 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	4 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)	1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® I/O Module[2] Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4[2]	Intel® I/O Module[2] Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4[2]
Warranty	3 year limited warranty, optional 2 year extended warranty available when combined with an Intel Chassis	3 year limited warranty, optional 2 year extended warranty available when combined with an Intel Chassis

	Intel® Server Board S2600GL / GZ	Intel® Server Board S2600IP	Intel® Server Board S2600CP
Product Name	Intel® Server Board S2600GL / GZ	Intel® Server Board S2600IP	Intel® Server Board S2600CP
Description	The Intel® Server Board S2600GL / GZ, Intel's technology showcase board, features maximum memory capacity, rack-optimized performance, and extensive I/O flexibility, making it ideal for high-performance and cloud computing. (Extended life product.)	With support for up to 8 single-width cards or 4 x16 double-width cards, the Intel® Server Board S2600IP provides enterprise customers with maximum I/O flexibility, storage flexibility, and is available in both rack and pedestal options. (Extended life product.)	Small- to medium-sized businesses can benefit from the Intel® Server Board S2600CP's storage capacity, mainstream performance, and I/O flexibility. (Extended life product.)
Target Market	Data center / cloud	Enterprise / storage	Small to medium businesses
Order Code	**S2600GL4: 16 DIMMs** **S2600GZ4: 24 DIMMs**	**S2600IP4: integrated I/O expansion module PCI Express* x8 Gen3**	**S2600CP2: Dual Port Ethernet Controller 1 GbE** **S2600CP4: Quad Port Ethernet Controller 1 GbE** **DBS2600CP2IOC: Dual 1 GbE, 8-port 6 Gb SAS PCI Express* card** **DBS2600CP4IOC: Quad 1 GbE, 8-port 6 Gb SAS PCI Express card**
Form Factor	Custom (16.5" x 16.5")	Custom (14.2" x 15")	SSI EEB (12" x 13")
Intel® Server Chassis or System	Intel® Server System R1000GL/GZ family Intel® Server System R2000GL/GZ family	Intel® Server System R2000IP family Intel® Server System P4000IP family	Intel® Server System P4000CP family Intel® Server Chassis P4000M
Processor Support[1]	**2 Intel® Xeon® processors E5-2600 product family**	**2 Intel® Xeon® processors E5-2600 product family**	**2 Intel® Xeon® processors E5-2600 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	2	8+2	6
PCI Slot Types	2 PCI Express* 3.0 x8 personality modules 2 PCI Express 3.0 x24 superslots (6 PCI Express 3.0 x8 or 2 PCI Express 3.0 x16 + 2 PCI Express 3.0 x8)	1 PCI Express 3.0 x16 3 PCI Express 3.0 x8 or x0 3 PCI Express 3.0 x8 or x16 1 PCI Express 2.0 x4 1 PCI Express 2.0 x4 via SAS ROC module 1 PCI Express 1.0 x8 via I/O expansion module	1 PCI Express 3.0 x16 5 PCI Express 3.0 x8
Memory Capacity	16 or 24 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 or 768 GB max	16 x LR / U / RDIMMs 1066 /1333 / 1600 MHz ECC DDR3 512 GB max	16 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 GB max
SATA Ports	10-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s)	10-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s)	14-port SATA (12 3.0 Gb/s, 2 6.0 Gb/s)
SAS Options	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)	2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)	1 or 2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

Product Name	Intel® Server Board S2600CO	Intel® Workstation Board W2600CR	Intel® Server Board S1600JP
Description	An ideal server building block for embedded or storage systems and small- to medium-sized businesses, the Intel® Server Board S2600CO has a standard form factor, rich I/O with flexible configurations, and a 5-year life cycle. (Extended life product.)	The Intel® Workstation Board W2600CR is an expert solution that supports a maximum TDP processor, 16 DDR3 / DDR3L DIMM slots, dual 1 GbE LOM support, Firewire*, and high-end PCI Express* graphics cards.	A performance single-socket, half-width board, rich in I/O (40 Gen3 lanes) for a streamlined 1U rack mount server presentation. (Extended life product.)
Target Market	Embedded / storage / small to medium businesses	Data-intensive applications	Embedded / storage / small to medium businesses
Order Code	**S2600CO4: 4 SAS ports** **S2600COE: Firewire* 1394b, 8 SAS ports** **S2600COEIOC: Firewire 1394b, 8-port 6 Gb SAS PCI Express* card included**	**W2600CR2: up to 4 double-wide graphics cards**	**S1600JP2: Dual Port Ethernet Controller 1 GbE** **S1600JP4: Quad Port Ethernet Controller 1 GbE**
Form Factor	SSI EEB (12" x 13")	Custom (14.2" x 15")	Custom (6.8" x 13.8")
Intel® Server Chassis or System	Intel® Server Chassis P4000M	Intel® Workstation System P4000CR family	Intel® Server System R1000JP family
Processor Support[1]	**2 Intel® Xeon® processors E5-2600 product family**	**2 Intel® Xeon® processors E5-2600 product family**	**1 Intel® Xeon® processor E5-2600 / E5-1600 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	6	8+2	3
PCI Slot Types	4 PCI Express 3.0 x16 1 PCI Express 3.0 x8 1 PCI Express 2.0 x4	1 PCI Express 3.0 x16 3 PCI Express 3.0 x8 or x0 3 PCI Express 3.0 x8 or x16 1 PCI Express 2.0 x4 1 PCI Express 2.0 x4 via SAS ROC module 1 PCI Express 1.0 x8 via I/O expansion module	2 PCI Express* 3.0 x16 1 PCI Express 3.0 x8
Memory Capacity	16 LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 GB max	16 x LR / U / RDIMMs 1333 / 1600 MHz ECC DDR3 512 GB max	8 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 256 GB max
SATA Ports	10-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s)	10-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s)	10-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s)
SAS Options	4 or 8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	4 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)	1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)	1 or 2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4
Warranty	3 year limited warranty, optional 2 year extended warranty available when combined with an Intel Chassis	3 year limited warranty , optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

INTEL® SERVER BOARDS SUPPORTING THE INTEL® XEON® PROCESSOR E5-4600 FAMILY

CONTROL THE ENTERPRISE WITH THE INTEL® SERVER BOARD S4600LH

Intel's new density and cost-optimized four-socket (4S) server board extends the capabilities of the Intel® Xeon® processor E5 family, with up to a 75 percent performance boost over the Intel® Xeon® processor E5-2600 product family, plus increased network and storage sharing efficiencies. The Intel® Xeon® processor E5-4600 product family dramatically reduces compute time with Intel® Advanced Vector Extensions (Intel® AVX), and with Intel® Integrated I/O, latency is reduced while adding capacity and bandwidth.

Product Name	Intel® Server Board S4600LH
Description	Four-socket, incredibly dense server board with excellent floating-point performance and performance-per-watt for enterprise and HPC applications utilizing the Intel® Xeon® processor E5-4600 product family with support for Intel® MIC. Available with integrated Dual Port Intel® Ethernet Controllers (1 GbE or 10 GbE) and 48 DIMMs for massive memory support of 1.5 terabytes. (Extended life product.)
Target Market	Enterprise / HPC
Order Code	**S4600LH2: integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)** **S4600LT2: integrated Dual Port Intel® Ethernet Controller X540 (10 GbE)**
Form Factor	Custom (16.7" x 20")
Intel® Server Chassis or System	Intel® Server System R2208LT2HKC4 family Intel® Server System R2304LH2HKC family
Processor Support[1]	**4 Intel® Xeon® processors E5-4600 product family**
Chipset	Intel® C600 Chipset
Total PCI Slots	6+2
PCI Slot Types	6 PCI Express* 3.0 x16 2 PCI Express 3.0 x8 via I/O expansion module
Memory Capacity	48 x LR / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 1500 GB max
SATA Ports	11-port SATA (8 3.0 Gb/s, 2 6.0 Gb/s, 1 3.0 Gb/s)
SAS Options	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	1 Integrated Dual Port Intel® Ethernet Controller X540 (10 GbE) or 1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available

INTEL® SERVER BOARDS SUPPORTING THE INTEL® XEON® PROCESSOR E5-2400 FAMILY

INTEL® SERVER BOARDS AND SYSTEMS BASED ON THE INTEL® XEON® PROCESSOR E5-2400 PRODUCT FAMILY FURTHER EXPAND INTEL'S SERVER LINE UP

Our latest line of Intel® Server Boards featuring the Intel® Xeon® processor E5-2400 product family pave the way for better performance, better value, and better sales. Supporting a wide range of 1U, 2U, and pedestal systems with more options and more features, the family of E5-2400 server products deliver server class performance at competitive price points.

Product Name	Intel® Server Board S1400FP	Intel® Server Board S1400SP
Description	Perfect for entry-level applications with 6 DIMMs, dual Intel® Ethernet Controllers, 24 PCI Express* Gen3 I/O lanes, and Intel® Server Management for affordable and effective performance. (Extended life product.)	Flexible single-socket board that brings I/O and SAS expansion options to an entry-level, single-slot server for easy customization. Systems available with quad or dual 1 GbE NIC. (Extended life product.)
Target Market	First server	Embedded
Order Code	**S1400FP2: Dual Port Ethernet Controller 1 GbE** **S1400FP4: Quad Port Ethernet Controller 1 GbE**	**S1400SP2: Dual Port Ethernet Controller 1 GbE** **S1400SP4: Quad Port Ethernet Controller 1 GbE**
Form Factor	SSI ATX (12" x 9.6")	SSI ATX-like (12" x 9.6")
Intel® Server Chassis or System	Intel® Server Chassis P4000S family	Intel® Server System R1304SP family
Processor Support[1]	**1 Intel® Xeon® processor E5-2400 product family**	**1 Intel® Xeon® processor E5-2400 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	4+1	1+1+1
PCI Slot Types	1 PCI Express 3.0 x8 3 PCI Express 3.0 x4 1 PCI Express 2.0 x4	1 PCI Express 3.0 x8 1 PCI Express 3.0 x4 via I/O expansion module 1 PCI Express 3.0 x8 via I/O expansion module
Memory Capacity	6 x R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 96 GB max	6 x R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 96 GB max
SATA Ports	6-port SATA (4 3.0 Gb/s, 2 6.0 Gb/s)	6-port SATA (4 3.0 Gb/s, 2 6.0 Gb/s)
SAS Options	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	1 or 2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)	1 or 2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available when combined with an Intel Chassis	3 year limited warranty, optional 2 year extended warranty available

Product Name	Intel® Server Board S2400LP	Intel® Server Board S2400EP
Description	A mainstream, cost-efficient solution for high-density computing, provides 12 DIMMs via 6 channels and supports 2 PCI Express* 3.0 slots (1 x16, 1 x8) in a half-width form factor. (Extended life product.)	Value dual-socket board in 1U rack supports embedded environments with 28 PCI Express* Gen 3 I/O lanes and 8 DIMMs. 1U rack available with dual GbE. (Extended life product.)
Target Market	IPDC / HPC	Embedded
Order Code	**S2400LP / HNS2400LP: no Infiniband (Last date to order HNS2400LP is September 30, 2013)**	**S2400EP2: Dual Port Ethernet Controller 1 GbE S2400EP4: Quad Port Ethernet Controller 1 GbE**
Form Factor	Custom (6.8" x 16.6")	SSI CEB (12" x 10.5")
Intel® Server Chassis or System	Intel® Server Chassis H2000JR/KR family	Intel® Server System R1304EP2SHFN
Processor Support[1]	**2 Intel® Xeon® processors E5-2400 product family**	**2 Intel® Xeon® processors E5-2400 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	2	1+1+1
PCI Slot Types	1 PCI Express 3.0 x16 1 PCI Express 3.0 x8	1 PCI Express 3.0 x16 1 PCI Express 3.0 x8 via I/O expansion module 1 PCI Express 3.0 x4 via I/O expansion module
Memory Capacity	12 LR / U / RDIMMs 1333 / 1600 MHz ECC DDR3 384 GB max	8 LV / R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 128 GB max
SATA Ports	5-port SATA (4 3.0 Gb/s, 1 6.0 Gb/s)	2-port SATA (2 6.0 Gb/s)
SAS Options	4 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)	1 or 2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® I/O Module[2] Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4[2]	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available when combined with an Intel Chassis	3 year limited warranty, optional 2 year extended warranty available

	Intel® Server Board S2400BB	Intel® Server Board S2400SC
Product Name	Intel® Server Board S2400BB	Intel® Server Board S2400SC
Description	Best solution for price / performance-per-watt and per square foot with spread core design for exceptional power efficiency. 12 DIMMs and extensive I/O flexibility plus integrated quad GbE and more. (Extended life product.)	Expanded I/O with 33 total PCI Express* lanes and dual processor sockets bring cost-effective features to small- and medium-sized businesses. Flexible storage and server management capabilities in rack or pedestal configurations.
Target Market	IPDC / cloud	Medium business
Order Code	**S2400BB4**	**S2400SC2**
Form Factor	Custom (13.5" x 13.5")	SSI CEB (12" x 10.5")
Intel® Server Chassis or System	Intel® Server System R1000BB family Intel® Server System R2000BB family	Intel® Server System R2300SC family Intel® Server System P4300SC family Intel® Server Chassis P4000S/M
Processor Support[1]	**2 Intel® Xeon® processors E5-2400 product family**	**2 Intel® Xeon® processors E5-2400 product family**
Chipset	Intel® C600 Chipset	Intel® C600 Chipset
Total PCI Slots	8+1	4+1
PCI Slot Types	2 PCI Express* 3.0 x16 6 PCI Express 3.0 x8 1 PCI Express 2.0 x8 via I/O expansion module	1 PCI Express 3.0 x16 1 PCI Express 3.0 x8 1 PCI Express 3.0 x4 1 PCI Express 2.0 x4 1 Legacy 32/33 PCI slot
Memory Capacity	12 LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 384 GB max	8 LV / R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 128 GB max
SATA Ports	10-port SATA (6 3.0 Gb/s, 2 6.0 Gb/s)	6-port SATA (4 3.0 Gb/s, 2 6.0 Gb/s)
SAS Options	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter	8 integrated SAS ports, 6 Gb/s SAS via optional Intel® RAID Module / Adapter
Integrated LAN	2 Integrated Dual Port Intel® Ethernet Controllers I350 (1 GbE)	1 Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology2 (ESRT2) RAID levels 0, 1, 5, 10
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

NEW INTEL® SERVER BOARDS SUPPORTING THE INTEL® XEON® PROCESSOR E3-1200 V3 FAMILY

ENTRY-LEVEL SERVER BOARDS FOR EASY AND AFFORDABLE SOLUTIONS

Single-socket server boards featuring the Intel® Xeon® processor E3-1200 v2 and E3-1200 v3 product family are a simple, yet powerful way for small businesses to get the server-level features they need, with Intel technology and support. 1U rack and 4U pedestal systems available for easy integration.

Product Name	Intel® Entry Server Board S1200V3RPL	Intel® Entry Server Board S1200V3RPS
Description	Entry Server Board for pedestal integration with optional management capabilities	Lowest-cost entry Server Board with basic server features
Target Market	First server	First server
Order Code	**S1200V3RPL**	**S1200V3RPS**
Form Factor	MicroATX (9.6" x 9.6")	MicroATX (9.6" x 9.6")
Intel® Server Chassis or System	Intel® Server Chassis P4000 family Intel® Server System P4304RPL family	Intel® Server Chassis P4000 family Intel® Server System R1304RPS family
Processor Support[1]	**1 Intel® Xeon® processor E3-1200 v3 product family**	**1 Intel® Xeon® processor E3-1200 v3 product family**
Chipset	Intel® C226 Chipset	Intel® C222 Chipset
Total PCI Slots	4+1	4
PCI Slot Types	2 x PCI Express* 3.0 x8 1 x PCI Express 2.0 x4 1 x PCI Express 2.0 x1 1 x internal mezzanine connector x8	2 x PCI Express* 3.0 x8 1 x PCI Express 2.0 x4 1 x PCI Express 2.0 x1
Memory Capacity	4 x LR / UDIMMs 1333 / 1600 ECC 32 GB max	4 x LR / UDIMMs 1333 / 1600 ECC 32 GB max
SATA Ports	6-port SATA (6 x 6.0 Gb/s)	6-port SATA (2 x 6.0 Gb/s)
SAS Options	Optional via mezzanine connector	N/A
Integrated LAN	Dual Integrated Intel® Ethernet Controller I210 (1 GbE)	Dual Integrated Intel® Ethernet Controller I210 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology 2 (0, 1, 5, and 10)	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology 2 (0, 1, 5, and 10)
Module Upgrades	Intel® Storage I/O Module Intel® Remote Management Module 4 Intel® Remote Management Module 4 Lite TPM Module	TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

	Intel® Entry Server Board S1200V3RPO	Intel® Entry Server Board S1200V3RPM
Product Name	Intel® Entry Server Board S1200V3RPO	Intel® Entry Server Board S1200V3RPM
Description	Rack-optimized entry Server Board with maximum I/O expansion and optional management	Rack-optimized entry Server Board with maximum I/O expansion, where application needs processor graphics computation
Target Market	Small business, data center	Small business, data center
Order Code	S1200V3RPO	S1200V3RPM
Form Factor	MicroATX (9.6" x 9.6")	MicroATX (9.6" x 9.6")
Intel® Server Chassis or System	Intel® Server System R1208RPO family Intel® Server System R1304RPO family	Intel® Server System R1208RPM family
Processor Support[1]	1 Intel® Xeon® processor E3-1200 v3 product family	1 Intel® Xeon® processor E3-1200 v3 product family
Chipset	Intel® C224 Chipset	Intel® C226 Chipset
Total PCI Slots	1+1	1+1
PCI Slot Types	1 x PCI Express* 3.0 x8 1 x internal or external mezzanine connector x8 OR 2 x mezzanine connectors x4	1 x PCI Express* 3.0 x8 1 x internal or external mezzanine connector x8 OR 2 x mezzanine connectors x4
Memory Capacity	4 x LR / UDIMMs 1333 / 1600 ECC 32 GB max	4 x LR / URDIMMs 1333 / 1600 ECC 32 GB max
SATA Ports	6-port SATA (4 x 6.0 Gb/s)	6-port SATA (6 x 6.0 Gb/s)
SAS Options	Optional via mezzanine connector	Optional via mezzanine connector
Integrated LAN	Dual Integrated Intel® Ethernet Controller I210 (1 GbE)	Dual Integrated Intel® Ethernet Controller I210 (1 GbE)
Management Support	Intel® Server Management Software Integrated BMC with IPMI 2.0	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology 2 (0, 1, 5, and 10)	Intel® Rapid Storage Technology (0, 1, 5, and 10 + JBOD) Intel® Embedded Server RAID Technology 2 (0, 1, 5, and 10)
Module Upgrades	Intel® I/O Module Intel® Storage I/O Module Intel® Remote Management Module 4 Intel® Remote Management Module 4 Lite TPM Module	Intel® I/O Module Intel® Storage I/O Module Intel® Remote Management Module 4 Intel® Remote Management Module 4 Lite TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

Product Name	Intel® Entry Server Board S1200KP	Intel® Entry Server Board S1200BTS	Intel® Entry Server Board S1200BTL
Description	Sub-entry, mini-ITX server board for minimal footprint and lowest acquisition cost. Great for embedded applications requiring server performance.	Recommended first server where lowest price with reliability are key. Basic server features with room to grow.	Entry server board with management options expands deployment opportunities for remote access with low price point and basic server features.
Target Market	First server / embedded / storage	First server	First server / remote branch office
Order Code	DBS1200KPR	S1200BTSR	S1200BTLR, S1200BTLRM for use with Intel® RAID Modules RMS25PB080/040, RMT3PB080, and RMS25KB080/040
Form Factor	Mini-ITX (6.7" x 6.7")	MicroATX (9.6" x 9.6")	ATX (12" x 9.6")
Intel® Server Chassis or System	N/A	Intel® Server Chassis P4000S Intel® Server System R1304BTS family Intel® Server System P4304BTS family	Intel® Server Chassis P4000S Intel® Server System R1304BTL family Intel® Server System P4304BTL family
Processor Support[1]	1 Intel® Xeon® processor E3-1200 v2 product family	1 Intel® Xeon® processor E3-1200 v2 product family	1 Intel® Xeon® processor E3-1200 v2 product family
Chipset	Intel® C206 Chipset	Intel® C202 Chipset	Intel® C204 Chipset
Total PCI Slots	1	4	5
PCI Slot Types	1 PCI Express* 2.0 x8 (x16 mechanical)	1 PCI Express* 3.0 x8 (x16 mechanical) 1 PCI Express 3.0 x8 (x8 mechanical) 1 PCI Express 3.0 x4 (x8 mechanical) 1 PCI 32-bit / 33 MHz (5 V)	1 PCI Express* 3.0 x8 (x16 mechanical) 3 PCI Express 3.0 x4 (x8 mechanical) 1 PCI 32-bit / 33 MHz (5 V) 1 Mezzanine connector—optional SAS module
Memory Capacity	2 DDR3 UDIMMs 1066 / 1333 MHz ECC 16 GB max	4 DDR3 UDIMMs 1066 / 1333 / 1600 MHz ECC 32 GB max	4 DDR3 UDIMMs 1066 / 1333 / 1600 MHz ECC 32 GB max
SATA Ports	4-port SATA (2 6.0 Gb/s, 2 3.0 Gb/s)	6-port SATA (6 3.0 Gb/s)	6-port SATA (2 6.0 Gb/s, 4 3.0 Gb/s)
SAS Options	N/A	N/A	Optional SAS or SAS RAID via I/O Expansion Modules
Integrated LAN	Intel® Dual Gigabit Controller 82574L and 82579	Intel® Dual-Gigabit Controllers 82574L and 82579	Intel® Dual-Gigabit Controllers 82574L and 82579
Management Support	Intel® Deployment Assistant only	Intel® Deployment Assistant only	Intel® Server Management Software Integrated BMC with IPMI 2.0
Intel® RAID Support	Intel® Rapid Storage Technology (0, 1, 5, and 10)	Intel® Rapid Storage Technology (0, 1, 5, and 10)	Intel® Rapid Storage Technology (0, 1, 5, and 10) Intel® Embedded Server RAID Technology (0, 1, and 10)
Module Upgrades	N/A	TPM Module	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module
Warranty	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available	3 year limited warranty, optional 2 year extended warranty available

For more information, visit **www.intel.com/go/serverboards** or **ark.intel.com**

[1] Refer to http://support.intel.com/support/motherboards/server for up-to-date details on processors supported by each server board.

[2] On interposer (need accessory kit AXXRMM4IOM or AXXRMM4IOMW).

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.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

INTEL® COMPUTE MODULE HNS2600JF AND INTEL® SERVER CHASSIS H2000XXJR/KR

Description	Specifically designed for the HPC market, a high-density, four-node solution supporting optional QDR / FDR InfiniBand*, balancing optimal memory bandwidth and computing power to maximize price performance. (Extended life product.)
Target Market	IPDC / HPC embedded
Supported Compute Modules (Sold separately, chassis supports up to 4 total)	**4 x HNS2600JF:** No InfiniBand **4 x HNS2600JFF:** Integrated InfiniBand FDR (56 Gb/s) **4 x HNS2600JFQ:** Integrated InfiniBand QDR (40 Gb/s)
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family per module**
Total PCI Slots	3 per module
PCI Slot Types	4 x 3 PCI Express* 3.0 x16
Memory Capacity	4 x 8 LR / U / RDIMMs 1333 / 1600 ECC 256 GB max per module
Module Upgrades	Intel® I/O Module[1] Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4[1]

FOUR MODULE 2U RACK CHASSIS

Dimensions (H x W x D)	3.5" x 17.2" x 29.5"
System Cooling	3 x high-speed hot-swap redundant 40mm dual rotor fans per module
Power Supply	1200 W or 1600 W AC Common Redundant PSU (Platinum Efficiency)
Thermal Solution	Included with Compute Module
Other Components	Intel® System Management Software, iBMC with IPMI Optional SAS 6G upgrade kit
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC CHASSIS SKUS

H2216XXJR	16 x 2.5" hot-swap HDD 2 x 1200 W AC Common Redundant PSU
H2216XXKR	16 x 2.5" hot-swap HDD 2 x 1600 W AC Common Redundant PSU
H2312XXJR	12 x 3.5" hot-swap HDD 2 x 1200 W AC Common Redundant PSU
H2312XXKR	12 x 3.5" hot-swap HDD 2 x 1600 W AC Common Redundant PSU

Note: Systems based on Intel® Server Boards S2600JF have been disaggregated to chassis and compute module. Module plus chassis pricing has changed to equate the original integrated system price.

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® COMPUTE MODULE HNS2600WP AND INTEL® SERVER CHASSIS H2000XXJR/KR

Description	The ideal option for high-performance computing and data center deployment with maximum memory and I/O capability. Integrated QDR / FDR InfiniBand* available. (Extended life product.)
Target Market	IPDC / HPC embedded
Supported Compute Modules (Sold separately, chassis supports up to 4 total)	**4 x HNS2600WP:** No InfiniBand **4 x HNS2600WPF:** Integrated InfiniBand FDR (56 Gb/s) **4 x HNS2600WPQ:** Integrated InfiniBand QDR (40 Gb/s)
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family per module**
Total PCI Slots	4 per module
PCI Slot Types	4 x 4 PCI Express* 3.0 x16
Memory Capacity	4 x 16 LR / U / RDIMMs 1333 / 1600 ECC 512 GB max per module
Module Upgrades	Intel® I/O Module[1] Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4[1]

FOUR MODULE 2U RACK SYSTEMS	
Dimensions (H x W x D)	3.5" x 17.2" x 29.5"
System Cooling	3 x high-speed hot-swap redundant 40mm dual rotor fans per module
Power Supply	1200 W or 1600 W AC Common Redundant PSU (Platinum Efficiency)
Thermal Solution	Included with Compute Module
Other Components	Intel® System Management Software, iBMC with IPMI Optional SAS 6G upgrade kit
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC CHASSIS SKUS	
H2216XXJR	16 x 2.5" hot-swap HDD 2 x 1200 W AC Common Redundant PSU
H2216XXKR	16 x 2.5" hot-swap HDD 2 x 1600 W AC Common Redundant PSU
H2312XXJR	12 x 3.5" hot-swap HDD 2 x 1200 W AC Common Redundant PSU
H2312XXKR	12 x 3.5" hot-swap HDD 2 x 1600 W AC Common Redundant PSU

Note: Systems based on Intel® Server Boards S2600WP have been disaggregated to chassis and compute module. Module plus chassis pricing has changed to equate the original integrated system price.

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000GZ AND R2000GZ BASED ON THE INTEL® S2600GL / GZ SERVER BOARDS

Description	Rack-optimized Server Systems deliver unmatched memory capacity, performance, I/O capacity, and flexibility in an expansive family of 1U and 2U systems for the most demanding enterprise data center, cloud, or HPC environments. (Extended life product.)
Target Market	Data center / cloud
Server Board Included	**S2600GL4:** 16 DIMM and 4 x 1 Gb ethernet ports **S2600GZ4:** 24 DIMM and 4 x 1 Gb ethernet ports
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family**
Total PCI Slots	2
PCI Slot Types	2 x PCI Express Gen3 x24 Riser Slots
Memory Capacity	16 or 24 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 or 768 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

1U RACK SYSTEMS	
Dimensions (H x W x D)	1.75" x 16.93" x 27.95"
System Cooling	Redundant cooling fans
Power Supply	460 W AC Redundant PSU (Gold Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
PCI Riser Slots	1x PCI Express* x16, x16 mechanical
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R1208GL4DS	8 x 2.5" hot-swap HDD 16 DIMM 460 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R1208GZ4GC	8 x 2.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R1208GZ4GS9	8 x 2.5" hot-swap HDD 24 DIMM 750 W AC Redundant PSU
R1304GL4DS9	4 x 3.5" hot-swap HDD 16 DIMM 460 W AC Redundant PSU
R1304GZ4GC	4 x 3.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Intel® Remote Management Module 4
R1304GZ4GS9	4 x 3.5" hot-swap HDD 24 DIMM 750 W AC Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000GZ AND R2000GZ BASED ON THE INTEL® S2600GL / GZ SERVER BOARDS *continued*

2U RACK SYSTEMS	
Dimensions (H x W x D)	3.44" x 16.93" x 27.95"
System Cooling	Redundant cooling fans
Power Supply	750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
PCI Riser Slots	2 x PCI Express* x8, x16 mechanical, 1 x8, x8 mechanical 1 x PCI Express x16, x16 mechanical, 1 x8, x8 mechanical 2 x PCIx 133 MHz, 1 PCIe x8, x8 mechanical
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R2208GL4GS	8 x 2.5" hot-swap HDD 16 DIMM 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2208GZ4GC	8 x 2.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2208GZ4GS9	8 x 2.5" hot-swap HDD 24 DIMM 750 W AC Redundant PSU
R2216GZ4GC	16 x 2.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Software RAID Key RKSAS8 Intel® RAID Expander RES2CV240 24-port Intel® Remote Management Module 4
R2224GZ4GC4	24 x 2.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Intel® Remote Management Module 4

SPECIFIC SKUS	
R2308GL4GS	8 x 3.5" hot-swap HDD 16 DIMM 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2308GZ4GC	8 x 3.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2308GZ4GS9	8 x 3.5" hot-swap HDD 24 DIMM 750 W AC Redundant PSU
R2312GL4GS	12 x 3.5" hot-swap HDD 16 DIMM 750 W AC Redundant PSU Intel® Remote Management Module 4
R2312GZ4GC4	12 x 3.5" hot-swap HDD 24 DIMM 2 x 750 W AC Redundant PSU Intel® Remote Management Module 4
R2312GZ4GS9	12 x 3.5" hot-swap HDD 24 DIMM 750 W AC Redundant PSU

INTEL® SERVER SYSTEMS R2000IP AND P4000IP BASED ON THE INTEL® SERVER BOARD S2600IP

Description	Provides unsurpassed I/O capacity by exposing all 80 PCI Express* Gen3 lanes available in the chipset to offer 8 single-width or 4 double-width card support with a full range of SAS RAID and I/O expansion options for the ultimate in flexibility. (Extended life product.)
Target Market	Enterprise / storage
Server Board Included	**S2600IP4:** 16 DIMM and 4 x 1 Gb ethernet ports
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family**
Total PCI Slots	8+2
PCI Slot Types	1 x PCI Express 3.0 x16 3 x PCI Express 3.0 x8 or x0 3 x PCI Express 3.0 x8 or x16 1 x PCI Express 2.0 x4 1 x PCI Express 2.0 x4 via SAS ROC module 1 x PCI Express 1.0 x8 via I/O expansion module
Memory Capacity	16 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

2U RACK SYSTEMS	
Dimensions (H x W x D)	3.44" x 16.93" x 27.95"
System Cooling	Redundant cooling fans
Power Supply	750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R2208IP4LHPC	8 x 2.5" hot-swap HDD 2 x 750 W AC Redundant PSU Software RAID Key RKSAS8 Intel® Remote Management Module 4
R2308IP4LHPC	8 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2312IP4LHPC	12 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Intel® RAID Expander RES2SV240 Intel® Integrated RAID Module RMS25CB080 Intel® Remote Management Module 4

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R2000IP AND P4000IP BASED ON THE INTEL® SERVER BOARD S2600IP *continued*

4U PEDESTAL SYSTEMS	
Dimensions (H x W x D)	17.24" x 6.81" x 26.9"
System Cooling	Redundant cooling fans
Power Supply	1200 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
P4216IP4LHJC	16 x 2.5" hot-swap HDD 2 x 1200 W AC Redundant PSU Software RAID Key RKSAS8
P4308IP4LHJC	8 x 3.5" hot-swap HDD 2 x 1200 W AC Redundant PSU Software RAID Key RKSATA8

INTEL® SERVER SYSTEMS P4000CP BASED ON THE INTEL® SERVER BOARD S2600CP

Description	Integrated system with a variety of storage and power supply options for powerful performance and flexible feature advantages specific to the small and medium business and storage segments. (Extended life product.)
Target Market	Small- to medium-sized businesses
Server Board Included	**S2600CP4:** Quad 1 GbE Ethernet Controllers
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family**
Total PCI Slots	6
PCI Slot Types	1 x PCI Express* 3.0 x16 5 x PCI Express 3.0 x8
Memory Capacity	16 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 512 GB max
Module Upgrades	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

4U PEDESTAL SYSTEMS

Dimensions (H x W x D)	17.24" x 6.81" x 24.9"
System Cooling	Non-redundant or redundant cooling fans
Power Supply	550 W AC Fixed PSU (Gold Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Hardware RAID Contoller RMS25PB080 provides 6 Gb/s to enable 8 SAS / SATA drives Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS

P4308CP4MHEN	8 x 3.5" hot-swap HDD 550 W AC Fixed PSU Non-redundant cooling fans Software RAID Key RKSATA8
P4308CP4MHGC	8 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Redundant cooling fans Software RAID Key RKSATA8

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000JP BASED ON THE INTEL® SERVER BOARD S1600JP

Description	Systems featuring a performance, single-socket, half-width board, rich in I/O (40 Gen3 lanes) for a streamlined 1U rack mount server presentation. (Extended life product.)
Target Market	Embedded / storage / small- to medium-sized businesses
Server Board Included	**S1600JP4:** Integrated Quad 1 GbE Ethernet Controllers
Processors Supported	**1 x Intel® Xeon® processor E5-2600 product family or Intel® Xeon® processor E5-1600 product family**
Total PCI Slots	3
PCI Slot Types	2 x PCI Express* 3.0 x16 1 x PCI Express 3.0 x8
Memory Capacity	8 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 256 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4

1U RACK SYSTEMS	
Dimensions (H x W x D)	1.75" x 17.2" x 24.75"
System Cooling	Redundant cooling fans
Power Supply	450 W DC Redundant PSU, 450 W AC Redundant PSU (Gold Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R1208JP4OC	8 x 2.5" hot-swap HDD 2 x 450 W AC Redundant PSU
R1208JP4TC	8 x 2.5" hot-swap HDD 2 x 450 W DC Redundant PSU
R1208JP4GS	8 x 2.5" hot-swap HDD 750 W AC Redundant PSU
R1304JP4OC	4 x 3.5" hot-swap HDD 2 x 450 W AC Redundant PSU
R1304JP4TC	4 x 3.5" hot-swap HDD 2 x 450 W DC Redundant PSU
R1304JP4GS	4 x 3.5" hot-swap HDD 750 W AC Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® WORKSTATION SYSTEMS P4000CR BASED ON THE INTEL® WORKSTATION BOARD W2600CR

Description	These workstation systems balance the need for computational power with I/O capacity and flexibility to deliver amazing application performance.
Target Market	Data-intensive applications
Workstation Board Included	**W2600CR2:** up to 4 double-wide graphics cards
Processors Supported	**2 x Intel® Xeon® processors E5-2600 product family**
Total PCI Slots	8+2
PCI Slot Types	1 x PCI Express* 3.0 x16 3 x PCI Express 3.0 x8 or x0 3 x PCI Express 3.0 x8 or x16 1 x PCI Express 2.0 x4 1 x PCI Express 2.0 x4 via SAS ROC module 1 x PCI Express 1.0 x8 via I/O expansion module
Memory Capacity	16 x LR / U / RDIMMs 1333 / 1600 MHz ECC DDR3 512 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

4U PEDESTAL SYSTEMS	
Dimensions (H x W x D)	17.24" x 6.81" x 26.9"
System Cooling	Non-redundant cooling fans
Power Supply	1600 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Hardware RAID Contoller RMS25PB080 provides 6 Gb/s to enable 8 SAS / SATA drives Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
P4304CR2LFKN	4 x 3.5" fixed HDD 1600 W AC Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R2000LH2 / LT2 BASED ON THE INTEL® SERVER BOARD S4600LH

Description	The uncompromising performance and high reliability server of choice for demanding applications, featuring support for 4 Intel® Xeon® processor E5-4600 and massive memory capacity of 1.5 TB. (Extended life product.)
Target Market	Enterprise / HPC
Server Board Included	**S4600LH2:** Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE) **S4600LT2:** Integrated Dual Port Intel® Ethernet Controller X540 (10 GbE)
Processors Supported	**4 x Intel® Xeon® processors E5-4600 product family**
Total PCI Slots	6+2
PCI Slot Types	6 x PCI Express* 3.0 x16 2 x PCI Express 3.0 x8 via I/O expansion module
Memory Capacity	48 x LR / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 1500 GB max
Module Upgrades	Intel® I/O Module: Ethernet and InfiniBand* Intel® Integrated RAID ROC or IOC Module (in PCI Express FF) Intel® Remote Management Module 4 (included) TPM Module
Additional Board Options	eUSB SSD, SATA DOM, and mSATA support (for internal keys and boot)

2U RACK SYSTEMS	
Dimensions (H x W x D)	3.43" x 17.24" x 28"
System Cooling	11 x high-speed hot-swap redundant 40mm dual rotor fans
Power Supply	1600 W AC Common Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Intel® Remote Management Module 4 Optional optical disk drive Optional Local Control Panel
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R2208LT2HKC4	8 x 2.5" hot-swap HDD Hardware RAID Contoller RMS25PB080 provides 6 Gb/s to enable 8 SAS / SATA drives Integrated Dual Port Intel® Ethernet Controller X540 (10 GbE) 2 x 1600 W AC Common Redundant PSU Intel® Remote Management Module 4
R2304LH2HKC	4 x 3.5" hot-swap HDD Integrated Dual Port Intel® Ethernet Controller I350 (1 GbE) 2 x 1600 W AC Common Redundant PSU Intel® Remote Management Module 4

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000SP BASED ON THE INTEL® SERVER BOARD S1400SP

Description	Built for entry-level affordability, this single-socket rack system provides real server performance at a low cost, making it an ideal embedded, data center, and storage solution building block. (Extended life product.)
Target Market	Embedded
Server Board Included	**S1400SP2:** Integrated Dual 1 GbE Ethernet Controllers **S1400SP4:** Integrated Quad 1 GbE Ethernet Controllers
Processors Supported	**1 x Intel® Xeon® processor E5-2400 product family**
Total PCI Slots	1+1+1
PCI Slot Types	1 x PCI Express* 3.0 x8 1 x PCI Express 3.0 x4 via I/O expansion module 1 x PCI Express 3.0 x8 via I/O expansion module
Memory Capacity	6 x R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 96 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

1U RACK SYSTEMS	
Dimensions (H x W x D)	1.7" x 17.2" x 21.8"
System Cooling	Non-redundant cooling fans
Power Supply	350 W AC Fixed PSU (Silver Efficiency), 450 W AC Redundant Power Supply (Gold Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R1304SP2SHBN	4 x 3.5" hot-swap HDD Intel® S1400SP2 Server Board with Integrated Dual 1 GbE Ethernet Controllers 350 W AC Fixed PSU
R1304SP4SHOC	4 x 3.5" hot-swap HDD Intel® S1400SP4 Server Board with Integrated Quad 1 GbE Ethernet Controllers 2 x 450 W AC Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000EP BASED ON THE INTEL® SERVER BOARD S2400EP

Description	Designed for high-density rack-optimized deployments, either in value data centers or embedded applications. (Extended life product.)
Target Market	Embedded
Server Board Included	**S2400EP2:** Dual 1 GbE Ethernet Controllers
Processors Supported	**2 x Intel® Xeon® processors E5-2400 product family**
Total PCI Slots	1+1+1
PCI Slot Types	1 x PCI Express* 3.0 x16 1 x PCI Express 3.0 x8 via I/O expansion module 1 x PCI Express 3.0 x4 via I/O expansion module
Memory Capacity	8 x LV / R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 128 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

1U RACK SYSTEMS

Dimensions (H x W x D)	1.7" x 17.2" x 21.8"
System Cooling	Non-redundant cooling fans
Power Supply	600 W AC Fixed PSU (Silver Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS

R1304EP2SHFN	4 x 3.5" hot-swap HDD 600 W AC Fixed PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000BB AND R2000BB BASED ON THE INTEL® SERVER BOARD S2400BB

Description	Innovative spread core design makes this the high-density and energy-efficient choice for data center and cloud applications where return on investment is measured in price and performance-per-watt. (Extended life product.)
Target Market	IPDC / cloud
Server Board Included	**S2400BB4:** 12 DIMM and 4 x 1 Gb ethernet ports
Processors Supported	**2 x Intel® Xeon® processors E5 2400 product family**
Total PCI Slots	8+1
PCI Slot Types	2 x PCI Express* 3.0 x16 6 x PCI Express 3.0 x8 1 x PCI Express 2.0 x8 via I/O expansion module
Memory Capacity	12 x LR / U / RDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 384 GB max
Module Upgrades	Intel® I/O Module Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

1U RACK SYSTEMS	
Dimensions (H x W x D)	1.75" x 17.2" x 24.75"
System Cooling	Redundant cooling fans
Power Supply	460 W AC Redundant PSU (Gold Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R1208BB4DC	8 x 2.5" hot-swap HDD 2 x 460 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R1304BB4DC	4 x 3.5" hot-swap HDD 2 x 460 W AC Redundant PSU Intel® Remote Management Module 4
R1208BB4GS9	8 x 2.5" hot-swap HDD 750 W AC Redundant PSU
R1304BB4GS9	4 x 3.5" hot-swap HDD 750 W AC Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000BB AND R2000BB BASED ON THE INTEL® SERVER BOARD S2400BB *continued*

2U RACK SYSTEMS	
Dimensions (H x W x D)	3.5" x 17.2" x 24.75"
System Cooling	Redundant cooling fans
Power Supply	750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R2208BB4GS9	8 x 2.5" hot-swap HDD 750 W AC Redundant PSU
R2308BB4GC	8 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Software RAID Key RKSATA8 Intel® Remote Management Module 4
R2312BB4GS9	12 x 3.5" hot-swap HDD 750 W AC Redundant PSU

INTEL® SERVER SYSTEMS R2000SC AND P4000SC BASED ON THE INTEL® SERVER BOARD S2400SC

Description	Expanded I/O for demanding first server environments makes this an ideal choice for small businesses seeking to maximize ROI while delivering affordable server-level performance.
Target Market	Medium business / RBO
Server Board Included	**S2400SC**
Processors Supported	**2 x Intel® Xeon® processors E5-2400 product family**
Total PCI Slots	4+1
PCI Slot Types	1 x PCI Express* 3.0 x16 1 x PCI Express 3.0 x8 1 x PCI Express 3.0 x4 1 x PCI Express 2.0 x4 1 x Legacy 32/33 PCI slot
Memory Capacity	8 x LV / R / U / DIMMs 1066 / 1333 / 1600 MHz ECC DDR3 128 GB max
Module Upgrades	Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

2U RACK SYSTEMS	
Dimensions (H x W x D)	3.5" x 17.2" x 24.75"
System Cooling	Non-redundant cooling fans
Power Supply	600 W AC Fixed PSU (Silver Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
R2308SC2SHFN	8 x 3.5" hot-swap HDD 600 W AC Fixed PSU
R2312SC2SHGR	12 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Power Distribution Board Intel® Remote Management Module 4 Software RAID Key RKSATA8

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R2000SC AND P4000SC BASED ON THE INTEL® SERVER BOARD S2400SC *continued*

4U PEDESTAL SYSTEMS	
Dimensions (H x W x D)	17.24" x 6.81" x 21.5" or 17.24" x 6.81" x 24.9"
System Cooling	Non-redundant or redundant cooling fans
Power Supply	550 W AC Fixed PSU (Silver Efficiency), 750 W AC Redundant PSU (Platinum Efficiency)
Thermal Solution	Included
Other Components	Includes Intel® System Management Software, iBMC with IPMI Optional optical disk drive
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS	
P4304SC2SFEN	4 x 3.5" fixed HDD 550 W AC Fixed PSU Non-redundant cooling fans 17.24" x 6.81" x 21.5" P4000S chassis
P4308SC2MHGC	8 x 3.5" hot-swap HDD 2 x 750 W AC Redundant PSU Redundant cooling fans Power Distribution Board Intel® Remote Management Module 4 17.24" x 6.81" x 24.9" P4000M chassis

INTEL® SERVER SYSTEMS R1000RP AND P4000RP BASED ON THE INTEL® SERVER BOARD

Description	Entry Server systems with management options expand deployment opportunities with low price point and basic server features.
Target Market	First server
Server Board Included	**S1200RPS:** Lowest cost with basic server features **S1200RPL:** Pedestal solution with optional management **S1200RPO:** Rack Optimized to support IOM and Storage Modules **S1200RPM:** Can support processors with GT2 graphics
Processors Supported	**Intel® Xeon® processor E3-1200v3 product family**
Total PCI Slots	4
PCI Slot Types	**S1200RPS:** 2 x PCI Express* 3.0 x8, 1 x PCI Express 2.0 x4, 1 x PCI Express 2.0 x1 **S1200RPL:** 2 x PCI Express 3.0 x8, 1 x PCI Express 2.0 x4, 1 x PCI Express 2.0 x1, 1 x internal mezzanine connector x8 **S1200RPO:** 1 x PCI Express 3.0 x8, 1 x internal or external mezzanine connector x8 OR 2 x mezzanine connectors x4 **S1200RPM:** 1 x PCI Express 3.0 x8, 1 x internal or external mezzanine connector x8 OR 2 x mezzanine connectors x4
Memory Capacity	4 x DDR3 UDIMMs 1333 / 1600 ECC 32 GB max
Module Upgrades	**S1200RPS:** TPM Module **S1200RPL:** Intel® Storage I/O slot, Intel® Remote Management Module 4, TPM Module **S1200RPO / S1200RPM:** Intel I/O Modules, Intel® Storage I/O slot, Intel® Remote Management Module 4, TPM Module

1U RACK SYSTEMS	
Dimensions (H x W x D)	1.75" x 17.24" x 21.8"
System Cooling	Non-redundant cooling fans
Power Supply	450 W Redundant or 350 W Fixed PSU (Silver Efficiency)
Thermal Solution	Sold separately
Other Components	Optional optical disk drive
Warranty	3 year limited warranty

SPECIFIC SKUS	
R1304RPSSFBN	4 x 3.5" fixed HDD Intel® Server Board S1200RPS 350 W Fixed PSU
R1304RPOSHBN	4 x 3.5" hot-swap HDD Intel® Server Board S1200RPO 350 W Fixed PSU
R1304RPMSHOR	4 x 3.5" hot-swap HDD Intel® Server Board S1200RPM 2 x 450 W hot-swap Redundant PSU
R1208RPOSHOR	8 x 2.5" hot-swap HDD Intel® Server Board S1200RPO 2 x 450 W hot-swap Redundant PSU
R1208RPMSHOR	8 x 2.5" hot-swap HDD Intel® Server Board S1200RPM 2 x 450 W hot-swap Redundant PSU

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

INTEL® SERVER SYSTEMS R1000RP AND P4000RP BASED ON THE INTEL® SERVER BOARD S1200V3RP *continued*

4U PEDESTAL SYSTEMS	
Dimensions (H x W x D)	17.24" x 6.9" x 21.5"
System Cooling	Non-redundant cooling fans
Power Supply	460 W hot-swap PSU (Silver Efficiency)
Thermal Solution	Sold separately
Other Components	Optional optical disk drive
Warranty	3 year limited warranty

SPECIFIC SKUS	
P4308RPLSHDR	8 x 3.5" hot-swap HDD Intel® Server Board S1200RPL 2 x 460 W hot-swap Redundant PSU
P4304XXSFCN	KDK
P4304XXSHCN	KDK

INTEL® SERVER SYSTEMS R1000BT AND P4000BT BASED ON THE INTEL® SERVER BOARDS S1200BTL / BTS

Description	Low-priced, entry-level server systems featuring the Intel® Xeon® processor E3 product family expand deployment opportunities for first server customers. Optional server management on some models.
Target Market	First server
Server Board Included	**S1200BTSR:** no management **S1200BTLR:** Intel® System Management Software, iBMC with IPMI
Processors Supported	**1 x Intel® Xeon® processor E3-1200 / E3-1200 v2 product family / Intel® Core™ i3 processor series**
Total PCI Slots	4 or 5
PCI Slot Types	**S1200BTSR:** 1 x PCI Express* 3.0 x8, 1 x PCI Express 3.0 x8 (x8 mechanical), 1 x PCI Express 3.0 x4 (x8 mechanical), 1 x PCI 32-bit / 33 MHz (5 V) **S1200BTLR:** 1 x PCI Express 3.0 x8 (x16 mechanical), 3 x PCI Express 3.0 x4 (x8 mechanical), 1 x PCI 32-bit / 33 MHz (5 V), 1 x Mezzanine connector—optional SAS module
Memory Capacity	4 x DDR3 UDIMMs 1066 / 1333 / 1600 MHz ECC DDR3 32 GB max
Module Upgrades	**S1200BTSR:** TPM Module **S1200BTLR:** Intel® Integrated RAID ROC or IOC Module Intel® Remote Management Module 4 TPM Module

1U RACK SYSTEMS

Dimensions (H x W x D)	1.75" x 17.24" x 21.8"
System Cooling	Non-redundant cooling fans
Power Supply	250 W or 350 W AC Fixed PSU (Silver Efficiency)
Thermal Solution	Sold separately
Other Components	Optional optical disk drive
Warranty	3 year limited warranty

SPECIFIC SKUS

R1304BTSSFANR	4 x 3.5" fixed HDD Intel® Server Board S1200BTSR 250 W AC Fixed PSU
R1304BTLSFANR	4 x 3.5" fixed HDD Intel® Server Board S1200BTLR 250 W AC Fixed PSU
R1304BTLSHBNR	4 x 3.5" hot-swap HDD Intel® Server Board S1200BTLR 350 W AC Fixed PSU

4U PEDESTAL SYSTEMS

Dimensions (H x W x D)	17.24" x 6.9" x 21.5"
System Cooling	Non-redundant cooling fans
Power Supply	365 W AC Fixed PSU (Silver Efficiency)
Thermal Solution	Sold separately
Other Components	Optional optical disk drive
Warranty	3 year limited warranty

SPECIFIC SKUS

P4304BTSSFCNR	4 x 3.5" fixed HDD Intel® Server Board S1200BTSR
P4304BTLSFCNR	4 x 3.5" fixed HDD Intel® Server Board S1200BTLR
P4304BTLSHCNR	4 x 3.5" hot-swap HDD Intel® Server Board S1200BTLR

For the latest product SKUs and specifications, visit: **http://ark.intel.com**

For more information, visit **www.intel.com/go/serversystems** or **ark.intel.com**

[1] On interposer (need accessory kit AXXRMM4IOM or AXXRMM4IOMW).

[2] Model available with TPM-enabled board supporting Intel® Trusted Execution Technology (Intel® TXT). No computer system can provide absolute security under all conditions. Intel TXT requires a computer system with Intel® Virtualization Technology, an Intel TXT-enabled processor, chipset, BIOS, Authenticated Code Modules, and an Intel TXT-compatible measured launched environment (MLE). Intel TXT also requires the system to contain a TPM v1.s. For more information, visit www.intel.com/technology/security

[3] High efficiency power supply.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, Intel Inside, Intel Core, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

(intel) Server Storage

INTEL® STORAGE SYSTEMS

Description	A flexible and expandable storage system with single- and multi-cable connectivity, redundant fans, and options for redundant power supplies simplifies your server configuration. Features 12 x 3.5" drives or 24 x 2.5" drives and works seamlessly with Intel® Servers and Intel® RAID for a complementary storage solution. Up to 48 TB storage capacity possible. Cascading up to 2 levels. (Extended life product.)
Target Market	Enterprise / storage

2U RACK SYSTEMS

Dimensions (H x W x D)	3.44" x 16.93" x 27.95"
System Cooling	Redundant cooling fans
Power Supply	460 W Redundant PSU (Gold Efficiency)
Other Components	Dual-port backplane for full redundancy Single or redundant SAS/SATA 6.0 Gb/s via SFF-8088 connection Fan and PSU monitoring via SES
Warranty	3 year limited warranty, optional 2 year extended warranty available

SPECIFIC SKUS

JBOD2312S2SP	12 x 3.5" hot-swap HDD 36-port SAS expander 460 W AC PSU 2 x external SFF-8088 connectors
JBOD2224S2SP (Available late Q3 2013)	24 x 2.5" hot-swap HDD 36-port SAS expander 460 W AC PSU 2 x external SFF-8088 connectors
JBOD2224S2DP	24 x 2.5" hot-swap HDD 2 x 36-port SAS expander 2 x 460 W AC PSU 4 x external SFF-8088 connectors

The Intel® Storage System JBOD2000 product family works seamlessly with Intel® Server Systems and Intel® RAID and can even be used as a virtual RBOD by using Intel® RAID Controller RS25SB008 or an Intel® Intelligent RAID module. Combine with Intel® Solid-State Drives using Intel® SSD Cache Technology, or set up a network using a SAS switch to serve multiple servers. With several configuration options available, it is a flexible and expandable storage system that simplifies your server environment.

For the latest product SKUs and specifications, visit: **http://ark.intel.com**
For more information, visit **www.intel.com/go/serverproducts**

Intel® Server Chassis

New Intel® Server Chassis P4000 series requires the separate purchase of a thermal solution kit and air duct specific to the Intel® Server Board selected. See the Accessories and Spares section of the chosen Intel Server Board configuration guide for recommended part numbers.

Other boxed Intel® Thermal Solutions are mechanically compatible with the processor socket but are not thermally validated in Intel Server Chassis.

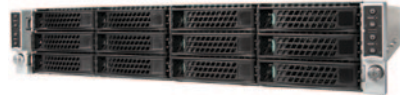|	Intel® Server Chassis P4000S	
Chassis	A general purpose pedestal chassis optimized for thermal and acoustic performance.	
Model	Fixed drive models	Hot-swap drive models
Chassis Order Code[1]	**P4304XXSFCN, P4304XXSFEN**	**P4304XXSHCN, P4304XXSHDR**
Spares Kit Order Code[2]	Mechanical Spares Kit: FUPSMSK Electrical Spares Kit: FUPSESK Air ducts sold separately based on board purchased	Mechanical Spares Kit: FUPSMSK Electrical Spares Kit: FUPSESK Air ducts sold separately based on board purchased
Form Factor	4U Pedestal	4U Pedestal
Intel® Server Board Support[1]	**P4304XXSFCN:** S1200BTS, S1200BTL, S1200V3RPL, S1200V3RPS, S2600CP2J **P4304XXSFEN:** S2400SC2, S2600CP2J	**P4304XXSHCN:** S1200BTL, S1200V3RPL, S1200V3RPS, S2600CP2J **P4304XXSHDR:** S2400SC2, S2600CP2J, all S1400FP
Drive Bays	Up to four 3.5" fixed SAS / SATA drives	Up to four 3.5" hot-swap SAS / SATA drives
Hot-Swap Disk Drive Bay (Order Code)	Upgrade: convert to four slot hot-swap drive bays using the following Drive Bay upgrade kit: (FUP4X35HSDK), supports four SAS / SATA hot-swap drives	Share the same hot-swap drive bay kit (FUP4X35HSDK), use as a spare
System Cooling	2 x 92mm internal chassis fan (single fan in P4304XXSFCN)	2 x 92mm internal chassis fan (single fan in P4304XXSHCN)
Power Supplies	P4304XXSFCN: (1) Fixed 365 W (Silver Efficiency) P4304XXSFEN: (1) Fixed 550 W (Silver Efficiency)	P4304XXSHCN: (1) Fixed 365 W (Silver Efficiency) P4304XXSHDR: (2) Common Redundant 460 W (Gold Efficiency)
I/O Slots	Up to 6	Up to 6
Backplane	None included	Included
Tool-less Features	Front bezel, EMI cover, side cover, PCI card retainer, peripheral bays, PSU installation, and fixed drive carriers	Front bezel, side cover, PCI card retainer, hot-swap drive carriers, hot-swap drive bay, peripheral bays, and PSU installation
Dimensions (H x W x D)	Pedestal: 17.24" x 6.81" x 21.5" (438mm x 173mm x 546mm)	Pedestal: 17.24" x 6.81" x 21.5" (438mm x 173mm x 546mm)
Bezel Features	Black, control panel, three 5.25" peripheral drive bays, four internal drive bays, two USB ports	Black, control panel, three 5.25" peripheral drive bays, four hot-swap drive bays and carriers (behind door), security lock, two USB ports
Front Connectors	2 x USB	2 x USB
System Security	Side cover: A padlock loop slot available at the rear of the system access cover to prevent access to the processors, memory, and add-in devices Side cover: Intrusion switch Back panel: Kensington* cable lock mounting hole	Front door: Security lock (available on hot-swap drive SKUs only) Side cover: A padlock loop slot available at the rear of the system access cover to prevent access to the processors, memory, and add-in devices Side cover: Intrusion switch Back panel: Kensington* cable lock mounting hole

	Intel® Server Chassis P4000M	
Chassis	A general purpose pedestal chassis targeted at small to medium business supporting CEB and EEB form factor server boards.	
Model	Fixed drive models	Hot-swap drive models
Chassis Order Code[1]	**P4308XXMFEN**	**P4208XXMHGC, P4216XXMHGC, P4216XXMHJC, P4308XXMHDR, P4308XXMHEN, P4308XXMHGC, P4308XXMHGN,**
Spares Kit Order Code[2]	Mechanical Spares Kit: FUPMMSK Electrical Spares Kit: FUPMESK Air ducts sold separately based on board purchased	Mechanical Spares Kit: FUPMMSK Electrical Spares Kit: FUPMESK Air ducts sold separately based on board purchased
Form Factor	4U Pedestal	4U Pedestal
Intel® Server Board Support[1]	**P4308XXMFEN:** all S2600CP, all S2600CO, all S2400GP, S2400SC2	**P4208XXMHGC, P4216XXMHGC, P4308XXMHDR, P4308XXMHEN, P4308XXMHGC, P4308XXMHGN:** all S2600CP, all S2600CO, all S2400GP, S2400SC2 **P4216XXMHJC:** all S2600CP, all S2600CO, all S2400GP
Drive Bays	Up to eight 3.5" fixed SAS / SATA drives	Up to eight or sixteen 2.5" hot-swap SAS / SATA drives Up to eight 3.5" hot-swap SAS / SATA drives
Hot-Swap Disk Drive Bay (Order Code)	Upgrade: convert to eight slot hot-swap drive bays using the following Drive Bay upgrade kit: (FUP8X25HSDK), supports eight SAS / SATA hot-swap drives	Share the same hot-swap drive bay kit (FUP8X25HSDK), use as spare
System Cooling	2 x 120mm internal chassis fan	2 x 120mm internal chassis fan Redundant Cooling on: P4208XXMHGC, P4216XXMHGC, P4216XXMHJC, P4308XXMHGC
Power Supplies	P4308XXMFEN: (1) Fixed 550 W (Silver Efficiency) No redundant PSU	P4208XXMHGC: (2) Common Redundant 750 W (Platinum Efficiency) P4216XXMHGC: (2) Common Redundant 750 W (Platinum Efficiency) P4216XXMHJC: (2) Common Redundant 1200 W (Platinum Efficiency) P4308XXMHDR: (2) Common Redundant 460 W (Gold Efficiency) P4308XXMHEN: (1) Fixed 550 W (Silver Efficiency) No redundant PSU P4308XXMHGC: (2) Common Redundant 750 W (Platinum Efficiency) P4308XXMHGN: (1) Common Redundant 750 W (Platinum Efficiency)
I/O Slots	Up to 6	Up to 6
Backplane	None included	Included
Tool-less Features	Front bezel, EMI cover, side cover, PCI card retainer, peripheral bays, PSU installation, and fixed drive carriers	Front bezel, side cover, PCI card retainer, hot-swap drive carriers, hot-swap drive bays, peripheral bays, and PSU installation
Dimensions (H x W x D)	Pedestal: 17.24" x 6.81" x 24.9" (438mm x 173mm x 632mm)	Pedestal: 17.24" x 6.81" x 24.9" (438mm x 173mm x 632mm)
Bezel Features	Black, control panel, three 5.25" peripheral drive slots, eight internal drive carriers, two USB ports	Black, control panel, three 5.25" peripheral drive slots, eight and sixteen hot-swap drive carriers (behind door), security lock, two USB ports
Front Connectors	2 x USB	2 x USB
System Security	Side cover: A padlock loop slot available at the rear of the system access cover to prevent access to the processors, memory, and add-in cards Side cover: Intrusion switch Back panel: Kensington* cable lock mounting hole	Front door: Security lock (available on hot-swap HDD SKUs only) Side cover: A padlock loop slot available at the rear of the system access cover to prevent access to the processors, memory, and add-in cards Side cover: Intrusion switch Back panel: Kensington* cable lock mounting hole

Chassis	Intel® Server Chassis H2000	
	A 2U rack chassis optimized for compute density, supporting up to four Intel® Compute Modules.	
Model	3.5" drive model	2.5" drive model
Chassis Order Code¹	**H2312XXKR, H2312XXJR**	**H2216XXKR, H2216XXJR**
Spares Kit Order Code²	1200 W PSU Spares: FXX1200PCRPS 1600 W PSU Spares: FXX1600PCRPS HSBP Spares: FHW12X35HSBP Node Tray Blank Filler: FH2000BNF Power Distribution Board Spares: FXXCRPSDB Control Panel Spares: FH2000FPANEL HDD Drive Bay Spares: FXX35HSADPB	1200 W PSU Spares: FXX1200PCRPS 1600 W PSU Spares: FXX1600PCRPS HSBP Spares: FHW16X25HSBP Node Tray Blank Filler: FH2000BNF Power Distribution Board Spares: FXXCRPSDB Control Panel Spares: FH2000FPANEL HDD Drive Bay Spares: FXX25HSCAR
Form Factor	2U Rack	2U Rack
Intel® Server Board Support¹	**HNS2600JF, HNS2600JFQ, HNS2600JFF, HNS2600WP, HNS2600WPQ, HNS2600WPF, HNS2400LP**	**HNS2600JF, HNS2600JFQ, HNS2600JFF, HNS2600WP, HNS2600WPQ, HNS2600WPF, HNS2400LP**
Drive Bays	Up to twelve 3.5" hot-swap SAS / SATA drives	Up to sixteen 2.5" hot-swap SAS / SATA drives
Hot-Swap Disk Drive Bay (Order Code)	FXX35HSADPB	FXX25HSCAR
System Cooling	40mm x 56mm Dual Rotor Fan Spare: FXX4056DRFAN	40mm x 56mm Dual Rotor Fan Spare: FXX4056DRFAN
Power Supplies	H2312XXJR: 2x 1200 W Platinum PSU (FXX1200PCRPS) H2312XXKR: 2x 1600 W Platinum PSU (FXX1600PCRPS)	H2216XXJR: 2x 1200 W Platinum PSU (FXX1200PCRPS) H2216XXKR: 2x 1600 W Platinum PSU (FXX1600PCRPS)
I/O Slots	N/A	N/A
Backplane	Included	Included
Tool-less Features	PSU, Compute Node, HDD bays are all hot swap	PSU, Compute Node, HDD bays are all hot swap
Dimensions (H x W x D)	2U Rack: 17.24" x 3.46" x 30.35" (438mm x 87.9mm x 771mm)	2U Rack: 17.24" x 3.46" x 28.86" (438mm x 87.9mm x 733mm)
Bezel Features	2U Rack Bezel Spares: A2UBEZEL	2U Rack Bezel Spares: A2UBEZEL
Front Connectors	N/A	N/A
System Security	N/A	N/A

For more information, visit **www.intel.com/products/server/chassis** or **ark.intel.com**

¹ Refer to www.intel.com/p/en_US/support/server/ for up-to-date details on server boards supported by each chassis.

² For complete spare and accessory list, please download the latest configuration guide from Spares, parts list and configuration guide at www.intel.com/p/en_US/support

³ Intel® Server Chassis H2000 series requires the separate purchase of Intel® Compute Modules. See the Accessories and Spares section of the chosen Intel® Server Board configuration guide for recommended part numbers.

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

(intel) Intel® Modular Server

SIMPLE. FLEXIBLE. COMPLETE.

The Intel® Modular Server is an integrated system that includes SAN storage, computing, and networking to simplify the growing demands of your IT infrastructure. The Intel Modular Server features:

- Up to six dual processor Server Compute Modules
- Integrated Storage Area Network (SAN)
- Integrated Ethernet Switch Modules
- All hot-swappable components
- Virtual Presence remote management capabilities
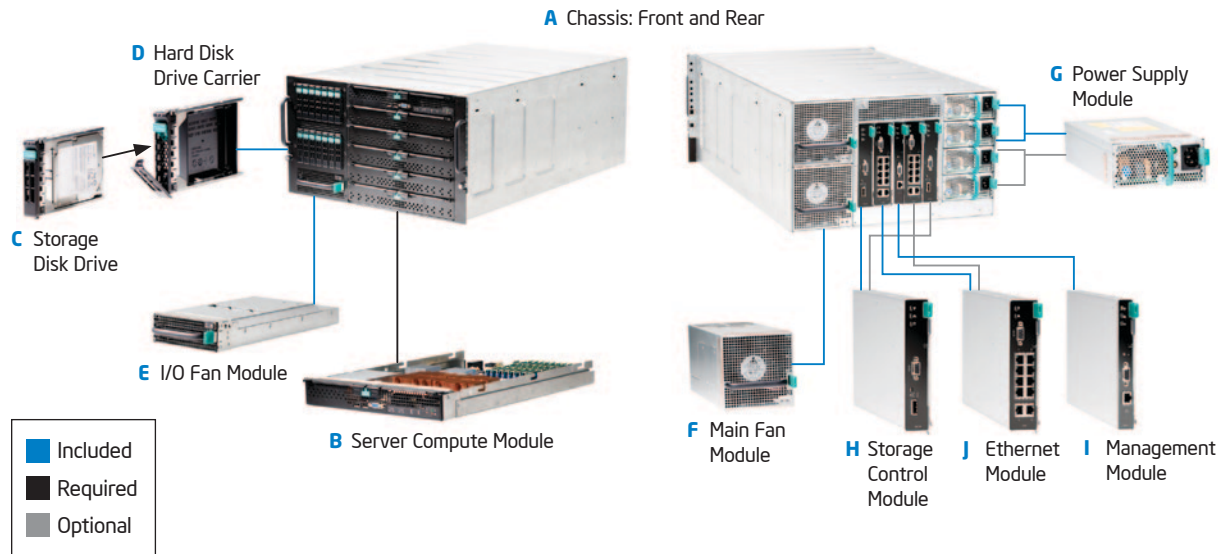- Optional software upgrade features:
  Intel® Shared LUN: Enables HA clustering and advanced virtualization applications
  Intel® Modular Server Storage Management Pack: Enables LUN cloning, RAID morphing, and storage pool defragmentation
  Intel® Modular Server Advanced Management Pack: Enables features for user authentication using an LDAP server, forwarding events to an external SYSLOG server, and exporting / importing chassis settings

As an integrated system, the Intel® Modular Server has capabilities not found in the common rack server setup, including virtual drives that provide grow-as-you-go flexibility and Virtual Presence management for simplicity.

Intel® Modular Server will be available for order until November 1, 2013 only. Please contact your Intel Field Representative for more information.

A Chassis: Front and Rear
D Hard Disk Drive Carrier
G Power Supply Module
C Storage Disk Drive
E I/O Fan Module
B Server Compute Module
F Main Fan Module
H Storage Control Module
J Ethernet Module
I Management Module

- Included
- Required
- Optional

A CHASSIS
- 1–6 Server Compute Modules
- Storage Drive Bay

B SERVER COMPUTE MODULE
(REQUIRED)
- Two models available: MFS2600KI and MFS5520VIR
- Up to 2 Intel® Xeon® processors
- Supports 16 DDR3 DIMMs (MFS2600KI) or 12 DDR3 DIMMs (MFS5520VIR)
- Dual Gigabit Mezzanine expansion card (optional)

C STORAGE HARD DISK DRIVE
(REQUIRED)
- Up to 14 2.5-inch SAS / SATA drives

D HARD DISK DRIVE CARRIERS
(INCLUDED)

E HOT-SWAPPABLE I/O FAN MODULE (INCLUDED)

F HOT-SWAPPABLE MAIN FAN MODULE (INCLUDED)

G HOT-SWAPPABLE POWER SUPPLY MODULE
(2 INCLUDED, 2 OPTIONAL)
- 3 + 1 redundancy

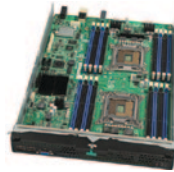**H STORAGE CONTROL MODULE**
(1 INCLUDED, 1 OPTIONAL)
- Up to 2 Storage Control Modules for redundancy

I MANAGEMENT MODULE
(INCLUDED)

J ETHERNET SWITCH MODULE
(1 INCLUDED, 1 OPTIONAL)
- Up to 2 Ethernet Switch Modules
- Each module features 10/100/ 1000GbE full-duplex ports

INTEL® MODULAR SERVER PRODUCTS

Server	Intel® Modular Server Compute Module MFS2600KI	Intel® Modular Server Compute Module MFS5520VIR
Order Code	MFS2600KI	MFS5520VIR
Intel® Server Chassis Support	Intel® Modular Server System MFSYS25V2	Intel® Modular Server System MFSYS25V2
Processor Support	Intel® Xeon® processor E5-2600 product family	Intel® Xeon® processor 5500 or 5600 series
Number of Processors Supported	2	2
Supported Speeds	Up to 8 GT/s (Intel® QuickPath Interconnect)	6.40 GT/s / 5.86 GT/s / 4.80 GT/s (Intel® QuickPath Interconnect)
Chipset	Intel® C600 Chipset	Intel® 5520 Server Chipset
Memory Capacity	16 DDR3 DIMMs (8 per processor)	12 DDR3 DIMMs (6 per processor)
Total Slots	1 Mezzanine expansion connector	1 Mezzanine expansion connector
Integrated SAS HBA	Connectivity to shared storage provided via onboard LSI* 1064e controller	Connectivity to shared storage provided via onboard LSI* 1064e controller
Integrated LAN	2 x Gigabit Ethernet (4 x with optional gigabit mezzanine card AXXGBIOMEZV)	2 x Gigabit Ethernet (4 x with optional gigabit mezzanine card AXXGBIOMEZV)
Integrated Graphics	Server Engines* LLC Pilot II* controller with 64 MB DDR2 memory	Server Engines* LLC Pilot II* controller with 64 MB DDR2 memory
Integrated Management	Remote management (KVM over IP), Remote Media Redirection, and Remote Serial Console	Remote management (KVM over IP), Remote Media Redirection, and Remote Serial Console
Application Management	Provided by Intel® System Management Software	Provided by Intel® System Management Software
Front Connectors	4 x USB, 1 x DB15 video	4 x USB, 1 x DB15 video

Chassis	Intel® Modular Server System MFSYS25V2
Chassis Order Code	MFSYS25V2
Form Factor	6U (can be deployed in a rack or pedestal kit)
Intel® Server Board Support	Intel® Modular Server Compute Module MFS5520VIR or MFS2600KI
Server Slots	6
Shared Storage HDD Bay	Supports up to 14 x 2.5" drives (MFSYS25V2)
Management Module Bay	1 integrated Intel® Modular Server Management Module
Storage Module Bay	1 integrated Intel® Storage Controller, option for redundant storage module
I/O Module Bay	1 integrated Intel® Gigabit Ethernet Switch, option for redundant Ethernet switch
System Cooling	3 x high-flow system fans included
Power Supply	Up to (4) 1000 W, N + 1 PFC 100 to 240 V-capable (2 power supplies included in the base MFSYS25V2 SKU)
Redundant Power Capable	Yes (fully redundant system configuration requires two additional power modules AXXPSU)
Tool-less Features	Complete tool-less serviceability
Dimensions (H x W x D)	10.3" x 17.5" x 28.4"
Weight	187 lbs (84.8 kg) fully configured
Ethernet Switch Module	10 x external 10/100/1000 Mb/s ports, 12 x internal 1 Gb/s ports, Layer 2+, 10 Gb/s switch interlinks, integrated management
Storage Controller Module	SAS 3 Gb-based SAN storage supporting RAID 0, 1, 1E, 5, 6, 10, 50, and 60; external 4 x mini SAS port expansion for integration with external SAS tape or RAID
Chassis Management Module	Web management GUI with remote KVM support, virtual presence, and virtualized access storage management

For more information, visit **intelmodularserver.com/**

All products and dates specified are preliminary based on current expectations and are subject to change without notice. Availability in different channels may vary.

Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

Copyright ° 2013 Intel Corporation. All rights reserved. 0713/JD/MS 310750-023US July 2013

Intel® RAID

Intel offers multiple categories of RAID products to protect data, increase performance, scale storage, and enhance server availability. A brief description of each category is listed below with details in the pages that follow.

CONTROLLER CARDS AND MODULES

- Best: Intel® Integrated Server RAID signifies unique system boards that are designed to add value above that of a standard RAID add-in card to Intel® Server Boards and Systems.
- Better: Intel® RAID Controllers are add-in cards designed to enable a wide variety of RAID solutions.
- Good: Intel® Embedded Server RAID Technology Software RAID Activation Keys are designed for entry-level RAID solutions.

RAID CACHE BACKUP

- Battery Backup Units (BBU) and Maintenance-Free Backup Units (MFBU) are available for hardware RAID products with embedded cache. The backup options are listed in the "Backup Option" row of the product tables.

EXPANDER BOARDS

- Intel® RAID Expander Cards are intended for any system with more than 8 drives. As an example of use, 8 RAID ports can be expanded to 24 ports.

PREMIUM FEATURE KEYS

- Several upgrade features can be added to enhance the performance and data protection of Intel's intelligent RAID cards and modules.

CABLE KITS AND CONVERTER BOARDS

- Newer generation RAID products do not ship with cables, as multiple options exist depending on the system in which the RAID products are installed. Therefore, Intel offers a variety of cables. A converter board that allows for two internal 8087 connectors to be converted to two external 8088 connectors is also available.

For more information, visit **www.intel.com/go/RAID**

INTEL® INTEGRATED RAID PRODUCTS

Controller	Intel® Integrated RAID Module RMS25CB080 / 040	Intel® Integrated RAID Module RMT3CB080	Intel® Integrated RAID Module RMS25JB080 / 040	Intel® Integrated RAID Module RMS25PB080 / 040
	6.0 Gb/s SAS 2.1 full hardware RAID Module with storage I/O connector	6.0 Gb/s SATA 3.0 full hardware RAID Module with storage I/O connector	6.0 Gb/s SAS 2.1 entry-level RAID Module with storage I/O connector	6.0 Gb/s SAS 2.1 full hardware RAID Module with standard PCI Express* x8 connector
Market Segment	Mainstream	Mainstream	Entry / Limited Feature	Mainstream
Order Code	RMS25CB080 / RMS25CB040	RMT3CB080	RMS25JB080 / RMS25JB040	RMS25PB080 / RMS25PB040
Processor / RAID On Chip	LSI* 2208	LSI* 2208	LSI* 2308	LSI* 2208
Memory	Embedded 1 GB ECC DDR2 SDRAM	Embedded 512 MB ECC DDR2 SDRAM	2 MB context memory for entry-level hardware RAID calculations	Embedded 1 GB ECC DDR2 SDRAM
PCI Bus	PCI Express* 3.0 x8	PCI Express* 3.0 x8	PCI Express* 3.0 x8	PCI Express* 3.0 x8
Channels	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates
Form Factor	1U capable system board	1U capable system board	1U capable system board	Low-profile PCI Express add-in card
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, and 1E	0, 1, 5, 6, 10, 50, and 60
Backup Options	AXXRSBBU9 (battery backup) AXXRMFBU2 (flash and supercap)	AXXRSBBU9 (battery backup) AXXRMFBU2 (flash and supercap)	N/A	AXXRSBBU9 (battery backup) AXXRMFBU2 (flash and supercap)
Cables	Purchased separately	Purchased separately	Purchased separately	Purchased separately
Intel® Server Board Support	Intel® Xeon® E5 series server boards with a storage I/O module connector	Intel® Xeon® E5 series server boards with a storage I/O module connector	Intel® Xeon® E5 series server boards with a storage I/O module connector	Intel® Xeon® E5 series server boards
Availability	Now	Now	Now	Now

Controller	Intel® Integrated RAID Module RMT3PB080	Intel® Integrated RAID Module RMS25KB080 / 040	Intel® Integrated RAID Module RMS2MH080	Intel® Integrated RAID Module RMS2AF080 / 040
	6.0 Gb/s SATA 3.0 full hardware RAID Module with standard PCI Express* connector	6.0 Gb/s SAS 2.1 entry-level RAID Module with standard PCI Express* connector	6.0 Gb/s SAS 2.0 RAID Module for use with Intel® Server Boards S5520UR and S5500WB	6.0 Gb/s SAS 2.0 entry-level RAID Module for use with Intel® Xeon® E3 and 5600 series server boards with an I/O module slot
Market Segment	Mainstream	Entry / Limited Feature	Mainstream	Entry
Order Code	RMT3PB080	RMS25KB080 / RMS25KB040	AXXRMS2MH080	AXXRMS2AF080 / AXXRMS2AF040
Processor / RAID On Chip	LSI* 2208	LSI* 2308	LSI* 2108	LSI* 2008
Memory	Embedded 512 MB ECC DDR2 SDRAM	2 MB context memory for entry-level hardware RAID calculations	Embedded 512 MB ECC DDR2 SDRAM	2 MB (on card) for RAID 0, 1, 1E, and 128 MB (from server board) for RAID 5 calculations
PCI Bus	PCI Express* 3.0 x8	PCI Express* 3.0 x8	PCI Express* 2.0 x8	PCI Express* 2.0 x4
Channels	8 SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates
Form Factor	Low-profile PCI Express add-in card	Low-profile PCI Express add-in card	1U capable system board	1U capable system board
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, and 1E	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 10, and 50
Backup Options	AXXRSBBU9 (battery backup) AXXRMFBU2 (flash and supercap)	N/A	AXXRSBBU7 AXXRSBBU8 (new longer life)	No
Cables	Purchased separately	Purchased separately	Included	Included
Intel® Server Board Support	Intel® Xeon® E5 series server boards	Intel® Xeon® E5 series server boards	Intel® Server Boards S5520UR and S5500WB	Intel® Server Boards S5520UR, S5500WB, S5520HC, S5520SC, S3420GP, and S1200BT
Availability	Now	Now	Now	Now

INTEL® RAID
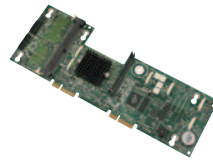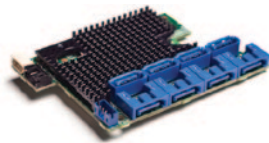
Controller	Intel® Integrated RAID Module RMS2LL080 / 040	Intel® Integrated RAID 1U / 2U Midplane	Intel® Integrated RAID Module SROMBSASMR	Intel® Integrated RAID Module AXX4SASMOD
	6.0 Gb/s SAS 2.0 entry-level RAID Module for use with Intel® Xeon® E3 and 5600 series server boards with an I/O module slot	SAS and SATA RAID Module for Intel® Server Systems SR1625UR, SR2600UR, and SR2625UR	4-port internal RAID Module for 1U, 2U, and pedestal use with Intel® Server Boards S5520HC and S5500WB	Flexible Module offering pass-through SAS and multiple entry-level RAID options
Market Segment	Entry / Limited Feature	Mainstream	Mainstream	Entry
Order Code	AXXRMS2LL080 / AXXRMS2LL040	Midplane included with systems requires AXXRAKSAS2 for hardware RAID activation	AXXROMBSASMR	AXX4SASMOD requires AXXRAKSW5 for RAID 5
Processor / RAID On Chip	LSI* 2008	LSI* 1078	LSI* 1078	LSI* 1064
Memory	2 MB for entry-level hardware RAID calculations	Supports up to 1 GB mini-DIMM ECC DDR2 667 MHz DDR2 SDRAM	Embedded 128 MB ECC DDR2 SDRAM	2 MB for entry-level hardware RAID calculations
PCI Bus	PCI Express* 2.0 x4	PCI Express* x4	PCI Express* x8	PCI Express* x4
Channels	8 / 4 SAS / SATA ports supporting point-to-point 6.0 Gb/s data-transfer rates	8 SAS / SATA ports supporting point-to-point 3.0 Gb/s data-transfer rates	4 internal SAS / SATA ports supporting point-to-point 3.0 Gb/s data-transfer rates	4 SAS / SATA ports supporting point-to-point 3.0 Gb/s data-transfer rates
Form Factor	1U capable system board	System midplane	1U capable system board	1U capable system board
RAID Levels	0, 1, and 1E	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 1E, and optional RAID 5
Backup Options	No	AXXRSBBU3	AXXRSBBU3	No
Cables	Included	Included	Included	Included
Intel® Server Board Support	Intel® Server Boards S5520UR, S5500WB, S5520HC, S5520SC, S3420GP, and S1200BT	Intel® Server Board S5520UR	Intel® Server Boards S5520UR, S5500WB, S5520HC, S5520SC, S3420GP, and S1200BT	Intel® Server Boards S5520UR, S5500WB, S5520HC, S5520SC, S3420GP, and S1200BT
Availability	Now	Now	Now	Now

SAS 2.0 INTEL® RAID CONTROLLER ADD-IN CARDS

Controller	Intel® RAID SSD Cache Controller RCS25ZB040	Intel® RAID Controller RS2SG244	Intel® RAID Controller RS2WG160	Intel® RAID Controller RS25NB008
	High performance 4-port intelligent hardware RAID card with a large capacity integrated NAND cache to significantly boost performance.	Scalable performance 6.0 Gb/s SAS RAID Controller with 24 internal and 4 external ports for SAS / SATA drives	Scalable performance 6.0 Gb/s SAS RAID Controller with 16 internal ports for SAS / SATA drives	Scalable performance dual-core 6.0 Gb/s SAS RAID Controller with 8 external ports for SAS / SATA drives
Order Code	**RCS25ZB040 (256 GB cache)** **RCS25ZB040LX (1024 GB cache)**	**RS2SG244**	**RS2WG160**	**RS25NB008**
Processor / RAID On Chip	**LSI* SAS2208**	**LSI* SAS2108**	**LSI* SAS2108**	**LSI* SAS2208**
Memory	1 GB embedded DDR3 ECC memory plus either 256 or 1024 GB NAND	512 MB embedded DDR2 ECC memory	512 MB embedded DDR2 ECC memory	1 GB embedded DDR3 ECC memory
PCI Bus	PCI Express* 3.0 x8	PCI Express* 2.0 x8	PCI Express* 2.0 x8	PCI Express* 3.0 x8
Channels	4 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	24 internal and 4 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	16 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length (MD2 compliant)	Full-height, 6.6" length	Full-height, 6.6" length	Low-profile, 6.6" length (MD2 compliant)
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60
Intel® Smart Backup Option	AXXRMFBU3	AXXRSBBU7 AXXRSBBU8 (new longer life)	AXXRSBBU7 AXXRSBBU8 (new longer life)	AXXRSBBU9
Cables	Not included	Included	Included	Not included
Availability	Now	Now	Now	August

Controller	Intel® RAID Controller RS25SB008	Intel® RAID Controller RS2MB044	Intel® RAID Controller RS25AB080	Intel® RAID Controller RS25DB080
	Scalable performance dual-core 6.0 Gb/s SAS RAID Controller with 8 external ports for SAS / SATA drives and maintenance-free backup unit (Flash-based)	Scalable performance 6.0 Gb/s SAS RAID Controller with 4 internal and 4 external ports for SAS / SATA drives	Mainstream dual-core 6.0 Gb/s SAS RAID Controller with 8 internal ports for SAS / SATA drives and maintenance-free backup unit (Flash-based)	Mainstream dual-core 6.0 Gb/s SAS RAID Controller with 8 internal ports for SAS / SATA drives
Order Code	RS25SB008	RS2MB044	RS25AB080	RS25DB080
Processor / RAID On Chip	LSI* SAS2208	LSI* SAS2108	LSI* SAS2208	LSI* SAS2208
Memory	1 GB embedded DDR2 ECC memory	512 MB embedded DDR2 ECC memory	1 GB embedded DDR2 ECC memory	1 GB embedded DDR3 ECC memory
PCI Bus	PCI Express* 3.0 x8	PCI Express* 2.0 x8	PCI Express* 3.0 x8	PCI Express* 3.0 x8
Channels	8 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	4 internal and 4 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60
Intel® Smart Backup Option	Maintenance-free backup unit (Flash-based) included with add-in card	AXXRSBBU7 AXXRSBBU8 (new longer life)	Maintenance-free backup unit (Flash-based) included with add-in card	AXXRSBBU9
Cables	Not included	One 8087 to four 7-pin SATA cable included	Purchased separately	AXXCBL740MS7P (ordered separately)
Availability	Now	Now	Now	Now

Controller	Intel® RAID Controller RS2VB080 / 040	Intel® RAID Controller RS2BL080 / 040	Intel® RAID Controller RS2PI008
	Mainstream 6.0 Gb/s SAS RAD Controller with 8 internal ports for SAS / SATA drives and maintenance-free backup unit (Flash-based)	Mainstream 6.0 Gb/s SAS RAID Controller with 8 internal ports for SAS / SATA drives	Mainstream 6.0 Gb/s SAS RAID Controller with 8 external ports for JBODs with SAS / SATA drives
Order Code	**RS2VB080 / RS2VB040**	**RS2BL080 / RS2BL040** (Standard) **RS2BL080DE** (with Drive Encryption Management)	**RS2PI008** (Standard) **RS2PI008DE** (with Drive Encryption Management)
Processor / RAID On Chip	**LSI* SAS2108**	**LSI* SAS2108**	**LSI* SAS2108**
Memory	512 MB embedded DDR2 ECC memory	512 MB embedded DDR2 ECC memory	512 MB embedded DDR2 ECC memory
PCI Bus	PCI Express* 2.0 x8	PCI Express* 2.0 x8	PCI Express* 2.0 x8
Channels	8 / 4 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 / 4 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 6, 10, 50, and 60
Intel® Smart Backup Option	Maintenance-free backup unit (Flash-based) included with add-in card	AXXRSBBU7 AXXRSBBU8 (new longer life)	AXXRSBBU7 AXXRSBBU8 (new longer life)
Cables	Included	Included	Included
Availability	Now	Now	Now

Controller	Intel® RAID Controller RT3WB080	Intel® RAID Controller RS2WC080 / 040	Intel® RAID Controller RS25GB008	Intel® RAID Controller RS25FB044
	Mainstream SATA-only RAID Controller with 8 ports and SAS expansion support for up to 16 SATA drives	Entry-level 6.0 Gb/s SAS RAID Controller with 8 internal ports for SAS / SATA drives	Entry-level 6.0 Gb/s SAS RAID Controller with 8 external ports for JBOD with SAS / SATA drives	Entry-level 6.0 Gb/s SAS RAID Controller with 4 internal ports for DAS storage and 4 external ports for JBOD storage
Order Code	RT3WB080	RS2WC080 / RS2WC040	RS25GB008	RS25FB044
Processor / RAID On Chip	LSI* SAS2108	LSI* SAS2008	LSI* SAS2308	LSI* SAS2308
Memory	256 MB embedded DDR2 ECC memory	2 MB (on card) for RAID 0, 1, 1E, and 128 MB (from server board) for RAID 5 calculations	2 MB context memory	2 MB context memory
PCI Bus	PCI Express* 2.0 x8	PCI Express* 2.0 x8	PCI Express* 3.0 x8	PCI Express* 3.0 x8
Channels	8 internal SATA ports supporting SAS expansion and point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 / 4 internal SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	8 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	4 internal and 4 external SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)	Low-profile, 6.6" length (MD2 compliant)
RAID Levels	0, 1, 5, 6, 10, 50, and 60	0, 1, 5, 10, and 50	JBOD	0, 1, 1E, and JBOD
Intel® Smart Backup Option	AXXRSBBU7 AXXRSBBU8 (new longer life)	No	No	No
Cables	Included	Included	Not included	Not included
Availability	Now	Now	Now	Now

SAS 1.0 INTEL® RAID CONTROLLER ADD-IN CARDS


Controller	Intel® RAID Controller SASUC8I	Intel® RAID Controller SASWT4I
	8-port SAS / SATA with pass through SAS and entry-level hardware RAID 0, 1, 1E, and 10E capability	4-port SAS / SATA with pass through SAS and entry-level hardware RAID 0, 1, 1E, and 10E capability
Order Code	SASUC8I	SASWT4I
Processor / RAID On Chip	LSI* 1068	LSI* 1064
Memory	2 MB for entry-level hardware RAID calculations	2 MB for entry-level hardware RAID calculations
PCI Bus	PCI Express* x4	PCI Express* x4
Channels	8 internal SAS / SATA ports supporting point-to-point 3.0 Gb/s data-transfer rates	4 internal SAS / SATA ports supporting point-to-point 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length	Low-profile, 6.6" length
RAID Levels	0, 1, and 1E/10E	0, 1, and 1E/10E
Intel® Smart Backup Option	No	No
Cables	N/A	Included
Availability	Now	Now

INTEL® SOFTWARE RAID ACTIVATION KEYS

Most Intel® Xeon® 5500 and 5600 series server boards include Intel® Embedded Server RAID Technology 2 which provides RAID 0, 1, and 10. Software RAID 5 can be enabled on these server boards by adding the AXXRAKSW5 activation key.

Most Intel® Xeon E5 series server boards include 8 SCU storage ports with activation and features corresponding to the following table.

ACTIVATION KEY	PRODUCT NAME	SCU STORAGE FUNCTIONALITY
None	N/A	4-port SATA key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, and 10, and Intel® Rapid Storage Technology Enterprise RAID 0, 1, 5, and 10 (no key)
RKSATA4R5	Intel® RAID C600 Upgrade Key RKSATA4R5	4-port SATA key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, 5, and 10, and Intel® Rapid Storage Technology Enterprise RAID 0, 1, 5, and 10 (BLACK)
RKSATA8	Intel® RAID C600 Upgrade Key RKSATA8	8-port SATA key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, and 10, and Intel® Rapid Storage Technology Enterprise RAID 0, 1, 5, and 10 (BLUE)
RKSATA8R5	Intel® RAID C600 Upgrade Key RKSATA8R5	8-port SATA key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, 5, and 10, and Intel® Rapid Storage Technology Enterprise RAID 0, 1, 5, and 10 (WHITE)
RKSAS4	Intel® RAID C600 Upgrade Key RKSAS4	4-port SAS key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, and 10, and Intel® Rapid Storage Technology Enterprise RAID 0, 1, and 10 (GREEN)
RKSAS4R5	Intel® RAID C600 Upgrade Key RKSAS4R5	4-port SAS key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, 5, and 10 and Intel® Rapid Storage Technology Enterprise RAID 0, 1, and 10 (YELLOW)
RKSAS8	Intel® RAID C600 Upgrade Key RKSAS8	8-port SAS key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, and 10 and Intel® Rapid Storage Technology Enterprise RAID 0, 1, and 10 (ORANGE)
RKSAS8R5	Intel® RAID C600 Upgrade Key RKSAS8R5	8-port SAS key with Intel® Embedded Server RAID Technology 2, RAID 0, 1, 5, and 10 and Intel® Rapid Storage Technology Enterprise RAID 0, 1, and 10 (PURPLE)
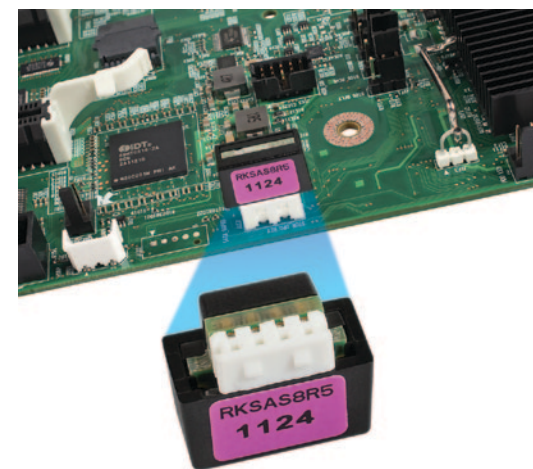
INTEL® RAID EXPANDER BOARDS (SAS EXPANDERS)
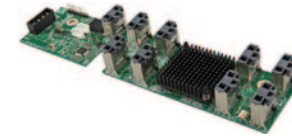
Expander Board	Intel® RAID Expander RES2SV240	Intel® RAID Expander RES2CV360 / 240
	24-port, 6.0 Gb/s-capable expander card for use with Intel® RAID products	36 / 24-port, 6.0 Gb/s-capable expander card for use with Intel® RAID products
Order Code	**RES2SV240** (with 6 cables) **RES2SV240NC** (no cables)	**RES2CV360** (no cables) **/ RES2CV240** (no cables)
Processor / RAID On Chip	**LSI* 6.0 Gb/s Expander**	**LSI* 6.0 Gb/s Expander**
Channels	24 SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates	36 / 24 SAS / SATA ports supporting point-to-point 6.0 Gb/s and 3.0 Gb/s data-transfer rates
Form Factor	Low-profile, 6.6" length (MD2 compliant) can be mounted in PCI Express* slot or chassis wall	Unique system board that requires chassis mounting point
Power Options	Standard PCI Express* x4 connector or RA 4-pin power connector	RA 4-pin power connector
Management	SGPIO	SGPIO
Fault LED Headers	Includes 2 pin headers to support each SAS port	Includes 2 pin headers to support each SAS port
Availability	Now	Now

INTEL® RAID PREMIUM FEATURES

These features are available as an upgrade for all LSI* SAS2108 processor-based Intel® RAID products. To identify products with this processor, please refer to the Processor row of the preceding feature tables. The Premium Feature Keys are described below.

PREMIUM FEATURE	SSD CACHE WITH FAST-PATH I/O	DRIVE ENCRYPTION MANAGEMENT	RAPID RECOVERY SNAPSHOT
Key Benefits	• SSD Cache allows Solid-State Drives to be utilized as additional cache for the RAID Controller. The cache can be used for both reads and writes to assist storage performance. • Fast-Path I/O accelerates communication with SSDs providing up to 150,000 I/O reads per second for small, random block-size I/O activity. This is a dramatic increase over solutions not using Fast-Path.	• Drive encryption management enables authentication key management, auto-lock, and instant erase of self-encrypting drives (SED). • All drives eventually leave the data center and the use of SEDs helps reduce risk of data breaches. • Instant erase significantly reduces the cost and time of repurposing or retiring drives.	• Rapid Recovery Snapshot allows users to capture source volume data changes and either restore files or rollback applications to a previous Point in Time (PiT). • Rapid recovery of lost data from disk can occur within minutes, minimizing the downtime experienced by users and eliminating the lengthy process of restoring data from tape. • By isolating a server's boot volume to a separate virtual drive and enabling the auto snapshot feature, users can be guaranteed that bootable snapshots exist, should operating system corruption occur.
Order Code	AXXRPFKSSD	AXXRPFKDE	AXXRPFKSNSH
Availability	Now	Now	Now

These features are available as an upgrade for all LSI* SAS2208 processor-based Intel® RAID products. To identify products with this processor, please refer to the Processor row of the preceding feature tables. The Premium Feature Keys are described below.

PREMIUM FEATURE	SSD CACHE WITH FAST-PATH I/O	DRIVE ENCRYPTION MANAGEMENT	RAPID RECOVERY SNAPSHOT
Key Benefits	• SSD Cache allows Solid-State Drives to be utilized as additional cache for the RAID Controller. Frequently accessed information is stored in the cache, allowing rapid access. • Fast-Path I/O accelerates communication with SSDs providing up to 465,000 I/O reads per second for small, random block-size I/O activity. This is a dramatic increase over solutions not using Fast-Path.	• Drive encryption management enables authentication key management, auto-lock, and instant erase of self-encrypting drives (SED). • All drives eventually leave the data center and the use of SEDs helps reduce risk of data breaches. • Instant erase significantly reduces the cost and time of repurposing or retiring drives.	• Rapid Recovery Snapshot allows users to capture source volume data changes and either restore files or rollback applications to a previous Point in Time (PiT). • Rapid recovery of lost data from disk can occur within minutes, minimizing the downtime experienced by users and eliminating the lengthy process of restoring data from tape. • By isolating a server's boot volume to a separate virtual drive and enabling the auto snapshot feature, users can be guaranteed that bootable snapshots exist, should operating system corruption occur.
Order Code	AXXRPFKSSD2	AXXRPFKDE2	AXXRPFKSNSH2
Availability	Now	Now	Now

INTEL® RAID HIGH AVAILABILITY STORAGE KEY

- The High Availability Storage solution provides fault tolerance capabilities as a key part of a high-availability data storage system by combining redundant RAID controllers, computer nodes, cable connections, SAS expanders, and dual-port SAS drives.

- Shared storage across two servers can improve performance and at the same time supporting either failover clustering or cluster in a box configurations. Also supported is Microsoft* failover clustering, controller-to-controller intercommunication over SAS, write-back cache coherency, shared and exclusive DB I/O policies, and exclusive access that allows the operating system to boot from the controller.

Order code: AXXRPFKHA2
Availability: June 2013

CABLE KITS AND CONVERTER BOARDS

The following cables are available for connecting Intel® RAID cards and modules to storage devices and drive bays. Intel® cables are designed to a high-quality specification and include the ability to bend at a very small radii. These cables allow low-profile Intel RAID products with vertical 8087 connectors to be used in 2U rack chassis while installed in a standard PCI Express* slot.

CABLE KIT ORDER CODE	NUMBER OF CABLES INCLUDED IN KIT	INITIATOR CONNECTOR	TARGET CONNECTOR	LENGTH
AXXCBL750MS7P	2	8087 mini-SAS straight	Four x 7-pin SATA style	750mm
AXXCBL650MSMS	2	8087 mini-SAS straight	8087 mini-SAS straight	650mm

CONVERTER BOARDS	ORDER CODE	DESCRIPTION	INTERNAL CONNECTORS	EXTERNAL CONNECTORS
Intel® RAID Converter Board RCVT8788	AXXRCVT8788	Small form factor board with brackets for installation in a standard or low-profile chassis cutout. Intended to be used to convert internal ports to external ports. Cables are not included.	Two x 8087 mini-SAS	Two x 8088

MOUNTING BRACKET	ORDER CODE	DESCRIPTION	INTERNAL CONNECTORS	EXTERNAL CONNECTORS
Intel RAID® Battery Remote Mounting Bracket	AXXBBUBRKTP	A mounting bracket that fits in a low profile PCI Express* slot and holds two RAID batteries or Maintenance Free Backup Units.	None	None

For more information, visit **www.intel.com/go/RAID**

INTEL® SERVER ADAPTERS

Help improve a server's reliability, availability, and scalability by adding an Intel® Ethernet 10GbE or 1GbE multi-port adapter.

CONNECTIVITY FOR COPPER NETWORKS

10 GIGABIT-OVER-COPPER

Adapter	Intel® X520-DA2 Dual Port Ethernet Server Adapter	Intel® 10 Gigabit AT2 Server Adapter	Intel® Ethernet Server Adapter X520-T2	Intel® Ethernet Server Adapter X540-T1	Intel® Ethernet Server Adapter X540-T2
Product Code—Singles	E10G42BTDA	E10G41AT2	E10G42BT	X540T1	X540T2
Product Code—Five Packs	E10G42BTDABLK	N/A	N/A	X540T1BLK	X540T2BLK
Connector(s)	2 SFP+ Direct Attach Copper	1 RJ-45	2 RJ-45	1 RJ-45	2 RJ-45
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82599ES	Intel® 82598EB	Intel® 82599ES	Intel® X540	Intel® X540
Bus Width and Type	PCI Express* 2.0 (5 GT/s) x8	PCI Express* 2.0 (2.50 GT/s) x8	PCI Express* 2.0 (5 GT/s) x8	PCI Express* 2.1 (5 GT/s) x8	PCI Express* 2.1 (5 GT/s) x8
Open FCoE Support	Yes	No	No	Yes	Yes

10 GIGABIT-OVER-COPPER

Adapter	Intel® 10 Gigabit AF DA Dual Port Server Adapter	NetEffect™ Ethernet Server Cluster Adapter DA	NetEffect™ Ethernet Server Cluster Adapter CX4	Intel® 10 Gigabit CX4 Dual Port Server Adapter
Product Code—Singles	E10G42AFDA	E10G81G2P	E10G81GT2CX4	EXPX9502CX4
Product Code—Five Packs	N/A	N/A	N/A	N/A
Connector(s)	2 SFP+ Direct Attach Copper	1 SFP+ Direct Attach Copper	1 CX4	2 CX4
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82598EB	NE020	NE020	Intel® 82598EB
Bus Width and Type	PCI Express* 2.0 (2.50 GT/s) x8	PCI Express* 1.1 (2.50 GHz) x8	PCI Express* 1.1 (2.50 GHz) x8	PCI Express* 2.0 (2.50 GT/s) x8

CONNECTIVITY FOR COPPER NETWORKS

10/100/1000 MB/S-OVER-COPPER MULTI-PORT

Adapter	Intel® PRO/1000 PT Quad Port Server Adapter	Intel® PRO/1000 GT Quad Port Server Adapter	Intel® PRO/1000 PT Dual Port Server Adapter
Product Code—Singles	EXPI9404PTL	PWLA8494GT	EXPI9402PT
Product Code—Five Packs	EXPI9404PTLBLK	PWLA8494GTBLK5	EXPI9402PTBLK
Connector(s)	4 RJ-45	4 RJ-45	2 RJ-45
End-Brackets	Low-profile, full-height	Full-height	Low-profile, full-height
Ethernet Controller	Intel® 82571GB	Intel® 82546GB	Intel® 82571GB
Bus Width and Type	PCI Express* x4	64-bit PCI / PCI-X	PCI Express* x4

10/100/1000 MB/S-OVER-COPPER MULTI-PORT

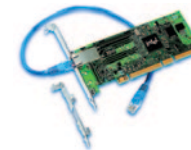| Adapter	Intel® PRO/1000 MT Dual Port Server Adapter	Intel® Gigabit ET2 Quad Port Server Adapter	Intel® Gigabit ET Dual Port Server Adapter
Product Code—Singles	PWLA8492MT	E1G44ET2	E1G42ET
Product Code—Five Packs	PWLA8492MTBLK5	E1G44ET2BLK	E1G42ETBLK
Connector(s)	2 RJ-45	4 RJ-45	2 RJ-45
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82546GB	Intel® 82576	Intel® 82576
Bus Width and Type	32- or 64-bit PCI / PCI-X	PCI Express* 2.0 (2.50 GT/s) x4	PCI Express* 2.0 (2.50 GT/s) x4
Virtual Machine Device Queues (VMDq) Support	No	Yes	Yes
Security Features	No	IPsec	IPsec
Halogen Free	No	No	No

CONNECTIVITY FOR COPPER NETWORKS

10/100/1000 MB/S-OVER-COPPER MULTI-PORT

Adapter	Intel® Ethernet Server Adapter I340-T4	Intel® Ethernet Server Adapter I350-T2	Intel® Ethernet Server Adapter I350-T4
Product Code—Singles	E1G44HT	I350T2	I350T4
Product Code—Five Packs	E1G44HTBLK	I350T2BLK	I350T4BLK
Connector(s)	4 RJ-45	2 RJ-45	4 RJ-45
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82580	Intel® I350	Intel® I350
Bus Width and Type	PCI Express* 2.0 (5 GT/s) x4	PCI Express* 2.0 (5 GT/s) x4	PCI Express* 2.0 (5 GT/s) x4
Virtual Machine Device Queues (VMDq) Support	Yes	Yes	Yes
Security Features	No	No	No
Halogen Free	Yes	Yes	Yes
EEE / DMA Coalescing	N/A	Yes	Yes

10/100/1000 MB/S-OVER-COPPER SINGLE PORT

NEW

Adapter	Intel® Ethernet Server Adapter I210-T1	Intel® PRO/1000 PT Server Adapter	Intel® PRO/1000 MT Server Adapter
Product Code—Singles	I210T1	EXPI9400PT	PWLA8490MT
Product Code—Five Packs	I210T1BLK	EXPI9400PTBLK	PWLA8490MTBLK5
Connector(s)	1 RJ-45	1 RJ-45	1 RJ-45
End-Brackets	Low profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® I210	Intel® 82572GI	Intel® 82545GM
Bus Width and Type	PCI Express* 2.1 (2.50 GT/s) x1	PCI Express* x1	32- or 64-bit PCI / PCI-X
Audio Video Bridging (AVB)	Yes	No	No

INTEL® SERVER ADAPTERS

CONNECTIVITY FOR FIBER NETWORKS

10 GIGABIT-OVER-FIBER SINGLE PORT

Adapter	Intel® X520-SR1 Ethernet Server Adapter	Intel® X520-LR1 Ethernet Server Adapter	Intel® 10 Gigabit XF SR Server Adapter
Product Code—Singles	E10G41BFSR	E10G41BFLR	EXPX9501AFXSR
Product Code—Five Packs	E10G41BFSRBLK	E10G41BFLRBLK	N/A
Connector(s)	1 LC	1 LC	1 LC
Fiber Optic Cabling	MMF 62.5 / 50µm up to 300m	SMF up to 10km	MMF 62.5 / 50µm up to 300m
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82599ES	Intel® 82599ES	Intel® 82598EB
Bus Width and Type	PCI Express* 2.0 (5 GT/s) x8	PCI Express* 2.0 (5 GT/s) x8	PCI Express* 2.0 (2.50 GT/s) x8
Open FCoE Support	Yes	Yes	No

10 GIGABIT-OVER-FIBER SINGLE PORT / 10 GIGABIT-OVER-FIBER MULTI-PORT

Adapter	Intel® 10 Gigabit XF LR Server Adapter	NetEffect™ Ethernet Server Cluster Adapter SFP+SR	Intel® X520-SR2 Dual Port Ethernet Server Adapter	Intel® 10 Gigabit XF SR Dual Port Server Adapter
Product Code—Singles	EXPX9501AFXLR	E10G81GF2SR	E10G42BFSR	EXPX9502AFXSR
Product Code—Five Packs	N/A	N/A	E10G42BFSRBLK	N/A
Connector(s)	1 LC	1 LC	2 LC	2 LC
Fiber Optic Cabling	SMF up to 10km	MMF 62.5 / 50µm up to 300m	MMF 62.5 / 50µm up to 300m	MMF 62.5 / 50µm up to 300m
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® 82598EB	NE020	Intel® 82599ES	Intel® 82598EB
Bus Width and Type	PCI Express* 2.0 (2.50 GT/s) x8	PCI Express* 1.1 (2.50 GHz) x8	PCI Express* 2.0 (5 GT/s) x8	PCI Express* 2.0 (2.50 GT/s) x8
Open FCoE Support	No	No	Yes	No

CONNECTIVITY FOR FIBER NETWORKS

GIGABIT-OVER-FIBER MULTI-PORT
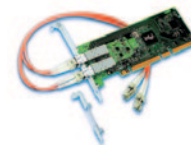
Adapter	Intel® Ethernet Server Adapter I350-F2	Intel® PRO/1000 PF Dual Port Server Adapter	Intel® PRO/1000 MF Dual Port Server Adapter	Intel® Gigabit EF Dual Port Server Adapter
Product Code—Singles	I350F2	EXPI9402PF	PWLA8492MF	E1G42EF
Product Code—Five Packs	I350F2BLK	EXPI9402PFBLK	PWLA8492MFBLK5	E1G42EFBLK
Connector(s)	2 LC	2 LC	2 LC	2 LC
Fiber Optic Cabling	MMF 62.5µm up to 275m MMF 50µm up to 550m	MMF 62.5 / 50µm up to 275m	MMF 62.5 / 50µm up to 275m	MMF 62.5µm up to 275m MMF 50µm up to 550m
End-Brackets	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height	Low-profile, full-height
Ethernet Controller	Intel® I350	Intel® 82571GB	Intel® 82546GB	Intel® 82576
Bus Width and Type	PCI Express* 2.1 (5 GT/s) x4	PCI Express* x4	64-bit PCI / PCI-X	PCI Express* 2.0 (2.50 GT/s) x4
Virtual Machine Device Queues (VMDq) Support	Yes	No	No	Yes
Security Features	No	No	No	IPsec
EEE / DMA Coalescing	Yes	No	No	No

CONNECTIVITY FOR FIBER NETWORKS

	GIGABIT-OVER-FIBER MULTI-PORT		GIGABIT-OVER-FIBER SINGLE PORT
Adapter	**Intel® Ethernet Server Adapter I350-F4**	**Intel® Ethernet Server Adapter I340-F4**	**Intel® PRO/1000 PF Server Adapter**
Product Code—Singles	I350F4	E1G44HF	EXPI9400PF
Product Code— Five Packs	I350F4BLK	E1G44HFBLK	EXPI9400PFBLK
Connector(s)	4 LC	4 LC	1 LC
Fiber Optic Cabling	MMF 62.5µm up to 275m MMF 50µm up to 550m	MMF 62.5µm up to 275m MMF 50µm up to 550m	MMF 62.5 / 50µm up to 275m
End-Brackets	Full-height	Full-height	Full-height
Ethernet Controller	Intel® I350	Intel® 82580	Intel® 82572GI
Bus Width and Type	PCI Express* 2.1 (5 GT/s) x4	PCI Express* 2.0 (5 GT/s) x4	PCI Express* x4
Virtual Machine Device Queues (VMDq) Support	Yes	Yes	N/A
Security Features	No	No	N/A
EEE / DMA Coalescing	Yes	No	N/A

For more information, visit **www.intel.com/go/ethernet**

Intel® Server Management

QUICKLY GET YOUR SERVERS UP AND RUNNING—AND KEEP THEM RUNNING—WITH INTEL® SERVER MANAGEMENT SOLUTIONS

Intel® Server Management improves security, reduces costs, and helps businesses move from reactive to proactive system management. A mix of hardware and software enables more secure remote management and monitoring of servers, clients, and applications from virtually any location—in a way that IT generalists can understand without attending weeks of training. It's all about IT made easy.

SIMPLE
- Makes it easy to set up and maintain a more reliable and secure IT infrastructure
- Streamlines tasks throughout server lifecycle with remote management
- Manages IT functions with a single suite of tools

MORE SECURE
- Keeps IT informed with automated daily health reports and alerts
- Improves reliability and stability with rapid application and patch deployment

SMART
- Designed specifically for small to midsize businesses
- Reduces travel time and costs
- Provides a proactive solution to server management with reports and alerts

INTEL® DEPLOYMENT ASSISTANT

Intel® Deployment Assistant is a free deployment application that helps keep servers up to date by locating, comparing, and recommending system updates. To set up your Intel® Servers using the Intel Deployment Assistant, just answer a series of easy-to-understand questions and confirm your configuration choices. The Intel Deployment Assistant will then configure the server and begin loading the chosen operating system. It also reduces redundant tasks by cloning all of your settings and updates to easily and quickly replicate across other identical servers.

FEATURES	BENEFITS
Wizard-based user interface	Reduces complexity while providing comprehensive guidance in the deployment of Intel® Servers.
Automatic detection of server configuration and components	Eliminates steps and saves time by detecting key configuration information including BIOS, LAN, and server management settings.
Load configuration profiles for identical servers	Reduces redundant tasks by saving and loading configuration settings from one server to identical servers.
Wizard-guided RAID configuration	Configures RAID from a single console with simple step-by-step instructions.
Automatic detection of available software updates	Minimizes uncertainty by automatically locating the latest drivers, firmware, and BIOS from the Internet, corporate network, or USB sources.
Unattended OS installation	Saves time—simply answer configuration questions, choose the drivers to include, and pop in the operating system CD. Supports a variety of Linux*, Windows*, and VMware* operating systems.
Multi-server cloning	Using the same easy-to-use wizard for updates, configuration, and OS installs, users can now build a silent PXE or USB image to clone everything on multiple systems at one time. Use it to create templates for future builds, give it to technicians to rebuild systems on-site, or use it in mass deployment environments.
Customized branding	OEMs and integrators can customize the user interface with their choice of colors and logos to promote their brand.

For more information, visit **www.intel.com/go/servermanagement**

INTEL® SYSTEM MANAGEMENT SOFTWARE

Intel® System Management Software is a set of management applications comprised of Intel® Active System Console and Intel® SNMP Subagent that let you view and control hardware (servers, desktops, and laptops) and software (operating systems, applications, and patches) across your network.

FEATURES	INTEL® ACTIVE SYSTEM CONSOLE	INTEL® SNMP SUBAGENT
Server Environment	1 to 10 servers	Enterprise
User Interface	Web-based	Integrates into enterprise tools such as HP* OpenView
Operating System Support	Windows*, Linux*	Windows*, Linux*
Single, Easy-to-Use Console	Yes	
Hardware Predictive Failure Analysis	Yes	Yes
Sensor Readings	Yes	Yes
Hardware Event Log	Yes	
Alerting	Yes (e-mail and SNMP)	Yes (SNMP)
Reporting	Yes	
BMC Configuration	Yes	
Power Management	Yes	
Remote Management		Yes
OEM Customization	Yes	

INTEL® MANAGEMENT MODULE

The Intel® Remote Management Module (Intel® RMM) allows you to securely gain access and control servers and other devices from any machine on the network—any place, any time.

Module	Intel® Remote Management Module 4			
Positioning	Have remote, secure access to full-screen KVM features together with remote CD or USB access without ever having to visit the server. Tightly integrated with onboard system firmware so users can choose between onboard NIC or dedicated management NIC for all RMM4 functionality. The RMM4 Lite contains all of the functionality of the RMM4 without the dedicated NIC and is now a choice on all systems that support the full RMM4.			
Order Code	AXXRMM4Lite	AXXRMM4	AXXRMM4IOM	AXXRMM4IOMW
Supported Systems[1]	Select Systems based on Intel® Server Boards S1200V3RPL, S1200V3RPO, S1200V3RPM, S1200BTL, S1400FP, S1400SP, S2400LP, S2600JF, S2600WP, S2400EP, S2400BB, S2400SC, S2400GP, S1600JP, S2600GL, S2600GZ, S2600IP, S2600CP, S2600CO, MFS2600KI, S4600LH, W2600CR	Select Systems based on Intel® Server Boards S1200V3RPL, S1200V3RPO, S1200V3RPM, S1200BTL, S1400FP, S1400SP, S2400LP, S2600JF, S2600WP, S2400EP, S2400BB, S2400SC, S2400GP, S1600JP, S2600GL, S2600GZ, S2600IP, S2600CP, S2600CO, MFS2600KI, S4600LH, W2600CR	Select Systems based on Intel® Server Boards S2600JF, S2400LP	Select Systems based on Intel® Server Boards S2600WP
Remote Server Restart	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware
OEM Customization	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware
USB Virtual Media Redirection	Yes	Yes	Yes	Yes
LDAP, SSH, SSL Support	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware
WS-MAN	No	No	No	No
Embedded Video / GUI (KVM) Redirection	Yes	Yes	Yes	Yes
Embedded Web Server	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware
Dedicated Server Management NIC	No	Yes	Yes	Yes
Local and Remote Configuration	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware
Agent-less Management	Support built into system firmware	Support built into system firmware	Support built into system firmware	Support built into system firmware

For more information, visit **www.intel.com/go/servermanagement**

McAfee®
An Intel Company

McAfee
ANTIVIRUS PLUS

Essential, award-winning PC protection for carefree computing

- Essential Protection Against the Latest Viruses and Malware
- Optimize your PC for Best Performance

McAfee
An Intel Company

Protects 1PC   Windows 8 Compatible

McAfee*

McAFEE* ANTIVIRUS PLUS*

When you surf, shop, and socialize, the last thing you want to think about is online risk. That's why McAfee is relentless when it comes to digital security, working hard to stay ahead of the latest Internet threats. Our 24/7 obsession means reliable protection for your Intel-powered systems—so you can work and play online with complete confidence.

WHY SECURITY?
- 85% of consumers think they are protected—only 37% are[1]
- 51% of search terms lead to malicious sites[1]
- 51% of consumer fraud starts online[1]

McAFEE* ANTIVIRUS PLUS* FEATURES

FEATURE	WHAT IT DOES	HOW IT PROTECTS
High-Performance Scanning Engine	Uses next-generation technology to scan systems for the latest viruses, trojans, spyware, and other threats. It works in the background without slowing the system	Identifies and blocks system threats
Firewall (2-way)	Protects system from incoming threats and safeguards personal information from being stolen	Keeps threats out and private information in
Vulnerability Scanner	Scans system for missing updates and recommends solutions to keep the PC safe	Proactively protects systems by keeping updates current
NetGuard Anti-Bot Protection	Disables hackers from sending out personal information	Preventative protection of personal information
Site Advisor Social	Detects malicious links in social networks	Surf social networks confidently
Safe Search	Features color-coded icons next to every search and social media result to identify sites that are safe	Helps user stay away from potentially risky sites
Touch Interface	Works effectively with Windows* 8 and systems with touch and provides a touch-friendly home screen	Easy system management
QuickClean	Removes unused applications and files to speed up the system	Keeps system running optimally and removes potentially sensitive, unused files
Enhanced Digital Data Messages	Includes the location of blocked IP addresses and identifies what makes connections unsafe	Identifies potential threatening Web sites and connections
Enhanced Security Reports	Redesigned to give the user information in fresh and engaging ways, including an easier-to-understand snapshot of what's happening in the world of security	Keeps user informed of security information
Malicious Ad and Pop-up Protection	Web sites do not always monitor their advertising—offers protection against malicious pop-ups and ads	Automatically blocks suspicious content

SYSTEM REQUIREMENTS

Windows* XP SP3 or higher (32-bit)

Windows* Vista* SP1 (32- and 64-bit)

Windows* 7 (32- and 64-bit)

Windows* 8 (32- and 64-bit)

512 MB RAM for XP, 2 GB RAM for Vista, Windows 7, and Windows 8

500 MB free drive space

1 GHz processor

Internet connection (high-speed Internet connection recommended)

McAFEE

SAAS ENDPOINT PROTECTION SUITE

Always on, always up-to-date
cloud-managed security for
your computers

- Protect desktops, laptops, and file servers against the latest threats
- Comprehensive protection with automatic updates and upgrade
- 24/7 McAfee® Gold Technical Support

McAfee®
An Intel Company

Protects
🖥 1PC

Windows 8
Compatible

SYSTEM REQUIREMENTS

Intel® Pentium® processor or compatible architecture

1 GB RAM (2 GB recommended)

Microsoft* mouse or compatible pointing device

256-color or higher VGA monitor

BROWSER REQUIREMENTS

Microsoft* Internet Explorer*
(versions 7, 8, 9, and 10)

Mozilla* Firefox* (versions 3.0 through 15)

Apple* Safari* for Windows (versions 4.0, 5.0, and 5.1). Browser protection service features not supported.

Google* Chrome* (versions 4.0 through 21)

McAFEE* SAAS ENDPOINT PROTECTION SUITE*

Cybercriminals are targeting growing businesses like yours. They're zeroing in, believing that your business is an easier target because you can't afford a sophisticated security framework. Maintaining an up-to-date defense perimeter around your systems is increasingly difficult in the face of rapidly changing attack strategies and the realities of limited budgets. Still, there's an answer to this dilemma—cloud-based solutions that deliver the most effective, up-to-date security solutions that are both scalable and affordable. With Security-as-a-Service (SaaS) suites covering e-mail, Web, desktops, and mobile devices, McAfee can help protect your business against the growing list of known and unknown threats.

KEY BENEFITS

- McAfee* SecurityCenter* for centralized visibility through an online management console
- Desktop and file server antivirus and antispyware scan and block out malware
- Desktop firewall blocks hackers and intrusions
- Web security for safe surfing

McAFEE* SAAS ENDPOINT PROTECTION SUITE* FEATURES

FEATURE	WHAT IT DOES	HOW IT PROTECTS
Comprehensive Coverage in a Single Solution	McAfee* SaaS security solutions are designed for all types and sizes of businesses, helping you put an end to point products with single, integrated suites	One solution for all types of businesses
Always On-Guard Security	No matter what security technology is being used, the protection profile is never obsolete with daily, automated updates and continual service upgrades	Ensures protection profile is kept up-to-date without interruption
Relentless Security	McAfee* Global Threat Intelligence* reputation technology is always-on protection that uses behavioral-based scanning to reduce exposure from unknown threats	Quarantines and blocks threats in real time and closes protection gaps
Quick Deployment to All Users	Simple management over the Internet so users are protected more quickly and stay up-to-date	Centralized deployment and configuration settings
Simplified Security Management	Via a Web browser, access the secured McAfee SecurityCenter to customize reporting widgets, schedule reports and upgrades to local assets, or even run virus and spyware scans on endpoints	Web-based security management
Integrated Web Security	Warns users before they visit a potentially dangerous Web site and helps them avoid online threats in real time	Tests Web sites and delivers safety ratings
E-mail Security Beyond Spam	Blocks inbound and internal threats, keeps businesses running, and helps IT meet compliance with built-in regulatory compliance templates and encryption capabilities	Blocks inappropriate and malicious content

McAFEE* ANTIVIRUS PLUS* vs. McAFEE* SAAS ENDPOINT PROTECTION SUITE* COMPARISON CHART

FEATURE	BENEFIT	MAV+ (HOME/OFFICE WITH > 5 COMPUTERS WITH DEDICATED IT)	MEP (BUSINESSES WITH < 5 EMPLOYEES WITHOUT DEDICATED IT)
Antivirus / Antispyware	Blocks, scans, and removes malware and threats: virus, spyware, trojans, rootkits	●	●
Desktop Firewall	Blocks hackers and intrusions	●	●
Site Advisor	Web site safety indicator – allows users to safely surf, search, and browse the Web	●	●
McAfee* Global Threat Intelligence (GTI)	Connect with McAfee Global Threat Intelligence (GTI) for real-time threat information	●	●
Easy and fast installation	Automatically removes incompatible security software	●	●
Web Filtering	Blocks malicious sites or unwanted site categories	◑	●
McAfee* SecurityCenter	Web-based management console for centralized management reporting	○	●
Rumor	Multiple computers on the same network will only need to download the daily threat updates once and then updates are shared automatically	○	●
Reporting	Scheduled reports can be automatically delivered on a regular basis	◑	●
Protected platforms	Protects Windows*-based PCs and file servers	◑	●
Support for Windows*	Windows* 8 Support	●	●

● Supported

◑ Supported in part

○ Not supported

McAFEE*

To learn more about McAfee products, visit **www.intel.com/mcafee-reseller**

INTEL® TECHNOLOGY PROVIDER

Intel® Technology Provider   www.intel.com/technologyprovider

INTEL® vPro™ TECHNOLOGY

Intel® vPro™ Technology Solution   www.intel.com/go/vpro

GRAPHICS

Client Graphics   www.intel.com/technology/visualtechnology/index.htm

INTEL® SATA SOLID-STATE DRIVES

Intel® SATA Solid-State Drives   www.intel.com/go/channelssd

DESKTOP

Desktop Highlights   www.intel.com/go/desktopprocessors or www.intel.com/desktopboards
Intel® Small Business Advantage   www.intel.com/go/SBA-Reseller
Desktop Processors   www.intel.com/go/desktopprocessors
Desktop Wireless   www.intel.com/go/wireless
Desktop Boards   www.intel.com/desktopboards
Ethernet Desktop Adapters   www.intel.com/go/ethernet

MOBILE

Mobile Highlights   www.intel.com/go/notebooks
Mobile Processors   www.intel.com/go/notebooks
Mobile Wireless   www.intel.com/go/wireless

SERVER

Server Highlights   www.intel.com/go/xeon or www.intel.com/go/serverproducts
Server Platforms   www.intel.com/xeon
Server / Workstation Processors   www.intel.com/xeon
Server / Workstation Boards   www.intel.com/go/serverboards or ark.intel.com
Server / Workstation Systems   www.intel.com/go/serversystems or ark.intel.com
Server Storage   www.intel.com/go/serverproducts
Server Chassis   www.intel.com/products/server/chassis or ark.intel.com
Modular Server   intelmodularserver.com/
RAID   www.intel.com/go/raid
Server Adapters   www.intel.com/go/ethernet
Server Management   www.intel.com/go/servermanagement

McAFEE*

McAfee*   www.intel.com/mcafee-reseller

(intel)