



# HPE Integrity i6 servers

## Mission-Critical Computing Continuity



### When you need continuous business

We all live and work in a new era of extreme business speed with heightened customer, partner, and employee expectations. To better compete and grow, businesses demand more innovation, speed, flexibility, and availability from their data centers. This puts the pressure squarely on IT to deliver new applications and services quickly, while also paving the way for future innovation.

Business environments keep changing because of technological improvements, shifts in customer expectations, and new market trends such as cloud, Big Data, and user mobility. What never changes is the need for resilient, reliable business technology platforms that enable enterprises to quickly adapt and, at the same time, keep their core-business processes and customer-facing interactions running without missing a beat.

The real-world impact of hardware or software failure can be significant. From financial transactions to supply-chain operations to 911 calls—if the job doesn't get done it can mean lost revenue, lost customers, or even lost lives. And if it makes the news, it can mean disastrous publicity and lost reputation.

That is the essence of the value HPE Integrity servers deliver to customers—an unparalleled portfolio of resilient systems that ensure continuous business for mission-critical environments.

Finally, the HPE Integrity portfolio is designed for longevity—decoupling resources (people) and applications (software) from the inevitable business changes.

With more than three decades of delivering proven value, the HP-UX and Integrity platform continues to evolve to help you address current market trends such as the cloud, mobility, and security, as well as the increasingly challenging requirements of your mission-critical environment. As a highly integrated UNIX® system, HP-UX delivers built-in resiliency and self-healing features, stability, and predictable performance, so you can count on the uptime your critical applications demand—and that includes data-driven core enterprise workloads like enterprise resource planning, billing, and databases. The three pillars of value that these systems always deliver are:

- Always-on availability
- Built-in efficiency
- Proven stability

## Deliver mission-critical results with HPE Integrity and HP-UX

Our lineup of HPE Integrity servers blends HPE BladeSystem efficiency with HPE Integrity resiliency. To increase longevity and protect your investment, we have designed these servers to support the latest generation of Intel® Itanium® processors.

HPE Integrity Superdome 2 is the ultimate mission-critical platform, scaling up, out, and within, to allow you to consolidate applications on a common platform. Engineered with trusted HPE Integrity Superdome reliability, Superdome 2 has a modular bladed design, common components, and standard racks. Some of the unique innovations from HPE are designed to boost infrastructure reliability with self-diagnosing, self-healing features built right into the heart of the system.

The HPE Integrity BL860c i6 Server Blade, HPE Integrity BL870c i6 Server Blade, and HPE Integrity BL890c i6 Server Blade are flexible and versatile two-, four-, and eight-socket systems that are ideal for your mission-critical enterprise applications. With support for hard partitioning (HPE nPars), HP-UX Virtual Partitions (HP-UX vPars), and HPE Integrity Virtual Machines (HPE VMs), these HPE Integrity server blades give you mission-critical levels of virtualization, availability, and flexibility. Additionally, embedded HPE Virtual Connect FlexFabric offers increased network scalability and configuration flexibility while reducing infrastructure costs by converging LAN and SAN traffic on the same connection. With wire-once connectivity, IT administrators can manage all subsequent “rewiring” virtually, significantly reducing cabling. These HPE Integrity server blades feature the unique HPE Blade Link technology, which combines multiple blades to create two-, four-, and eight-socket systems—providing greater scalability and flexibility.

HPE Integrity rx2800 i6 Server, a reliable and secure 2U two-socket rack server, is a great fit for branch offices and data centers supporting a range of mission-critical workloads. Customers achieve platform longevity and investment protection with advanced processors that deliver backward compatibility, while further enhancing performance with support of the HPE XP7 Storage and HPE 3PAR All Flash Arrays.

Customers can also leverage the recent HP-UX innovations that include the Veritas 6.1 File system support, online HP-UX vPAR migration, Smart Quorum with HPE Serviceguard and HPE OpenStack® support.

To know more about HP-UX:  
[hpe.com/info/hpux](http://hpe.com/info/hpux)

## HPE Integrity i6 server blades

Flexible mission-critical server blades combined with the efficiency of HPE BladeSystem to accelerate IT effectiveness



Integrity server blades	<b>HPE Integrity BL860c i6 Server Blade</b> Cost-effective mission-critical converged infrastructure—a versatile and expandable two-socket blade that is ideal for application-tier and transaction workloads, database, Java, and technical computing applications	<b>HPE Integrity BL870c i6 Server Blade</b> Flexible mission-critical server blades, combined with the efficiency of HPE BladeSystem—a four-socket server blade that is ideal for the database tier of multi-tiered enterprise applications such as SAP® and Oracle enterprise applications	<b>HPE Integrity BL890c i6 Server Blade</b> Scale up to meet the high demands of mission-critical computing with an 8-socket server blade—ideal for larger mission-critical workloads such as enterprise resource planning, customer relationship management, business intelligence, and large shared-memory applications
<b>Processors supported</b>	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache 2.53 GHz (4-core) with 32 MB shared last-level cache 1.73 GHz (4-core) with 20 MB shared last-level cache	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache 2.53 GHz (4-core) with 32 MB shared last-level cache 1.73 GHz (4-core) with 20 MB shared last-level cache	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache 2.53 GHz (4-core) with 32 MB shared last-level cache 1.73 GHz (4-core) with 20 MB shared last-level cache
<b>Number of processors</b>	1–2	2–4	4–8
<b>Maximum number of cores</b>	16	32	64
<b>Operating systems supported</b> Choice of Data Center, High Availability, Virtual Server, or Base OEs	HP-UX 11i v3	HP-UX 11i v3	HP-UX 11i v3
<b>Maximum memory (cluster)</b>	384 GB (24 x 16 GB)	768 GB (48 x 16 GB)	1.5 TB (96 x 16 GB)
<b>I/O slots</b>	3 mezzanine slots: 2 Type II and 1 Type I, PCI Express (PCIe) x8 Gen2	6 mezzanine slots: 4 Type II and 2 Type I, PCIe x8 Gen2	12 mezzanine slots: 8 Type II and 4 Type I, PCIe x8 Gen2
<b>Internal hard disk drives</b>	Up to 2	Up to 4	Up to 8
<b>Management and virtualization</b>	HPE Systems Insight Manager (SIM) HPE Integrity Integrated Lights-Out 3 (iLO 3) HP-UX Virtual Partitions (vPars) OpenStack for HP-UX	HPE SIM HPE iLO 3 HP-UX vPars 1 or 2 HPE nPartitions (nPars) OpenStack for HP-UX	HPE SIM HPE iLO 3 HP-UX vPars 1–4 HPE nPars OpenStack for HP-UX
<b>Form factor</b>	8 blades in 10U; 4 blades in 6U	4 blades in 10U; 2 blades in 6U	2 blades in 10U; 1 blade in 6U

## HPE Integrity i6 server blades (continued)

Flexible mission-critical server blades combined with the efficiency of HPE BladeSystem to accelerate IT effectiveness

<b>Software</b>	HPE Matrix OE for HP-UX HPE Serviceguard Solutions	HPE Matrix OE for HP-UX HPE Serviceguard Solutions	HPE Matrix OE for HP-UX HPE Serviceguard Solutions
<b>Recommended services</b>	<b>Support</b> HPE Critical Service HPE Proactive 24 Service HPE Support Plus 24 Service	HPE Critical Service HPE Proactive 24 Service HPE Support Plus 24 Service	HPE Critical Service HPE Proactive 24 Service HPE Support Plus 24 Service
	<b>Installation</b> HPE Installation and Startup	HPE Installation and Startup	HPE Installation and Startup
	<b>Other services</b> HPE Startup Integrity Blade Infrastructure Service HPE Enhanced Network I&S for BladeSystem Switches HPE Startup VSE Global Workload Manager (gWLM) w/VM Service HPE Cluster Consistency 2-3 Node Cluster Service HPE Serviceguard Implementation—HP-UX	HPE Startup Integrity Blade Infrastructure Service HPE Enhanced Network I&S for BladeSystem Switches HPE Startup VSE Global Workload Manager (gWLM) w/VM Service HPE Cluster Consistency 2-3 Node Cluster Service HPE Serviceguard Implementation—HP-UX	HPE Startup Integrity Blade Infrastructure Service HPE Enhanced Network I&S for BladeSystem Switches HPE Startup VSE Global Workload Manager (gWLM) w/VM Service HPE Cluster Consistency 2-3 Node Cluster Service HPE Serviceguard Implementation—HP-UX
<b>Hardware options</b>	10 Gb/s converged network adapters 10 Gb/s network adapters 8 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers SAS solid state drives and hard disk drives	10 Gb/s converged network adapters 10 Gb/s network adapters 8 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers SAS solid state drives and hard disk drives	10 Gb/s converged network adapters 10 Gb/s network adapters 8 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers SAS solid state drives and hard disk drives

## HPE Integrity i6 rack servers

### Re-energize your branch office and rack server infrastructure



<b>Integrity i6 rack servers</b>	<b>HPE Integrity rx2800 i6 Server</b> Ideal for branch offices and data centers with UNIX workloads such as business processing, OLTP, system management, application tier, security, and industrial R&D	
<b>Processors supported</b>	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache 2.53 GHz (4-core) with 32 MB shared last-level cache 1.73 GHz (4-core) with 20 MB shared last-level cache	
<b>Number of processors</b>	1–2	
<b>Maximum number of cores</b>	16	
<b>Operating systems supported</b> Choice of Data Center, High Availability, Virtual Server, or Base OEs	HP-UX 11i v3	
<b>Maximum memory cluster</b>	384 GB (24 x 16 GB), DDR3 Low-Voltage (1.35V) Memory	
<b>I/O slots</b>	Maximum support of 6 I/O slots with 2 three-slot PCIe riser cards; two-slot PCIe riser cards are also supported	
<b>Internal hard disk drives</b>	Up to 8	
<b>Management and virtualization</b>	HPE Systems Insight Manager (SIM) HPE Integrity Integrated Lights-Out 3 (iLO 3) HP-UX Virtual Partitions (vPars) HPE Integrity Virtual Machines (VMs) OpenStack for HP-UX	
<b>Rack height (EIA unit)</b>	2U rack, tower with pedestal kit	
<b>Recommended services</b>	<b>Support</b> HPE Proactive 24 Service HPE Support Plus 24 Service	<b>Other services</b> HPE Proactive Select menu HPE Startup Virtual Machine Service HPE Serviceguard Implementation—HP-UX HPE Serviceguard Installation and Startup Service HPE Startup Integrity 2-socket server service
<b>Hardware options</b>	Ethernet and Fibre Channel multifunction (combo) adapters 1 Gb/s and 10 Gb/s network adapters 8 Gb/s and 16 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers Quad Data Rate (QDR) 4X InfiniBand host channel adapters HPE Integrity rx2800 2D Graphics Adapter SAS solid state drives and hard disk drives Keyboard and Mouse Kits Trusted platform module (TPM)	

## HPE Integrity i6 Superdome 2

The flagship server in the HPE Mission-Critical Converged Infrastructure—ideal for high-end consolidation, availability, and resiliency



Integrity i6 Superdome 2	<b>HPE Superdome 2-8s</b>	<b>HPE Superdome 2-16s</b>	<b>HPE Superdome 2-32s</b>
	Entry point for HPE Superdome-class reliability and flexibility	Modular, flexible building block for HPE Superdome 2, with expanded scalability for enterprise applications	Expanded scalability, performance, and ease of management, including the innovative HPE Superdome 2 cabinet with programmable status display
<b>Processors supported</b>	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9500 series</b> 2.53 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9300 series</b> 1.73 GHz (4-core) with 24 MB shared last-level cache 1.60 GHz (4-core) with 20 MB shared last-level cache	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9500 series</b> 2.53 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9300 series</b> 1.73 GHz (4-core) with 24 MB shared last-level cache 1.60 GHz (4-core) with 20 MB shared last-level cache	<b>Intel Itanium processor 9700 series</b> 2.66 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9500 series</b> 2.53 GHz (8-core) with 32 MB shared last-level cache 2.13 GHz (8-core) with 24 MB shared last-level cache  <b>Intel Itanium processor 9300 series</b> 1.73 GHz (4-core) with 24 MB shared last-level cache 1.60 GHz (4-core) with 20 MB shared last-level cache
<b>Number of processors</b>	2–8	2–16	2–32
<b>Maximum number of cores</b>	64	128	256
<b>Scalable processor chipset</b>	sx3000	sx3000	sx3000
<b>Operating systems supported</b> Choice of Data Center, High Availability, Virtual Server, or Base OEs	HP-UX 11i v3	HP-UX 11i v3	HP-UX 11i v3
<b>Maximum memory (cluster)</b>	4 TB DDR3 (256 x 16 GB)	4 TB DDR3 (256 x 16 GB)	8 TB DDR3 (512 x 16 GB)
<b>External I/O slots</b>	48 external PCIe x8 Gen2	96 external PCIe x8 Gen2	96 external PCIe x8 Gen2
<b>Built-in I/O</b>	32 10GbE ports Pass-through or switch interconnect module	32 10GbE ports Pass-through or switch interconnect module	64 10GbE ports Pass-through or switch interconnect module
<b>Form factor</b>	18U enclosure 4U I/O expansion enclosure HPE Intelligent Series Racks 600 mm wide in both 36U and 42U heights Standard rack door	18U enclosure 4U I/O expansion enclosure HPE Intelligent Series Racks 600 mm wide in both 36U and 42U heights HPE Superdome 2 door with active display	2 18U enclosures in single 19-inch rack 4U I/O expansion enclosure HPE Intelligent Series Racks 600 mm wide in both 36U and 42U heights HPE Superdome 2 door with active display
<b>Management and virtualization</b>	HPE Systems Insight Manager (SIM) HPE Integrity Integrated Lights-Out 3 (iLO 3) HP-UX Virtual Partitions (vPars) HPE Integrity Virtual Machines (VMs) OpenStack for HP-UX		
<b>Software</b>	HP-UX Operating Environments (OEs): Base OE, Virtual Server OE, High Availability OE, Data Center OE	HP-UX OEs: Base OE, Virtual Server OE, High Availability OE, Data Center OE	HP-UX OEs: Base OE, Virtual Server OE, High Availability OE, Data Center OE

## HPE Integrity i6 Superdome 2 (continued)

The flagship server in the HPE Mission-Critical Converged Infrastructure—ideal for high-end consolidation, availability, and resiliency

<b>Recommended services</b>	<b>Support</b>		
	HPE Critical Service HPE Proactive 24 Service	HPE Critical Service HPE Proactive 24 Service	HPE Critical Service HPE Proactive 24 Service
<b>Hardware options</b>	<b>Installation</b>		
	HPE Factory Express Services HPE Installation and Startup	HPE Factory Express Services HPE Installation and Startup	HPE Factory Express Services HPE Installation and Startup
<b>Hardware options</b>	HPE iCAP and TiCAP processors HPE Lights Out Advanced KVM Card	HPE iCAP and TiCAP processors HPE Lights Out Advanced KVM Card	HPE iCAP and TiCAP processors HPE Lights Out Advanced KVM Card
	Ethernet and Fibre Channel multifunction (combo) adapters 1 Gb/s and 10 Gb/s network adapters 8 Gb/s and 16 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers Quad Data Rate (QDR) 4X InfiniBand host channel adapters	Ethernet and Fibre Channel multifunction (combo) adapters 1 Gb/s and 10 Gb/s network adapters 8 Gb/s and 16 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers Quad Data Rate (QDR) 4X InfiniBand host channel adapters	Ethernet and Fibre Channel multifunction (combo) adapters 1 Gb/s and 10 Gb/s network adapters 8 Gb/s and 16 Gb/s Fibre Channel host bus adapters 6 Gb/s Serial-Attached SCSI (SAS) Smart Array Controllers Quad Data Rate (QDR) 4X InfiniBand host channel adapters

## HPE options

### Comprehensive solutions for the HPE Integrity servers

<b>HPE Instant Capacity (iCAP) (processors, memory)</b>	Reduces overprovisioning and helps link IT costs to revenue by deferring these costs until they are actually needed. iCAP hardware is purchased at a fraction of the price of active hardware and does not require software or support. When additional capacity is needed, the remaining portion is paid with no premium, and the component is activated with a simple command, typically requiring no downtime.
<b>HPE Temporary Instant Capacity (TiCAP)</b>	Like a prepaid phone card that provides 30 days of activation for iCAP processor cores, TiCAP is consumed at your own pace, and includes OS and HPE Matrix OE licenses and support. TiCAP allows you to meet short-term peaks in application demands when they occur.
<b>HPE Global Instant Capacity (GiCAP)</b>	Allows you to move the usage rights for hardware and software licenses within a group of servers, effectively deactivating components in one server in order to activate them in another. GiCAP, combined with the HPE Matrix OE, is a unique differentiator that offers automatic load balancing for cost-effective high availability.
<b>HPE Intelligent Series Rack</b>	The HPE Intelligent Series Racks, with optional Location Discovery Services, sends the rack identification number and precise U location to the servers. This provides important location information to iLO and HPE Insight Control software, along with server power and temperature data, allowing you to place workloads more efficiently. Manual, error-prone asset management is removed because servers can now self-identify and inventory themselves.
<b>HPE Fibre Channel and Gigabit Ethernet multifunction adapters</b>	Delivers the performance, flexibility, and high availability you need to support the connectivity requirements for server consolidation in your adaptive enterprise. Both single and dual channels for both Fibre Channel and Gigabit Ethernet are available to help maximize utility from a single I/O slot.
<b>HPE Fibre Channel adapters</b>	The highest level of availability and support when used in conjunction with HPE storage arrays, tape storage systems, and Fibre Channel switches. The dual-channel and single-channel Fibre Channel adapters effectively double performance over previous-generation Fibre Channel adapters. In addition, the Fibre Channel adapters auto-negotiate 1 Gb, 2 Gb, 4 Gb, or 8 Gb transfer rates allowing full legacy support for existing SAN infrastructures to protect your current SAN investment.
<b>HPE 4X InfiniBand adapters</b>	Provides high-speed, low-latency switched fabric solutions enhanced for server clusters. HPE 4X Fabric products provide a leading-edge interconnect for both high-performance computing (HPC) customers who want to deploy clusters for scientific and engineering applications, and for commercial customers who want to deploy highly-available and scalable database clusters.
<b>HPE Lights Out (iLO) Advanced KVM Card</b>	Makes it simpler, faster, and less costly to remotely manage your HPE Integrity servers. The HPE Integrity iLO Advanced KVM card is an optional accessory that combines a physical graphics/USB card with additional logic to enable the Lights Out Advanced Virtual Media and Integrated Remote Console.
<b>HPE Memory Upgrades</b>	HPE branded memory is the easiest way to quickly enhance and improve overall system performance for demanding database and application workloads. HPE memory modules are qualified and tested to strict HPE standards to help facilitate consistently high levels of performance and reliability in HPE servers. Memory upgrade options differ by server. Most HPE Integrity servers offer Double Chip Spare technology.

## HPE—the right choice for your enterprise

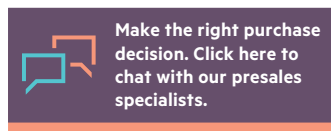
We are here to help you build an infrastructure that's designed for your business needs. HPE is investing to unify across the data center infrastructure so that customers can standardize on management tools, enclosures, power monitoring, etc., while leveraging their investments. Are spiraling power and cooling costs draining your budget? Our energy-saving tools and technologies can help you significantly cut costs by regulating and monitoring power usage across your infrastructure. Are you trying to get the greatest utilization from your data center floor space? We offer a complete portfolio of solutions, including small-footprint options. Do you need help scaling up or out, or designing a data center that can change along with your business needs? Look to HPE. Do you want the broadest range of choice from proven IT providers? Our hardware, software, and service partners deliver thousands of solutions designed specifically for HPE products.

Learn more about the services applicable: [hpe.com/info/services](http://hpe.com/info/services)

Customize your IT lifecycle management, from acquisition of new IT, management of existing assets, and removal of unneeded equipment. [hpe.com/hpefinancialservices](http://hpe.com/hpefinancialservices)

The bottom line? HPE is the right partner to help you use technology for better business outcomes.

Learn more at [hpe.com/servers/integrity](http://hpe.com/servers/integrity)



Sign up for updates



© Copyright 2011–2013, 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Intel Itanium is a trademark of Intel Corporation in the U.S. and other countries. Oracle and Java are registered trademarks of Oracle and/or its affiliates. SAP is the trademark or registered trademark of SAP SE in Germany and in several other countries. UNIX is a registered trademark of The Open Group. The OpenStack Word Mark is either a registered trademark/service mark or trademark/service mark of the OpenStack Foundation, in the United States and other countries and is used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation or the OpenStack community. Pivotal and Cloud Foundry are trademarks and/or registered trademarks of Pivotal Software, Inc. in the United States and/or other countries. All other third-party trademark(s) is/are property of their respective owner(s).

4AA3-4519ENN, July 2017, Rev. 10