

## PRIMERGY RX800 S3

### 4, 8 and 16-socket Dual-Core Intel® Xeon® Processor MP based Rack Server

### Taking 64-bit Computing beyond 8-way

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Pages 2

PRIMERGY RX servers are perfect answers for an IT strategy that seeks to downsize data center infrastructure costs by enhancing transparency of structure, management overhead and maximizing the use of investments.

With RX rack servers and the PRIMECENTER rack enclosures, you benefit from our renowned experience in data center technology, which assures the best quality of data center operation. To guarantee heterogeneous data center assets, the PRIMECENTER modular design accommodates seamless integration of PRIMERGY, PRIMEPOWER compute nodes, storage SAN and NAS subsystems, as well as other infrastructure components such as hubs, KVM switches and more, using a universal power circuit structure.

Cost-effective scaling, simplified operation and enhanced quality of data center IT production are the main benefits in deploying PRIMERGY RX servers. Their centralized PRIMERGY Server View Suite management functions mean less troubleshooting and costs and remote access from anywhere at any time. The flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer – shortening your time to production.

#### PRIMERGY RX800 S3

The price/performance economics of 64-bit Dual-Core Intel Xeon MP processors drives the deployment of business-standard solutions based on high-end Windows and Linux OS versions for large-scale deployment in data centers. The key to realizing those economical advantages is the modular growth of the platform, which keeps pace with growing business performance requirements. In addition, the deployment of these platforms must ensure that data center production jobs finish on schedule; thus, modularity can never mean compromises on data center robustness.

RX800 S3 supports budget-saving strategies by providing a 4-socket 64-bit Intel® Xeon® MP building block with latest Dual-Core 7100N series technology in a 3 U rack package and up to 6 hot-plug Serial Attached SCSI (SAS) hard disks.

In one area, the RX800 S3 needs no further scalability: its proven data center reliability comes with every modular 4-way building block and extends seamlessly to 8-socket and 16-socket enclosures at a pace defined by your business needs. A RX800 S3 building block can not be combined with an RX800 S2 building block to an 8- or 16-socket system.



Picture: 4-Socket respectively 8-Socket



Key Features	Benefits
<ul style="list-style-type: none"> <li>4-way building block for 4, 8 and 16-way configurations, up to 256 GB memory, certified for MS Windows 2003 datacenter and more Enterprise server operating systems</li> </ul>	<ul style="list-style-type: none"> <li>Grow as you go! As your business demands grow, so does the PRIMERGY RX800 S3</li> </ul>
<ul style="list-style-type: none"> <li>Dual-Core Xeon MP 7100N series with outstanding performance and 4<sup>th</sup> level cache, <b>RAID on Mother Board</b> with Serial Attached SCSI (SAS), hot-plug PCI-X 266 MHz, redundancy for fans, power supplies and PCI-X; SDDC (Chipkill)™, Redundant Bit Steering, hot replace, hot-add memory and memory mirroring</li> </ul>	<ul style="list-style-type: none"> <li>Leading transaction processing performance and performance/Watt for best responsiveness</li> <li>Virtualization platform with performance headroom to spare and highest performance combined with highest reliable operation</li> </ul>

<b>Type</b>	4-socket Rack Server building block for 4, 8 and 16-socket SMP systems
<b>System board</b>	4-socket
Chip set	XA-64e™
Processors	2 - 4 x Dual-Core Intel® Xeon® MP per chassis, max. 16 per config.
Frequencies (GHz)	7110N (2.50), 7120N (3.00) / 7130N (3.16) / 7140N (3.33), 7150N (3.50 GHz)
Front-Side-Bus	667 MHz
Second-Level-Cache	2 x 1 Mbyte, ECC
Third Level Cache	4 / 8 (7130) / 16 (7140/50) Mbyte
Fourth-Level-Cache	256 MB on chip per chassis
<b>Memory</b>	2 Gbyte to max. 64 Gbyte per chassis, maximum 256 (16-way)
registered ECC DDR2 SDRAM; 4 memory boards per 4-way system unit (3 U) with 4 slots each for PC2-3200 modules 1, 2 and 4 Gbyte; Chipkill™, Redundant Bit Steering, Hot-replace, Hot-add Memory, Memory Mirroring (Support)	
<b>Console interface</b>	
Keyboard, mouse	2x PS/2
Graphics	1x VGA (15-pin)
Controller onboard	ATI Radeon 7000 16 MB
<b>Server Management</b>	onboard
Standard:	BMC and Remote Management Controller (RSA-II) onboard; PRIMERGY ServerView Suite; PDA; PRIMERGY Diagnostic LEDs
<b>Flash-EPROM</b>	BIOS update with USB stick or via modem
<b>Front Panel</b>	
On/off switch; LEDs for Power, HD activity, System ID, System Info, System Error; (back: SIO Error, Service Processor Error)	
<b>Compliance with Norm and Standards</b>	
<b>Product safety</b>	
Global	IEC 60950
Europe	EN 60950
USA / Canada	UL 1950, CSA 950
<b>Electro magnetic compatibility</b>	
Europe	EN 55 022 class A, EN 55 024 EN 61000-3-2, EN 61000-3-3
Taiwan / Japan	CNS 13438 class A / VCCI class A
Australia / New Zealand	AN / NZS 3548 class A
USA / Canada	FCC CFR 47, Part 15, Subpart B, class A ICES-003
<b>Declaration of conformity</b>	
Europe (CE)	89/336/EEC(EMV);73/23 EEC(LVD)
North America	FCC Verification Procedure
Taiwan / Japan	BSMI / VCCI
Australia	C-Tick Mark
<b>Approvals</b>	
<b>Product safety</b>	
Global / Europe	CB
USA / Canada	UL C/US
<b>Electro magnetic compatibility</b>	
Australian	C Tick
Japan / Taiwan	
Mexico	NOM-018
Russia	Gost
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	

<b>Supported operating systems</b>
Microsoft: Windows 2003 Standard Edition (32/64-bit for up to 4 sockets); Enterprise (32/64-bit for up to 8 sockets) / Data Center (64-bit for up to 16 sockets)
SUSE: LINUX ES-9 (32/64-bit for up to 8 sockets) ES-10 (32-bit for up to 8, 64-bit for up to 16 sockets)
Red Hat: EL 3 (32-bit for up to 8 sockets); EL 4 (32-bit for up to 8, 64-bit for up to 16 sockets)
VMware: VMware Infrastructure 3 for up to 16 sockets (planned for March 07)

Components and features per 3 U chassis		
Interfaces		
Serial	1x RS-232-C (9-pin)	
USB	1x front, 2x back	
LAN	2x RJ45	
Remote Management	1x RJ45	
Onboard controller**		
Fast-IDE Controller	for DVD drive	
ServerRAID-8i SAS RoMB (RAID on Mother Board) (in 8-way only one as standard)	6-Port SAS controller; RAID level 0, 1, 10, 5, 50 with 256MB RAID Cache and BBU	
LAN (BroadCom5704)	2x 10/100/1000 Mbit/s Ethernet (PCE-Boot via LAN from PXE server)	
** For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.		
I/O Slots (Standard) PCI-X 2.0		
6x PCI-X 64-bit / 266 MHz, Hot-plug, 3,3V		
Drive bays		
for hard disks	6x 2.5/1-inch, hot-plug for SAS	
for accessible drives	1x 5.25/0.5-inch used by DVD (only DVD in master chassis usable)	
Hard disk drives	36, 73, 146 Gbyte, SAS	
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.		
System fans (hot-plug)		
Redundant hot-plug fans (4 + 4) as standard		
Electrical values		
Standard configuration with 2 hot-plug power supply modules rated 1300 W		
Rated AC voltage	200V - 240V	
Frequency	50 - 60 Hz	
max. apparent power	1600 VA	
max. effective power	1300 W	
max. mains current	8.5 A	
max. heat dissipation	6098 kJ/h (5780 BTU)	
Temperature/Noise/Dimension/Weight		
Ambient temperature	10°C-35°C DIN IEC 721-3-3 class 3K2	
Declared noise emission according to ISO 9296	idle*	operating* (*ISO 7779)
L <sub>WAd</sub> (1 B = 10 dB) :	6.6 B	6.6 B
L <sub>pAm</sub> (bystander position):	60 dB	60 dB
Overall measures	128.35*440*715 (mm); HxWxD (3 U)	
Rack mount depth:	715 mm, incl. SMP cable 815 mm;	
Rack height units:	3/6/12 U (4/8/16-way)	
Rack cable depth:	100 mm (900 mm Rack sufficient, 1000 mm Rack recommended)	
Rack integration kit	inclusive telescopic rails as part of the standard delivery	
Weight	~ 38.5 kg (per 3 U system unit)	