

PRIMERGY BF200, BF400 S2 BladeFrame Processing Blade (pBlade) Specifications

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PRIMERGY BladeFrame is the platform to build an application independent, service-oriented IT infrastructures. The solution features a service-oriented infrastructure, the innovative Processing Area Network (PAN), which radically eliminates the complexity of traditional infrastructures. Thanks to the simplification, separation and sharing of resources, IT departments have experienced enormous gains in flexibility and efficiency. With its resource management software, the PAN Manager, PRIMERGY BladeFrame combines excellent, robustly-controlled management of physical and virtual resources, and outstanding high availability and disaster recovery (DR) capabilities. By pooling and sharing of server resources PRIMERGY BladeFrame is an ideal platform for server consolidation and fast delivery of new services. This makes the solution to a dynamic infrastructure in the box, which goes far beyond traditional blade architectures and presents a completely new approach to utilizing IT.

Within the PRIMERGY BladeFrame systems, Processing Blades provide the processing capacity needed to run applications. To accommodate a range of customer requirements, both two-socket and four-socket Processing Blade (pBlade) configurations based on industry-standard technology from AMD and Intel are offered.

The Processing Blades are diskless, anonymous and interchangeable - enabling automated allocation, repurposing and failover since any pBlade can immediately assume the identity of any other. Disk resources are accessed from a storage area network (SAN). This unique design enables a data center to pool processing assets and associate configurations with the pool instead of assigning individual servers to specific applications.



Key Features	Benefits
n Stateless, anonymous and interchangeable processing nodes (pBlades)	n Automated allocation, repurposing and failover since any pBlade can immediately assume the identity of any other
n Operating system support (Microsoft Windows, Red Hat Enterprise Linux, SUSE Linux Enterprise, VMware ESX and Solaris10)	n Unmodified applications can automatically deployed on demand
n Industry-standard processor technologies from Intel and AMD	n Wide choice of processing nodes which fits for any purpose n Joint operation of both processor architectures in the same chassis
n Uniform administration of physical servers and virtual machines	n Reduction in complexity n Simplified administration of the IT infrastructure
n Consistent form factor of processing resources	n Seamless interchange ability of servers within different chassis n Joint operation of older and new systems

Processing Blades BFi20

- n 2-socket Intel Xeon Processing Blade
- n Different memory configurations with DDR2 DIMM modules
- n No internal hard disks
- n Different number of processing blades can be installed in BF200 (max. 6) and BF400 S2 (max. 24)



PY BFi20S4/2X E5410 2.33 12M/8GB
S26361-K1061-V230

- n Processor: Quad-Core Intel® Xeon® E5410 processor
- n CPU speed: 2.33 GHz
- n Cache: 12 MB L2 cache
- n Memory: 8 GB ECC DDR2 Chipkill™ memory
- n CPU Interconnect: 1.333 MHz FSB
- n Maximum Power: 225 Watt

PY BFi20S4/2X E5450 3.0 12M/16GB
S26361-K1061-V231

- n Processor: Quad-Core Intel® Xeon® E5450 processor
- n CPU speed: 3.0 GHz
- n Cache: 12 MB L2 cache
- n Memory: 16 GB ECC DDR2 Chipkill™ memory
- n CPU Interconnect: 1.333 MHz FSB
- n Maximum Power: 300 Watt

PY BFi20S4/2X E5450 3.0 12M/32GB
S26361-K1061-V232

- n Processor: Quad-Core Intel® Xeon® E5450 processor
- n CPU speed: 3.0 GHz
- n Cache: 12 MB L2 cache
- n Memory: 32 GB ECC DDR2 Chipkill™ memory
- n CPU Interconnect: 1.333 MHz FSB
- n Maximum Power: 300 Watt

Processing Blades BFa20

- n 2-socket AMD Opteron Processing Blade
- n Different memory configurations with DDR2 DIMM modules
- n No internal hard disks
- n Different number of processing blades can be installed in BF200 (max. 6) and BF400 S2 (max. 24)



PY BFa20S2/2O 2220SE 2.8 2M/16GB
S26361-K1061-V314

- n Processor: Dual-Core AMD Opteron 2220SE (F-series)
- n CPU speed: 2.8 GHz
- n Cache: 2 x 1 MB L2 cache
- n Memory: 16 GB ECC DDR2 667 DIMM
- n CPU Interconnect: 1GHz HyperTransport
- n Maximum Power: 390 Watt

Processing Blades BFi40

- n 4-socket Intel Xeon Processing Blade
- n Different memory configurations with DDR2 DIMM modules
- n No internal hard disks
- n Different number of processing blades can be installed in BF200 (max. 6) and BF400 S2 (max. 24)



PY BFi40S4/4X X7350 2.93 8M/32GB
S26361-K1061-V422

- n Processor: Quad-Core Intel® Xeon® MP processor
- n CPU speed: 2.93GHz
- n Cache: 2 x 4MB SLC
- n Memory: 32GB ECC DDR-2 Chipkill™ memory
- n CPU Interconnect: 1066MHz FSB
- n Maximum Power: 710 Watt

PY BFi40S4/4X X7350 2.93 8M/64GB
S26361-K1061-V423

- n Processor: Quad-Core Intel® Xeon® MP processor
- n CPU speed: 2.93GHz
- n Cache: 2 x 4MB SLC
- n Memory: 64GB ECC DDR-2 Chipkill™ memory
- n CPU Interconnect: 1066MHz FSB
- n Maximum Power: 710 Watt

PY BFi40S5/4X E7450 2.40 12M/32GB
S26361-K1061-V432

- n Processor: 6-Core Intel® Xeon® E7450
- n CPU speed: 2.4GHz
- n Cache: 12MB TLC
- n Memory: 32GB ECC DDR-2 Chipkill™ memory
- n CPU Interconnect: 1066MHz FSB
- n Maximum Power: 500 Watt

PY BFi40S5/4X E7450 2.40 12M/96GB
S26361-K1061-V434

- n Processor: 6-Core Intel® Xeon® E7450
- n CPU speed: 2.4GHz
- n Cache: 12MB TLC
- n Memory: 96GB ECC DDR-2 Chipkill™ memory
- n CPU Interconnect: 1066MHz FSB
- n Maximum Power: 555 Watt

Processing Blades BFa40

- n 4-socket AMD Opteron Processing Blade
- n Different memory configurations with DDR2 DIMM modules
- n No internal hard disks
- n Different number of processing blades can be installed in BF200 (max. 6) and BF400 S2 (max. 24)



PY BFa40S2/4O 8220E 2.8 2M/32GB
S26361-K1061-V517

- n Processor: Dual-Core AMD Opteron 8220SE (F-Series)
- n CPU speed: 2.8 GHz
- n Cache: 2 x 1 MB L2
- n Memory: 32 GB ECC DDR2 667 DIMM
- n CPU Interconnect: 1 GHz HyperTransport™
- n Maximum Power: 680 Watt

General Specifications

Hardware	
Multiple pBlade architectures within a BladeFrame	Yes
Processing Blades per BladeFrame	<ul style="list-style-type: none"> n PRIMERGY BladeFrame 200: Up to 6 n PRIMERGY BladeFrame 400 S2: Up to 24
Height	5.3cm (1.2U)
Power Supply / cooling mechanism	Each Processing Blade, common power backplane within the chassis
Customer replaceable	Yes
Software	
Operating system	<ul style="list-style-type: none"> n Microsoft Windows Server 2003 n Red Hat Enterprise Linux n SUSE LINUX Enterprise Server n VMware ESX n Solaris 10
Multiple operating systems within a BladeFrame	Yes
System management	PAN Manager software
Third-party management	BMC Patrol, HP OpenView Network Node Manager, Tivoli Enterprise Console, SNMP-based management products
Out-of-band system management	IPMI