Huawei FusionServer RH5885 V3

— High Efficiency, Flexible Expansion

HUAWEI TECHNOLOGIES CO., LTD.

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The Huawei FusionServer RH5885 V3 (RH5885 V3 for short) is a standard 4U 4-socket rack server and supports Intel® Xeon® E7 v2 or v3 processors. To meet the requirements of mission-critical applications such as databases, business intelligence (BI), and virtualization, the RH5885 V3 provides up to 72 computing cores and supports flexible configurations for processors, DIMMs, I/O, and hard disks, achieving optimal cost effectiveness.

Fault-tolerant design to ensure stable system operation

- Chip-level fault-tolerant features, such as automatic recovery for processors and links, ensure stable system operation.
- Memory mirroring and memory sparing prevent system shutdown caused by memory hardware faults.
- Full redundancy and hot swap maintenance are supported for key components, such as PSUs, fan modules, and hard disks, without the need for opening the chassis cover. These features facilitate quick replacement for faulty components during normal system operation, ensuring high system reliability.
- The integrated intelligent management software monitors system operation, triggers warnings, and rectifies faults.
- A diagnosis panel facilitates fault location, which reduces the time required to rectify faults.

Strong processing capabilities for optimal cost effectiveness

- The RH5885 V3 supports four Intel® Xeon® E7-4800 v2/v3 or E7-8800 v2/v3 processors. The maximum number of cores per processor increased from 15 to 18, and the maximum cache capacity is increased from 37.5 MB to 45 MB.
- To maximize the concurrent processing capability, up to 60 cores and 144 concurrent threads are supported.
- Configured with Huawei ES series PCIe solid-state drives (SSDs), the RH5885 V3 provides excellent I/O performance, eliminating disk performance bottlenecks.

Flexible expansion to fit various application scenarios

- Supporting PCIe 3.0, the RH5885 V3 offers a data throughput rate of 8 Gbit/s, with a rate increase of 60% compared with PCIe 2.0.
- The RH5885 V3 supports eight or twenty-three 2.5" hard disks, which allows flexible configuration of the local storage capacity. This applies to distributed databases and big data analysis.
- A plug-in NIC is used to provide LAN on motherboard (LOM). GE or 10GE ports can be flexibly configured.

Optimized energy efficiency to reduce OPEX

- Power capping is adopted to increase the server deployment density without the need for changing the equipment room design.
- The dynamic energy-saving technology adjusts the processor frequency and voltage according to the processor usage, reducing energy consumption.
- Platinum PSUs offer power efficiency of up to 94% at 50% loads.

RH5885 V3	
Form factor	4U rack server
Number of processors	2 or 4
Processor model	Intel® Xeon® E7-4800 v2/v3 or E7-8800 v2/v3 processors, with an L3 cache capacity of 45 MB maximum
Maximum memory capacity	48 DIMMs, up to 3 TB (64 GB DIMMs)
Maximum local storage	8 or 23 x 2.5" SAS/SATA HDDs or SSDs
RAID support	RAID 0, 1, 10, 5, and 6
LOM network port	2 or 4 x GE ports, or 2 x 10GE ports
Expansion slot	A maximum of 8 PCIe slots (including one PCIe for RAID)
USB port	5 (front: 2; rear: 2; built-in: 1)
Fan module	5 hot-swappable, counter-rotating fan modules in N+1 redundancy mode
PSU	2 or 4 hot-swappable, redundant PSUs
Management	Integrated BMC that supports the following: IPMI 2.0, SNMPv3, SNMP Trap v1, CIM, and WS-MAN SOL, KVM over IP, WebUI, CLI, IPMI tool, and virtual media Black box function
Operating systems supported	Microsoft Windows Server Red Hat Enterprise Linux SUSE Linux Enterprise Server Citrix XenServer VMware ESXi Huawei FusionSphere
Power supply	110 V/220 V AC or –48 V DC
Operating temperature	5ºC – 40ºC
Dimensions	Height: 175 mm (6.89 in.) Width: 447 mm (17.60 in.) Depth: 790 mm (31.10 in.)