# Huawei Server Portfolio

HUAWEI

- **Low failure rate:** More than 750,000 servers are delivered and used in a large scale with the failure rate 15% lower than the average industrial level.
- **Excellent performance:** Huawei servers have shattered 107 SPEC world records for computing performance and energy efficiency.
- **High security and controllability:** Huawei is the only vendor that supports one-stop R&D, production, and

delivery and uses Huawei proprietary core chips to improve service performance.
- **High availability:** With rich RAS features, Huawei servers can stably run in the temperature of 40° C for a long term.
- **Continuous innovation:** Huawei has strong R&D capability and uses Huawei proprietary core chips for accelerating applications and improving service performance.

## Rack server

RH8100 V3 is an 8-socket rack server. It uses eight Intel® XeonTM E7-8800 v2 series processors and a maximum memory capacity of 12 TB. With up to 60 RAS features, the RH8100 provides reliability comparable to midrange computers and better performance than midrange computers. This ensures reliability and performance for mission-critical applications.

- 60 RAS features and reliability comparable to midrange computers
- Superb performance and expansion capability
- Modular design facilitating maintenance and smooth upgrades

**RH8100 V3**

RH5885H V3 is a 4U, 4-socket rack server. It supports four Intel® XeonTM E7-4800 v2 series processors and a maximum memory capacity of 6 TB. With up to 53 RAS features, the RH5885H V3 provides stable, efficient support for mission-critical applications, such as databases, ERP, BI analysis, and virtualization.

- Optimal choice for mission-critical applications with reliability comparable to midrange computers
- Double processing capabilities compared with the previous-generation product
- Double processing capabilities compared with the previous-generation product
- Outstanding scalability to apply to various scenarios

**RH5885H V3**

RH5885 V3 is a 4U, 4-socket rack server. It supports four Intel® XeonTM E7-4800 v2 series processors with up to 60 computing cores. With flexible configurations in processors, memory, I/O, and hard disks, the RH5885 V3 meets requirements for mission-critical applications, such as databases, ERP, BI analysis, and virtualization.

- Optimal choice for mission-critical applications with stable system operation
- Strong processing capabilities with optimal cost effectiveness
- Flexible expansion to apply to various scenarios

**RH5885 V3**

RH5885 V2 is an 8U, 8-socket rack server. It supports eight Intel® XeonTM E7-8800 v2 series processors with up to 80 computing cores. With high reliability, the RH5885 V2 is the optimal choice for large-scale database deployment, BI analysis, and ERP.

- Strong processing performance to accelerate applications
- Flexible scalability to fit a wide variety of applications
- Easy maintenance without opening the chassis cover

**RH5885 V2**

RH1288 V2 is a 1U, 2-socket rack server. It supports two Intel® XeonTM E5-2600 v2 series processors and a maximum local storage capacity of 16 TB. With the excellent, high-density architecture and perfect balance in performance and density, the RH1288 V2 is an optimal choice for extensive applications and cloud computing.

- Easily meeting application requirements
- High energy efficiency using intelligent power consumption control
- Flexible storage configurations
- Simple management and maintenance

**RH1288 V2**

Featuring two Intel® XeonTM E5-2400 v2 series processors, the RH2285H V2 is a 2U, 2-socket rack server. It provides large storage capacity, flexible scalability, and superb cost-effectiveness, making it an ideal hardware platform for big data and distributed storage applications.

- High performance and flexible expansion for application acceleration
- Large-capacity and highly reliable storage
- Improved energy efficiency using the delicate design of IT systems

**RH2285H V2**

RH2288H V2 is a 2U, 2-socket rack server. It supports two Intel® XeonTM E5-2600 v2 series processors. With large local storage, optimal computing performance, and excellent expansion, the RH2288H V2 is an ideal choice for mission-critical applications and cloud computing.

- Strong performance to meet various application requirements
- High energy efficiency using intelligent energy consumption management
- Flexible storage configurations

**RH2288H V2**

RH2485 V2 is a 2U, 4-socket rack server. It supports four Intel® XeonTM E5-4600 v2 series processors with up to 48 computing cores. The RH2485 V2 applies to databases, virtualization, HPC, and memory-intensive applications.

- High-density four sockets with high performance, large memory, and flexible I/O expansion
- High energy efficiency using intelligent energy consumption management
- Simple management and maintenance

**RH2485 V2**

## Blade server

E9000 uses a modular design that integrates computing, networking, and storage resources. Featuring high performance, high reliability, flexible scalability, and easy management, the E9000 supports processors based on three generations and 100GE network evolution. This meets various workload requirements.

- Balanced performance and reliability for enterprise-level blade servers
- Strong computing capability using E5-2600 v2 or E7-4800 v2 series processors
- Outstanding performance with high scalability, large memory, PCIe SSDs, GPUs, and GPGPUs

**E9000**

## High-density servers

X6000 is a high-density server designed for cloud computing, data centers, and Internet applications. With its optimized architecture, the X6000 offers high density, rich server node options, and high energy efficiency. It is an ideal choice for large-scale server deployment.

- High computing density, saving space by up to 75%
- Rich server node options for various application scenarios
- Excellent energy efficiency control

**X6000**

X8000 is an architecture-optimized rack server designed for data centers and Internet applications. Featuring high density, energy efficiency, and rapid deployment, the X8000 is an ideal choice for data centers of large enterprises and groups, governments, energy industries, and Internet enterprises.

- Fastest PCIe SSD with IOPS 20% faster and OLTP 16% higher than competitive products
- Excellent performance and flexible scalability meeting requirements for various service applications
- High reliability based on multiple advanced algorithms

**X8000**

## PCIe SSD

PCIe SSD ES3000 (ES3000 for short) is designed for storage applications that require high IOPS, such as databases, virtualization, big data, search, and ERP. The ES3000 provides high performance, low latency, high reliability, and a long service life. Reducing the TCO and accelerating applications

- Fastest PCIe SSD with IOPS 20% faster and OLTP 16% higher than competitive products
- Excellent performance and flexible scalability meeting requirements for various service applications
- High reliability based on multiple advanced algorithms

**ES3000**

# Huawei Server Parameter QuickStart Guide

(This table, made in April 2014, is for internal use only. For detailed specifications, see the Huawei website.)

| Server Type | Model | Picture | Description | Form Factor | Processor | Number of DIMM Slots | Hard Disk | RAID Controller Card | PCIe Slot | LOM | PSU | Fan Module | Operating Temperature | Competitive Product | Management |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rack servers | RH1288 V2 | | High density | 1U | 2 x Intel® Xeon® E5-2600 v2 | 24 | 8 x 2.5" SAS/SATA/SSD; or 4 x 3.5" SAS/SATA | SR120/SR320BC | 3 slots for installing the following:One PCIe x16 FHHL;One PCIe x8 HHHL;One RAID controller card | 2xGE/4xGE/2x10GE | 2 redundant, hot-swappable, Platinum PSUs of 460 W/750 W/800 W AC or 800 W DC | 7 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 35℃ | IBM x3550 M4;HP DL360p/DL160;Dell R620;Cisco C220 M3 | |
| | RH2285H V2 | | Storage intensive | 2U | 2 x Intel® Xeon® E5-2400 v2 | 12 | 8 x 2.5" SAS/SATA/SSD;12 x 3.5" SAS/SATA + 2 x 2.5"" SAS/SATA/SSD;or 26 x 2.5" SAS/SATA/SSD | SR120/SR320BC/SR420BC | 6 slots for installing the following:(One PCIe x16 FHHL + one PCIe x8 FH3/4L) or (two PCIe x8 FHFL + one PCIe x 8 FH3/4L) ;Two PCIe x4 HHHL;One RAID controller card | 2xGE/4xGE/2x10GE | 2 redundant, hot-swappable, Platinum PSUs of 460 W/750 W/800 W AC or 800 W DC | 4 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | HP DL380e Gen8;IBM X3630 M3;Dell R520 | |
| | RH2288H V2 | | Excellent performance and storage | 2U | 2 x Intel® Xeon® E5-2600 v2 | 24 | 8 x 2.5" SAS/SATA/SSD;12 x 3.5" SAS/SATA + 2 x 2.5" SAS/SATA/SSD;or 26 x 2.5" SAS/SATA/SSD | SR120/SR320BC/SR420BC | 7 slots for installing the following:(One PCIe x16 FHFL+one PCIe x8 FH3/4L) or(two PCIe x8 FHFL + one PCIe x8 FH3/4L); Three PCIe x8 HHHL;One RAID controller card | 2xGE/4xGE/2x10GE | 2 redundant, hot-swappable, Platinum PSUs of 460 W/750 W/800 W AC or 800 W DC | 4 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | HP DL380p Gen8;IBM X3650 M4;Dell R720/R720xd | Support for vMedia, KVM, and SOL; Compatible with IPMI 2.0, SNMP, and IPv6; Support for Huawei eSight and third-party management software |
| | RH2485 V2 | | High density | 2U | 4 x Intel® Xeon® E5-4600 v2 | 48 | 8 x 2.5" SAS/SATA/SSD | SR120/SR320BC | 8 slots for installing the following:One PCIe x16 FHHL;One PCIe x8 FH3/4L Five PCIe x8 HHHL;One RAID controller card | 4xGE with 2x10GE expansion ports | 2 redundant, hot-swappable, Platinum PSUs of 750 W or 1200 W AC | 6 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | HP DL560 Gen8;IBM x3750M4;Dell R820;Cisco C420 M3; Fujitsu RX500S7 (4U) | |
| | RH5885 V3 | | High reliability and performance, substitute for RISC server (economical) | 4U | 4 x Intel® Xeon® E7-4800 v2 | 48 | 8 x 2.5" SAS/SATA/SSD; or 23 x 2.5" SAS/SATA/SSD | SR120/SR320BC/SR420BC | 7 slots for installing the following:One PCIe x16 FHHL;Three PCIe x8 FHHL;Two PCIe x4 HHHL;One PCIe x4 FH3/4L | 2xGE/4xGE/2x10GE | 4 redundant, hot-swappable, Platinum PSUs of 750 W/1200 W AC or 800 W DC | 5 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | Dell R920;IBM X3850 X6;HP DL580 Gen8 | |
| | RH5885H V3 | | High reliability and performance, substitute for RISC server (high specifications) | 4U | 4 x Intel® Xeon® E7-4800 v2 | 96 | 8 x 2.5"SAS/SATA/SSD; or 23 x 2.5" SAS/SATA/SSD | SR120/SR320BC/SR420BC | 16 slots for installing the following:12 PCIe x8 FHFL;4 PCIe x4 FHFL | 2xGE/4xGE/2x10GE | 2 redundant, hot-swappable, Platinum PSUs of 2000 W/3000 W AC or 2500 W DC | 5 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | Dell R920;IBM X3850 X6;HP DL580 Gen8 | |
| | RH5885 V2 | | 4U, 4 sockets (scalable to 8 sockets) | 8U | 8 x Intel® Xeon® E7-8800/4800 | 128 | 16 x 2.5" SAS/SATA/SSD | CH91M03 RAID (02310MTX) | 16 slots for installing the following:12 PCIe x8 FHFL;4 PCIe x4 FHFL | Up to 8xGE or 4x10GE | 4 redundant, hot-swappable, Platinum 2000 W AC | 12 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 35℃ | HP DL980 Gen7;IBM x3850 X5;Oracle X4800 | |
| | RH8100 V3 | | Substitute for RISC server | 8U | 8 x Intel® Xeon® E7-8800/4800 v2 | 192 | 12 x 2.5" SAS/SATA/SSD or 24 x 2.5" SAS/SATA/SSD | See the brochure | 16 slots (See the brochure for details.) | Up to 8xGE or 4x10GE | 4 hot-swappable, Platinum PSUs of 2000 W/ 3000 W AC or 2500 W DC in 2+2 redundancy mode | 8 hot-swappable, counter-rotating fan modules in N+1 redundancy mode | 5℃ to 40℃ | IBM x3950 X6;HP DL980 Gen8 | |
| X6000 high-density server | E9000 chassis | | High-density, multi-node server for Internet, cloud computing, and data center server deployment, saving space by 75%; Supports up to four half-width or two full-width compute nodes, and four HHHL PCIe x8 slots; Provides two 750 W/800 W/1200 W AC or 800 W DC PSUs in 1+1 redundancy mode; Supports three hot-swappable fan modules in N+1 redundancy mode. | | | | | | | | | | 5℃ to 40℃ | IBM iDataPlex;HP SL6500;Dell C6220;Fujitsu CX420 | |
| | CH121 | | Large memory | Half-width | 2 x Intel® Xeon® E5-2600 v2 | 24 | 2 x 2.5" SAS/SATA/SSD | RU120 | 3 slots for installing the following: Two PCIe x16 mezz cards;One PCIe x8 FHHL | / | / | / | 5℃ to 40℃ | HP BL460c;IBM X240;Cisco B200 M3;Dell M620 | Compatible with IPMI 2.0, SNMP, and IPv6, two redundant management modules support vMedia, KVM, SOL, Huawei eSight, and third-party management software. |
| | CH140 | | Twin node | Half-width | 2 x 2 Intel® Xeon® E5-2600 v2 | 2 x 8 | 2 x 1 x 2.5" SAS/SATA/SSD | / | 2 slots for installing two PCIe x8 mezz cards which are shared by two subnodes | / | / | / | 5℃ to 35℃ | IBM X222;Dell M420 | |
| | CH220/221 | | I/O expansion | Full-width | 2 x Intel® Xeon® E5-2600 v2 | 24 | 2 x 2.5" SAS/SATA/SSD | RU120 | 6 slots for installing the following:Two PCIe x16 mezz cards;Four PCIe x8 FHHL or two PCIe x16 FHFL | / | / | / | 5℃ to 40℃ | IBM X240 + PCIe expansion node | |
| | CH222 | | Storage expansion | Full-width | 2 x Intel® Xeon® E5-2600 v2 | 24 | 15 x 2.5" SAS/SATA/SSD | SR120/SR320BC | 3 slots for installing two PCIe x16 mezz cards and one PCIe x8 FHHL | / | / | / | 5℃ to 40℃ | IBM X240 + storage expansion node;IBM V7000;HP D2200sb;Dell M4110 | |
| | CH240 | | Large memory | Full-width | 4 x Intel® Xeon® E5-4600 v2 | 48 | 8 x 2.5" SAS/SATA/SSD | RU120/RU32BC | 2 slots for installing two PCIe x16 mezz cards | / | / | / | 5℃ to 40℃ | HP BL660c;IBM X440;Cisco B420 M3;Dell M820 | |
| | CH242 V3 | | High expansion | Full-width | 4 x Intel® Xeon® E7-4800 v2 | 32 | 4 x 2.5" SAS/SATA/SSD or 8 x 2.5"SAS/SATA/SSD | RU120/RU32BC | 7 slots for installing the following:Four PCIe x16 mezz cards;Two PCIe x16 FHHL; One PCIe x16 FH3/4L (4 HDDs) | / | / | / | 5℃ to 40℃ | HP BL680c;Dell M910 | |
| X8000 high-density server | X6000 chassis | | High-density, multi-node server for Internet, cloud computing, and data center server deployment, saving space by 75%; Supports up to four half-width or two full-width compute nodes, and four HHHL PCIe x8 slots; Provides two 750 W/800 W/1200 W AC or 800 W DC PSUs in 1+1 redundancy mode; Supports three hot-swappable fan modules in N+1 redundancy mode. | | | | | | | | | | 5℃ to 40℃ | / | |
| | XH310 V2 | | High density | Half-width | 1 x Intel® Xeon® E3-1200 v2 | 4 (UDIMMs) | 1 x 3.5" SATA HDD (not hot-swappable) | / | 1 slot for installing one PCIe x8 HHHL | 2 onboard GE | / | / | 5℃ to 40℃ | Lenovo SD210X4 | Support for vMedia, KVM, and SOL; Compatible with IPMI 2.0, SNMP, and IPv6; Support for Huawei eSight and third-party management software |
| | XH311 V2 | | High density | Half-width | 1 x Intel® Xeon® E3-1200 v2 | 4 (UDIMMs) | 4 x 2.5" SAS/SATA/SSD | SR120/SR320 | 2 slots for installing one PCIe x8 HHHL and one RAID controller card | 2 onboard GE | / | / | 5℃ to 40℃ | / | |
| | XH320 V2 | | High density | Half-width | 2 x Intel® Xeon® E5-2400 v2 | 12 | 4 x 2.5" SAS/SATA/SSD | RU120/RU32BC | 2 slots for installing one PCIe x8 HHHL and one RAID controller card | 2 onboard GE | / | / | 5℃ to 35℃ | Lenovo SD330;Inspur SA5248/SA5248L;Dell C6220;HP SL6500 | |
| | XH621 V2 | | Large memory and capacity and storage intensive | Full-width | 2 x Intel® Xeon® E5-2600 v2 | 24 | 8 x 2.5" SAS/SATA/SSD | RU120/RU32BC | 4 slots for installing three PCIe x8 HHHL and one RAID controller card | 2 onboard GE | / | / | 5℃ to 35℃ | IBM dx360 M4 | |
| | X8000 rack | | High-density, multi-node server for Internet, cloud computing, and data center server deployment;Centralized heat dissipation and power supply, saving space by 75%, reducing power consumption by 15%, and improving efficiency by over 850%;Supports up to 80 half-width, high-density or 40 full-width storage compute nodes in 44U;Supports eight 3000 W PSUs in N+N redundancy mode;Supports 12 hot-swappable fan modules in N+1 redundancy mode;Provides unified management using RMCs and MMCs. | | | | | | | | | | 5℃ to 40℃ | / | |
| | DH310 V2 | | High density | Half-width | 1 x Intel® Xeon® E3-1200 v2 | 4 (UDIMMs) | 1 x 3.5" SATA HDD (not hot-swappable) | / | / | 2 onboard GE | / | / | 5℃ to 40℃ | / | Compatible with IPMI 2.0, SNMP, and IPv6, RMCs support vMedia, KVM, SOL, Huawei eSight, and third-party management software. |
| | DH320 V2 | | High density | Half-width | 2 x Intel® Xeon® E5-2400 v2 | 12 | 4 x 2.5" SAS/SATA/SSD | RU120 | 2 slots for installing one PCIe x8 HHHL and one RAID controller card | 2 onboard GE | / | / | 5℃ to 40℃ | / | |
| | DH628 V2 | | Storage intensive | 1/4- width | 2 x Intel® Xeon® E5-2400 v2 | 8 | 12 x 2.5" SAS/SATA/SSD or 12 x 3.5" SAS/SATA + 2 x 2.5"SATA/SSD | RU120/RU32BC | 2 slots for installing one PCIe x16 FH3/4L and one RAID controller card | 2 onboard GE | / | / | 5℃ to 35℃ | / | |
| SSD | ES3000 | | Provides three options based on capacity: 800 GB, 1.2 TB, and 2.4 TB;Provides a PCIe 2.0 x8 port with up to 3.2 GB/s read/write bandwidth as a full-height, half-length card;Provides up to 770,000 read IOPS and 630,000 write IOPS as the fastest PCIe SSD in the industry. | | | | | | | | | | 0℃ to 35℃ | Fusion-IO ioDrive2/ioDrive2 Duo;STEC s1120;OCZ Z-Drive CM84/RM84;Virident FlashMAX II;Intel SSD 910 | Provides management and maintenance tools, such as log recording, ECC statistics, bad block statistics, bad block labeling, and in-band upgrades. |