9032 Configuration Help

 Notice: The V3 servers which install VMware system should avoid using the Intel X710/XL710 NIC, should configure and use the NIC which is in the compatibility list configuration except X7xx/XL7xx serial NIC. The reason is detailed in the warning notice:

http://support.huawei.com/enterprise/en/bulletins-product/NEWS2000000641

Notice:The V3 servers which install VMware system should avoid using the Intel X710/XL710 NIC, should configure and use the NIC which is in the compatibility list configuration except X7xx/XL7xx serial NIC. The reason is detailed in the warning notice: http://support.huawei.com/enterprise/en/bulletins-product/NEWS2000000641

2. **===Mode===**

o 2.1 Default System Mode

- 1.For single system mode, only one type of CPU is configured and each CPU occupies the same type and number of DIMM. This mode supports and could switch to certain physical partition mode on site.
- 2.For physical partition mode, the types of CPUs and DIMMs occupied by each CPU in different physical partitions may be different, hence it cannot switch to single system mode or other physical partition mode.

o 2.2 On Site Physical Partition

Recommend at least 1 RAID controller card and 1 NIC for each physical partition with local storage.

3. Please confirm whether the customer's ambient environment could match

The product has high requirements on ambient environment and supports only certain upper-layer software versions.

Before formal order placing, check whether the customer's ambient environment meet the requirements

and whether the customer's upper-layer software is supported according to the KunLun Mission Critical Server Ambient Environment and Application Information Checklist to identify risks in advance and make countermeasures.

4. Please check the customer's ambient environment

 4.1 For non-Huawei cabinet (third-party cabinet) delivery, perform the following ambient environment checks 4.1.1 Check whether the customer's ambient environment meets the requirements for non-Huawei cabinet delivery

For details, see the KunLun Mission Critical Server Ambient Environment and Application Information Checklist.

- 4.2 For Huawei cabinet delivery, perform the following ambient environment checks
 - 4.2.1 Check whether a preassembled cabinet can be pushed from the unloading place to the installation position in the equipment room.
- 1.If the preassembled cabinet cannot be pushed from the unloading place to the installation position in the equipment room and the customer does not want to optimize the environment,
- extra fees must be paid for disassembled shipment and onsite installation.
- 2.It refer the separate shipment service, please confirm it carefully. If not configure and customer need the separate shipment, it need contract change otherwise could not deliver.
 - 4.2.2 Check the PDU power supply mode in the customer equipment room.

Only supports three phase PDU power type.

4.2.3 The Length of Single Power Cable of PDU in Cabinet(m)

The power cable configuration depends on the actual requirements.

4.2.4 The Length of Grounding Cable of Cabinet(m)

The power cable configuration depends on the actual requirements.

 4.2.5 Check whether the customer's ambient environment meets the requirements for Huawei cabinet delivery

For details, see the KunLun Mission Critical Server Ambient Environment and Application Information Checklist.

- 5. check the application information
 - o 5.1 Required OS versions in compatibility list

Server Compatibility Checker:

http://support.huawei.com/onlinetoolsweb/ftca/index?serise=6

6. ===9032Base Configuration===

o 6.1 ===CPU===

• 6.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- o 6.2 ===Memory===
 - 6.2.1 VMware 5.5 (or a later version)

If you want to run vmware on a chassis with 4 physical partitions, the total memory shouldn't exceed 16 TB.

• 6.2.2 DIMM capacity

Configurator automatically calculates memory code and memory quantity according to the memory capacity which customer need:

2TB 256 * 8GB

4TB 256 * 16GB

6TB 768 * 8GB

8TB 256 * 32GB

12TB 768 * 16GB

16TB 512 * 32GB

24TB 768 * 32GB

32TB 512 * 64GB

- o 6.3 ===RAID Card===
 - 6.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - o 6.4 ===2.5" Hard Disk===
 - 6.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID

controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

6.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

• 6.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

• 6.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

• 6.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

6.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

• 6.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

32P single system mode: If configure 1-4 RAID controller cards, each Raid Card can support 1-12 hard disks; 48 hard disks are supported with more than 4 RAID controller cards; The number of HDDs must be averaged by the number of RAID controller cards.

20P single system mode: One RAID controller card supports 12 hard disks, two RAID controller cards support 24 hard disks and 3/4/5 RAID controller cards support 30 hard disks.

6.4.8 Huawei ES3500S V3 SSD-800GB-SAS-2.5"-12Gb/s-Read Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.9 SSD-400GB-SAS-2.5"-12Gb/s-Write Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series:

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

• 6.4.10 SSD-800GB-SAS-2.5"-12Gb/s-Write Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

• 6.4.11 SSD-1.6TB-SAS-2.5"-12Gb/s-Write Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.12 Huawei ES3520S V3 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.13 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5"-12Gb/s-Read Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series:

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series;

Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.14 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5"-12Gb/s-Read Intensive

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series:

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.15 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series:

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.16 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5"-12Gb/s-Mixed Use

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

 6.4.17 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5"-12Gb/s-Mixed Use

- 1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks;
- 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks;
- 3. The number of HDDs must be averaged by the number of Raid Card;
- 4.SSDs grade classification:

Read Intensive(RI): MLC, 0.3~1 DWPD, corresponding to the Intel S3500/S3510 Series;

Mixed Use(MU): 3~5 DWPD, corresponding to the Intel S3600/S3610 Series; Write Intensive(WI): eMLC, 10 DWPD, corresponding to the Intel S3700/S3710 Series.

6.4.18 Huawei ES3500S V5 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.19 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.20 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.21 Huawei ES3500S V5 SSD-7680GB-SAS-2.5"-12Gb/s-Read Intensive

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.22 Huawei ES3600S V5 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.23 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.24 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.4.25 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

1. If configure 1-4 Raid Cards, each Raid Card can support 1-12 hard disks; 2. If configure 8 Raid Cards, each Raid Card can support 1-6 hard disks; 3. The number of HDDs must be averaged by the number of Raid Card; 4.SSDs grade classification: Read Intensive(RI):Read Intensive; Mixed Use(MU): Mixed Use; Write Intensive(WI): Write Intensive;

6.5 ===Network Interface Card===

• 6.5.1 1st NIC

Mandatory.

• 6.5.2 2nd NIC

Mandatory.

○ 6.6 ===BIO module assembly===

• 6.6.1 BIO module type

BIO module must be equipped, here only to choose the specifications.

32P single system mode: Configure 8 hot-swappable BIO supports 16 hot-swappable PCIe slots;Configure the 8 non-hot-swap BIO supports 24 non-hot-plug PCIe slots;4 Non-Hot Plug BIO + 4 hot-swappable BIO, supports 8 hot-swappable PCIe slot, 12 non-hot-plug PCIe slots.

20P single system mode:Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.

6.7 ===PCle Card(Non-hot-plugged,In BIO module)===

6.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.13 PCle card in the 13th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.14 PCle card in the 14th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.15 PCle card in the 15th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.16 PCle card in the 16th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.17 PCle card in the 17th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.18 PCle card in the 18th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.19 PCle card in the 19th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.20 PCle card in the 20th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.21 PCle card in the 21th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.22 PCle card in the 22th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.23 PCle card in the 23th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.7.24 PCle card in the 24th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.7.25 Number of QDR IB Cables

Used for PCIe IB Card, length is 3m.

6.7.26 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.7.27 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.7.28 5m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.7.29 10m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- o 6.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.9 PCle card in the 13th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.10 PCle card in the 14th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.11 PCle card in the 16th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.12 PCle card in the 17rd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.13 PCle card in the 19th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.14 PCle card in the 20th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.15 PCle card in the 22th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.8.16 PCle card in the 23th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

o 6.9 ===PCle Card(Non-hot-plugged,In FIO module)===

• 6.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.13 PCle card in the 13th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.14 PCle card in the 14th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.15 PCle card in the 15th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.16 PCle card in the 16rd PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.17 PCle card in the 17th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.9.18 PCle card in the 18th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.19 PCle card in the 19th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card. 9032 comes with four FIO module.

6.9.20 PCle card in the 20th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.21 PCle card in the 21th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.9.22 PCle card in the 22th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.23 PCle card in the 23th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.9.24 PCle card in the 24th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

6.10 ===High Speed Cable and Optical Transceiver ===

6.10.1 1m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.10.2 3m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.11 ===Operating System===

6.11.1 Operating System

1. Operating system manufacturers provide the original service, Huawei only resale. 2. According to the operating system manufacturer's life cycle strategy, entering the version(eg: suse 12.2) of the LTSS cycle requires an additional purchase of LTSS expand maintenance.

Please confirm the customer's operating system version before placing the order. If the LTSS version is involved, the customer needs to purchase it from the operating system manufacturer separately.

3.According to the operating system manufacturer's life cycle strategy, entering the version(eg: redhat 7.2) of the EUS/ELS cycle requires an additional purchase of EUS/ELS expand maintenance.

Please confirm the customer's operating system version before placing the order. If the EUS/ELS version is involved, the customer needs to purchase it from the operating system manufacturer separately.

o 6.12 Physical Partition

- 1. The KunLun 9032 can operate in single-system or physical partition mode.
- 2. The server does not support mixing of CPUs, DIMMs, RAID controller cards and hard disks of different types when it operates in single-system or physical partition mode.
- 3. The server supports two 16-socket physical partitions or four 8-socket physical partitions or eight 4-socket physical partitions.
- 4. The quantities of CPUs, DIMMs, RAID controller cards, and hard disks in each physical partitions must be the same.
- 5.Each physical partitions must provided one piece of RAID controller card at least.

5. The types and quantities of BIOs, NICs, and PCIe cards to be configured depend on site requirements.

6.13 System operating mode

physical partition: one eight-way servers will be interconnected through a passage way off, isolated into two four-way server.

- o 6.14 ===Physical Partition 1===
 - 6.14.1 **===CPU===**
 - 6.14.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.14.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.14.2 ===**Memory**===
 - 6.14.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.14.3 ===RAID Card===
 - 6.14.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.14.4 ===2.5" Hard Disk===
 - 6.14.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.14.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.14.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.14.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.14.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.14.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5"-12Gb/s-Read Intensive Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.14.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.14.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.14.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.14.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.14.5 ===Network Interface Card===
 - 6.14.5.1 **1st NIC**

Mandatory.

- 6.14.6 ===BIO module assembly===
 - 6.14.6.1 BIO module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.

6.14.7 ===PCle Card(Non-hot-plugged,In BIO module)===

6.14.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.14.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.14.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

 6.14.7.13 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

 6.14.7.14 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.14.7.15 5m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.14.7.16 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.14.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.14.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.14.9 ===PCle Card(Non-hot-plugged,In FIO module)===

• 6.14.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.14.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.14.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.14.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

- 6.14.10 ===High Speed Cable and Optical Transceiver ===
 - 6.14.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.14.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.14.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

- 6.15 ===Physical Partition 2===
 - 6.15.1 **===CPU===**
 - 6.15.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.15.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.15.2 ===**Memory**===
 - 6.15.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.15.3 ===RAID Card===
 - 6.15.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.15.4 ===2.5" Hard Disk===
 - 6.15.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.15.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.15.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.15.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.15.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.15.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.15.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.15.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.15.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.15.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.15.5 ===Network Interface Card===
 - 6.15.5.1 1st NIC

Mandatory.

- 6.15.6 ===BIO module assembly===
 - 6.15.6.1 BIO module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.15.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.15.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.15.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.15.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.15.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.15.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

 6.15.7.13 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

 6.15.7.14 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.15.7.15 5m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.15.7.16 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.15.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.15.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.15.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

- 6.15.9 ===PCle Card(Non-hot-plugged,In FIO module)===
 - 6.15.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.15.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.15.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card. 9032 comes with four FIO module.

• 6.15.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.15.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

- 6.15.10 ===High Speed Cable and Optical Transceiver ===
 - 6.15.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.15.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.15.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.16 ===Physical Partition 3===
 - 6.16.1 **===CPU===**
 - 6.16.1.1 CPU series

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.16.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.16.2 **===Memory===**
 - 6.16.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.16.3 ===RAID Card===
 - 6.16.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.16.4 ===2.5" Hard Disk===
 - 6.16.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.16.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.16.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.16.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.16.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.16.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.16.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.16.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.16.5 ===Network Interface Card===
 - 6.16.5.1 1st NIC

Mandatory.

- 6.16.6 ===BIO module assembly===
 - 6.16.6.1 BIO module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.16.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.16.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.16.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.16.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.16.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.16.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.13 PCle card in the 13th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.14 PCle card in the 14th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.16.7.15 PCle card in the 15th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

 6.16.7.16 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

 6.16.7.17 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.16.7.18 5m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.16.7.19 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.16.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.16.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.9 PCle card in the 13th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.16.8.10 PCle card in the 14th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

- 6.16.9 ===PCle Card(Non-hot-plugged,In FIO module)===
 - 6.16.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.16.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.13 PCle card in the 13th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.16.9.14 PCle card in the 14th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card. 9032 comes with four FIO module.

6.16.9.15 PCle card in the 15th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

- 6.16.10 ===High Speed Cable and Optical Transceiver ===
 - 6.16.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.16.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.16.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.17 ===Physical Partition 4===
 - 6.17.1 **===CPU===**
 - 6.17.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.17.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.17.2 ===Memory===
 - 6.17.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.17.3 ===RAID Card===
 - 6.17.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.17.4 ===2.5" Hard Disk===
 - 6.17.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.17.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5"-12Gb/s-Mixed Use Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.17.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.17.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.17.5 ===Network Interface Card===
 - 6.17.5.1 **1st NIC**

Mandatory.

- 6.17.6 ===BIO module assembly===
 - 6.17.6.1 **BIO** module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.17.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.17.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.17.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.17.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.17.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.17.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.13 PCle card in the 13th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.14 PCle card in the 14th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.17.7.15 PCle card in the 15th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

 6.17.7.16 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

 6.17.7.17 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.17.7.18 5m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.17.7.19 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.17.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.17.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.17.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.17.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.9 PCle card in the 13th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.17.8.10 PCle card in the 14th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

- 6.17.9 ===PCle Card(Non-hot-plugged,In FIO module)===
 - 6.17.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.13 PCle card in the 13th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.17.9.14 PCle card in the 14th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.17.9.15 PCle card in the 15th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card. 9032 comes with four FIO module.

- 6.17.10 ===High Speed Cable and Optical Transceiver ===
 - 6.17.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.17.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.17.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - o 6.18 ===Physical Partition 5===
 - 6.18.1 **===CPU===**
 - 6.18.1.1 CPU series

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

6.18.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.18.2 ===**Memory**===
 - 6.18.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

6.18.3 ===RAID Card===

• 6.18.3.1 RAID controller card

- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.18.4 ===2.5" Hard Disk===
 - 6.18.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.18.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.18.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.18.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.18.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.18.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.18.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.18.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.18.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.18.5 ===Network Interface Card===
 - 6.18.5.1 **1st NIC**

Mandatory.

- 6.18.6 ===BIO module assembly===
 - 6.18.6.1 **BIO** module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.18.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.18.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.18.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.18.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.18.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.18.7.13 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.18.7.14 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.18.7.15 5m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.18.7.16 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.18.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.18.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.18.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.18.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

- 6.18.9 ===PCle Card(Non-hot-plugged,In FIO module)===
 - 6.18.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.18.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.18.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.18.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

- 6.18.10 ===High Speed Cable and Optical Transceiver ===
 - 6.18.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.18.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.18.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - o 6.19 ===Physical Partition 6===
 - 6.19.1 **===CPU===**
 - 6.19.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.19.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.19.2 **===Memory===**
 - 6.19.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.19.3 **===RAID Card===**
 - 6.19.3.1 RAID controller card

- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.

6.19.4 ===2.5" Hard Disk===

6.19.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.19.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.19.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.19.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.19.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.19.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.19.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.19.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.19.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.19.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.19.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.19.5 ===Network Interface Card===
 - 6.19.5.1 1st NIC

Mandatory.

- 6.19.6 ===BIO module assembly===
 - 6.19.6.1 **BIO** module type
- 1.BIO module must be equipped, here only to choose the specifications;
- 2. Configure 8 hot-swappable BIO supports 16 hot-swappable PCIe slots;
- 3. Configure the 8 non-hot-swap BIO supports 24 non-hot-plug PCIe slots;
- 4.4 Non-Hot Plug BIO + 4 hot-swappable BIO, supports 8 hot-swappable PCIe slot, 12 non-hot-plug PCIe slots.
 - 6.19.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.19.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.19.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.19.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.19.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.19.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.19.7.13 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.19.7.14 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.19.7.15 5m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.19.7.16 10m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.19.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.19.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.19.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.19.9 ===PCle Card(Non-hot-plugged,In FIO module)===

6.19.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.19.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.19.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

6.19.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.19.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.19.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.19.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

- 6.19.10 ===High Speed Cable and Optical Transceiver ===
 - 6.19.10.1 1m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.19.10.2 3m Passive SFP+ High-speed Cable-include Interface Module
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.19.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km
- 1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.
 - 6.20 ===Physical Partition 7===
 - 6.20.1 **===CPU===**
 - 6.20.1.1 CPU series

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

• 6.20.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.20.2 **===Memory===**
 - 6.20.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.20.3 **===RAID Card===**
 - 6.20.3.1 RAID controller card

- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.

6.20.4 ===2.5" Hard Disk===

• 6.20.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.20.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.20.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.20.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.20.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.20.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.20.5 ===Network Interface Card===
 - 6.20.5.1 1st NIC

Mandatory.

- 6.20.6 ===BIO module assembly===
 - 6.20.6.1 BIO module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.20.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.20.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.20.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.4 PCle card in the 4th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.20.7.5 PCle card in the 5th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.20.7.6 PCle card in the 6th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.20.7.7 PCle card in the 7th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.8 PCle card in the 8th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.9 PCle card in the 9th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.10 PCle card in the 10th PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.11 PCle card in the 11th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.20.7.12 PCle card in the 12th PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

6.20.7.13 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.20.7.14 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.20.7.15 5m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.20.7.16 10m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.20.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.20.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.3 PCle card in the 4th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.4 PCle card in the 5th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.20.8.5 PCle card in the 7th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.6 PCle card in the 8th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.7 PCle card in the 10th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.20.8.8 PCle card in the 11th PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

6.20.9 ===PCle Card(Non-hot-plugged,In FIO module)===

• 6.20.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.20.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.20.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.20.9.4 PCle card in the 4th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.20.9.5 PCle card in the 5th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

6.20.9.6 PCle card in the 6th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.20.9.7 PCle card in the 7th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.20.9.8 PCle card in the 8th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.20.9.9 PCle card in the 9th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.20.9.10 PCle card in the 10th PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

• 6.20.9.11 PCle card in the 11th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

• 6.20.9.12 PCle card in the 12th PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

- 6.20.10 ===High Speed Cable and Optical Transceiver ===
 - 6.20.10.1 1m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.20.10.2 3m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.20.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

- 6.21 ===Physical Partition 8===
 - 6.21.1 **===CPU===**
 - 6.21.1.1 **CPU series**

E7-v3 is Haswell EX Xeon E7 v3 CPU, E7-v4 is Broadwell EX Xeon E7 v4 CPU, latter is a new generation of intel series CPU.

6.21.1.2 CPU type

Preferred, Sub-preferred: optimal recommended according to the business.

- 6.21.2 **===Memory===**
 - 6.21.2.1 VMware 5.5 (or a later version)

The total DIMM should be less than 4TB for each 8P or 4P hard partition with VMware.

- 6.21.3 ===RAID Card===
 - 6.21.3.1 RAID controller card
- 1. Configure the hard disk must be equipped with RAID;
- 2. Recommends Raid card preferably contains super capacitor.
 - 6.21.4 ===2.5" Hard Disk===

• 6.21.4.1 Hard Disk-300GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.2 Hard Disk-300GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.3 Hard Disk-600GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.21.4.4 Hard Disk-600GB-SAS-15000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.21.4.5 Hard Disk-900GB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.21.4.6 Hard Disk-1.2TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

• 6.21.4.7 Hard Disk-1.8TB-SAS-10000rpm-2.5"-12Gb/s

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.8 Huawei ES3520S V3 SSD-960GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.9 Huawei ES3520S V3 SSD-1.92TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.10 Huawei ES3520S V3 SSD-3.84TB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.11 Huawei ES3620S V3 SSD-800GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.12 Huawei ES3620S V3 SSD-1.6TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.13 Huawei ES3620S V3 SSD-3.2TB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.14 Huawei ES3500S V5 SSD-960GB-SAS-2.5" 12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.15 Huawei ES3500S V5 SSD-1920GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.21.4.16 Huawei ES3500S V5 SSD-3840GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.21.4.17 Huawei ES3500S V5 SSD-7680GB-SAS-2.5"-12Gb/s-Read Intensive

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

6.21.4.18 Huawei ES3600S V5 SSD-800GB-SAS-2.5" 12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.21.4.19 Huawei ES3600S V5 SSD-1600GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.21.4.20 Huawei ES3600S V5 SSD-3200GB-SAS-2.5"-12Gb/s-Mixed Use

Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

 6.21.4.21 Huawei ES3600S V5 SSD-6400GB-SAS-2.5"-12Gb/s-Mixed Use Every 4P supports 6 hard disks, and each RAID controller card supports 12 hard disks. The number of current hard disks should not exceeds the number that system mode or RAID controller cards support.

- 6.21.5 ===Network Interface Card===
 - 6.21.5.1 1st NIC

Mandatory.

- 6.21.6 ===BIO module assembly===
 - 6.21.6.1 BIO module type
- 1.Each non-hot-plug BIO supports three PCIe slots, and each hot-plug BIO supports two PCIe slots.
- 2.BIO module must be equipped, here only to choose the specifications.
 - 6.21.7 ===PCle Card(Non-hot-plugged,In BIO module)===
 - 6.21.7.1 PCle card in the 1st PCle slot(X16)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.21.7.2 PCle card in the 2nd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

• 6.21.7.3 PCle card in the 3rd PCle slot(X8)

Configure BIO-pluggable modules, each of the three non-hot-swap BIO scalable slot, of which only the first one is the X16, the other two slots are X8.

 6.21.7.4 1m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

 6.21.7.5 3m IB FDR High-speed Passive Cable(DAC)-Include Interface Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.21.7.6 5m IB FDR High-speed Cable-Include 56Gb/s
 QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

6.21.7.7 10m IB FDR High-speed Cable-Include 56Gb/s QSFP+ Optical Module

The IB FDR cable including the QSFP+ optical transceiver and optical fiber, does not need to configure the optical fiber additionally.

- 6.21.8 ===PCle Card(Hot-plugged,In BIO module)===
 - 6.21.8.1 PCle card in the 1st PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

• 6.21.8.2 PCle card in the 2nd PCle slot(X16)

Configure BIO hot-swappable modules, each BIO scalable two hot-pluggable slots, and two slots are X16.

- 6.21.9 ===PCle Card(Non-hot-plugged,In FIO module)===
 - 6.21.9.1 PCle card in the 1st PCle slot(X16)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.21.9.2 PCle card in the 2nd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot, The first and fourth slots can only match the GPU card, the other slot with SSD, and a FIO can only be equipped with SSD card or GPU card.

9032 comes with four FIO module.

6.21.9.3 PCle card in the 3rd PCle slot(X8)

FIO module internal non-hot plug slot, each FIO has six non-hot plug slot,
The first and fourth slots can only match the GPU card, the other slot with SSD, and a
FIO can only be equipped with SSD card or GPU card.
9032 comes with four FIO module.

- 6.21.10 ===High Speed Cable and Optical Transceiver ===
 - 6.21.10.1 1m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver;2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.21.10.2 3m Passive SFP+ High-speed Cable-include Interface Module

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.21.10.3 Optical Transceiver-SFP+-850nm-10Gb/s-LC-Multimode-0.3km

1.Used for 10GE SFP+ Network Card, the quantity of SFP+ Cable and optical transceiver are not more than the 10GE interfaces without optical transceiver; 2.The SFP+ cable including interface module, does not need to configure the optical transceiver and optical fiber additionally.

6.22 ===Power Cord===

• 6.22.1 C13 AC power cord

- 1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style.
- 2.2000W and below power supply use C13 power cable, PDU power cable is 12A in Japan, other countries is 10A; wall plug cable is 12A in Japan, other countries is 10A. 3.If use the wall plug, please select power cable by select Area model(C13 to C13 Wall plug, normal extension cord);
- 4.If use the PDU plug, please select C13 PDU power cable(C13 to C14 PDU plug, PDU extension cord).



IEC plug



plug for PDU



wall plug

• 6.22.2 C13 wall plug power cord

- 1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style.
- 2.2000W and below power supply use C13 power cable, PDU power cable is 12A in Japan, other countries is 10A; wall plug cable is 12A in Japan, other countries is 10A. 3.If use the wall plug, please select power cable by select Area model(C13 to C13 Wall plug, normal extension cord);
- 4.If use the PDU plug, please select C13 PDU power cable (C13 to C14 PDU plug, PDU extension cord).



Denmark C13-C13



Korea C13-C13



Argentina C13-C13



Australia C13-C13



Brazil C13-C13



Britain C13-C13



China C13-C13



Europe C13-C13



South Africa C13-C13



India C13-C13



Italy C13-C13



Japan C13-C13



North America C13-C13



Switzerland C13-C13

• 6.22.3 C13 PDU power cord

1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style.

2.2000W and below power supply use C13 power cable, PDU power cable is 12A in Japan, other countries is 10A; wall plug cable is 12A in Japan, other countries is 10A. 3.If use the wall plug, please select power cable by select Area model(C13 to C13 Wall plug, normal extension cord);

4.If use the PDU plug, please select C13 PDU power cable(C13 to C14 PDU plug, PDU extension cord).



China(PDU) C13-14

• 6.22.4 C19 AC power cord

- 1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style;
- 2.3000W power supply can not use Britain style Wall Plug that 13A can make power failure, it must use PDU plug; if need the Britain style Wall Plug, please use 2000W power supply;
- 3.If use the wall plug, please select power cable by select Area model(C19 to C19 wall plug, normal extension cord);
- 4.If use the PDU plug, please select C19 PDU power cable(C19 to C20 PDU plug, PDU extension cord).



IEC plug



plug for PDU



• 6.22.5 C19 wall plug power cord

- 1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style;
- 2.3000W power supply can not use Britain style Wall Plug that 13A can make power failure, it must use PDU plug; if need the Britain style Wall Plug, please use 2000W power supply;
- 3.If use the wall plug, please select power cable by select Area model(C19 to C19 wall plug, normal extension cord);
- 4.If use the PDU plug, please select C19 PDU power cable(C19 to C20 PDU plug, PDU extension cord).



Australia C19-C19



Brazil C19-C19



China C19-C19



Europe C19-C19



South Africa C19-C19



New India C19-C19



Japan C19-C19



North America C19-C19

• 6.22.6 C19 PDU power cord

- 1.Power Cable recommend Wall Plug and PDU Style, if the use condition is clear, it could select the Wall Plug or PDU Style;
- 2.3000W power supply can not use Britain style Wall Plug that 13A can make power failure, it must use PDU plug; if need the Britain style Wall Plug, please use 2000W power supply;
- 3.If use the wall plug, please select power cable by select Area model(C19 to C19 wall plug, normal extension cord);
- 4.If use the PDU plug, please select C19 PDU power cable(C19 to C20 PDU plug, PDU extension cord).





World general (besides Japan, Taiwan,

Australia) C19-C20

○ 6.23 ===Confirm Room Environment===

6.23.1 Make sure the customer's computer room environment meet the installation requirements

KunLun mission-critical servers have certain requirements for the equipment room environment of a customer. Before placing an order, confirm the equipment room

environment with the customer, and prepare a confirmation report.

If there are any incompliant items, communicate with the customer in advance and rectify the environment if required.

 6.23.2 According to the customer's computer room environment to choose whether to split the factory shipments

If the equipment room environment of the customer does not meet requirements for preassembled shipment and the customer does not want to rectify the environment, the customer needs to pay extra expenses for disassembled shipment.

In disassembled shipment, computing chassis are removed from servers at the production site after testing, and are installed back at the customer's site.