

## NETAŞ Cloud Servers NCS6722 N4 / NCS 6722 N3

Riser Card Datasheet

Version: R1.0

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#### **Revision History**

Revision No.	<b>Revision Date</b>	Revision Reason
R1.0	2025-05-15	First edition.

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## **Contents**

1 Riser Card General Info	2
1.1 General Info 1.1.1 NCS 6722 N4	1
1.1.2 NCS 6722 N3	2
2 I/O Expansion	6
2.1 PCIe Slot Position.	6
2.1.1 Positions of the PCIe Slots for a General-Purpose Server Model	6
2.1.2 Positions of the PCIe Slots for a 4-GPU Server Model	12
2.1.3 Positions of the PCIe Slots for a NCS6722 N3 Model	15
2.2 PCIe Slot Descriptions	19
2.2.1 Descriptions of the PCIe Slots for a NCS6722 N4 Model	19
2.2.2 Descriptions of the PCIe Slots for a NCS6722 N4 4-GPU Server Model	22
3 Product Stracture	24
3.1 Physical Structure	24
3.1.1 Physical Structure of the NCS6722 N4 General Model	24
3.1.2 Physical Structure of the NCS6722 N4 4-GPU Model	
3.1.3 Physical Structure of the NCS6722 N3 Model	27
Glossary	30
9	

# Chapter 1

## Riser Card General Info

#### **Table of Contents**

General Info. 2

#### 1.1 General Info

#### 1.1.1 NCS 6722 N4

Table 1-1 shows the riser internal components of the NCS6722 N4 server

<b>Product Codes</b>	Product Descriptions
180000501070	NCS 6722 N4 Zone-1 PCIE extension shelf
180000475766	NCS 6722 N4 Zone-2 PCIe Riser Card-A
180000475765	NCS 6722 N4 Zone-2 PCIe Riser Card-B
180000492479	NCS 6722 N4 Zone-2 PCIe Riser Card-C
180000492481	NCS 6722 N4 Zone-2 PCIe Riser Card-D
180000475767	NCS 6722 N4 Zone-3 PCIe Riser Card-A
180000474738	NCS 6722 N4 Zone-3 PCIe Riser Card-B
180000492480	NCS 6722 N4 Zone-3 PCIe Riser Card-C
180000493010	NCS 6722 N4 Zone-3 PCIe Riser Card-D
180000501071	NCS 6722 N4 Zone-4 PICE Extension Shelf

**Table 1-1 Product Codes** 

Table 1-2 shows the riser dimensions and pictures of the NCS6722 N4 server

<b>Product Codes</b>	Dimensions (HxLxW)	Pictures
180000501070	43.5*220.8*89.8	A
_		
180000475766	78.7*249*129	
180000475765		
180000492479		
180000492481		
_		
180000475767	78.7*249*129	
180000474738		
180000492480		W
180000493010		
180000501071	43.5*220.8*89.8	
		4

**Table 1-2 Riser Dimensions and Pictures** 

Table 1-3 shows the riser I/O Modules of the NCS6722 N4 server

	No.	Name	Description	Product Codes
			I/O module 1 supports any of the following configurations:	
	1	I/O module 1	● Two half-height half-length PCle 5.0 x8 standard cards. One of the slots can be used as a PCle 5.0 x16 slot.	180000501070
			Two 2.5-inch SAS/SATA/NVMe hard disks.	
			VO module 2 supports any of the following configurations:	
			One full-height half-length single-width PCle 5.0 x16 standard card and two full-height half-length single-width PCle 5.0 x8 standard cards.	180000475766
		1/0 1-1- 0	● Two full-height half-length single-width PCle 5.0 x16 standard cards.	180000475765
	2	I/O module 2	● Two full-height 3/4-length single-width PCle 5.0 x16 standard cards.	180000492479
<b>4</b>			One full-height 3/4-length double-width PCle 5.0 ×16 standard card and one full-height half-length single-width PCle 5.0 ×16 standard card.	180000492481
7			Two 3.5/2.5-inch SAS/SATA/NV/Me hard disks.	
672			VO module 3 supports any of the following configurations:	
NCS			One full-height half-length single-width PCle 5.0 x16 standard card and two full-height half-length single-width PCle 5.0 x8 standard cards.	180000475767
Z	3	I/O module 3	Two full-height half-length single-width PCle 5.0 x16 standard cards.	180000474738
	3	VO module 3	Two full-height 3/4-length single-width PCle 5.0 x16 standard cards.	180000492480
			One full-height 3/4-length double-width PCle 5.0 x16 standard card and one full-height half-length single-width PCle 5.0 x16 standard card.	180000493010
			Two 3.5/2.5-inch SAS/SATA/NVMe hard disks.	
			I/O module 4 supports any of the following configurations:	
		I/O module 4	Two half-height half-length PCle 5.0 x8 standard cards. One of the slots can be used as a PCle 5.0 x16 slot.	180000501071
ı	4	I/O module 4	Two 2.5-inch SAS/SATA/NVMe hard disks.	
1			One M2 adapter that supports two M2 SAS/SATA hard disks.	

Table 1-3 Riser I/O Modules

#### 1.1.2 NCS 6722 N3

Table 1-4 shows the riser internal components of the NCS6722 N3 server

180000485466	NCS 6722 N3 Zone-1 PCIE extension shelf
180000519631	Zone-3 PCIe Riser card-A
180000452642	NCS 6722 N3 Zone-2 PCIe Riser Card-B
180000452641	NCS 6722 N3 Zone-3 PCIe Riser Card-A
180000452643	NCS 6722 N3 Zone-3 PCIe Riser Card-B
180000485467	NCS 6722 N3 Zone-4PICE Extension Shelf

**Table 1-4 Product Codes** 

Table 1-5 shows the riser dimensions and pictures of the NCS6722 N3 server

Product Codes	Dimensions (HxLxW)	Pictures
180000485466	43.5*220.8*89.8	
180000519631 180000452642	78.5*209*129	
180000452641		
180000452643	78.5*209*129	
180000485467	43.5*220.8*89.8	

**Table 1-5 Riser Dimensions and Pictures** 

Table 1-6 shows the riser I/O Modules of the NCS6722 N3 server

No	0.	Name	Description	
			Either of the following configurations is supported:	
			Two half-height half-length PCle 4.0 x8 standard cards. One of the two slots can be extended to the PCle 4.0 x16 card slot.	180000485466
	1	I/O module 1	Two 2.5-inch SAS/SATA hard disks. The NVMe SSD is supported.	
			Liquid cooling configuration, liquid inlet and outlet interface area.	
			Either of the following configurations is supported:	
	2 1/0	I/O module 2	<ul> <li>A full-height full-length PCle 4.0 x16 standard card, a full-height fulllength PCle 4.0 x8 standard card, and a full-height half-length PCle 4.0 x8 standard card.</li> </ul>	180000519631
			<ul> <li>A full-height full-length PCle 4.0 x16 standard card and a full-height half-length PCle 4.0 x16 standard card.</li> </ul>	180000452642
			Two 3.5/2.5-inch SAS/SATA hard disks.	
			Either of the following configurations is supported:	
	3 I/O module 3	I/O module 3	<ul> <li>A full-height full-length PCle 4.0 x16 standard card, a full-height fulllength PCle 4.0 x8 standard card, and a full-height half-length PCle 4.0 x8 standard card.</li> </ul>	180000452641
		<ul> <li>A full-height full-length PCle 4.0 x16 standard card and a full-height half-length PCle 4.0 x16 standard card.</li> </ul>	180000452643	
			Two 3.5/2.5-inch SAS/SATA hard disks.	
	4 I/O module 4		Either of the following configurations is supported:	
			Two half-height half-length PCle 4.0 x8 standard cards. One of the two slots can be extended to the PCle 4.0 x16 card slot.	180000485467
			Two 2.5-inch SAS/SATA hard disks. The NVMe SSD is supported.	

**Table 1-6 Riser I/O Modules** 

Serial Number: DS-001 Publishing Date: 2025-05-15 (R1.0))

# Chapter 2 I/O Expansion

#### **Table of Contents**

PCIe Slot Positions.	5
PCIe Slot	
Descriptions.	19

#### 2.1 PCIe Slot Positions

#### 2.1.1 Positions of the PCle Slots for a General-Purpose Server Model

Figure 2-1 shows the positions of the PCIe slots for a general-purpose NCS6722 N4 server model.

Figure 2-1 PCIe Slots for a General-Purpose Server Model



- 1. I/O module 1
- 2. I/O module 2
- 3. I/O module 3
- 4. I/O module 4

I/O modules can provide more PCIe slots through riser cards. For a description of the riser cards supported by the I/O modules of a general-purpose NCS 6722 N4 server model, refer to Table 2-1.

Table 2-1 Riser Cards Supported by a General-Purpose Server Model

I/O Module	Riser Card	PCIe Interface	Quantity
I/O module 1	SR2PB	x16	1
		X8	1
I/O module 2	SR3RB	x16	1
		x8	2
	SR2RB/SR2RB_GPU	x16	2
	SR2RB2	x16	2
I/O module 3	SR3LB	x16	1
		x8	2
	SR2LB/SR2LB_GPU	x16	2
	SR2LB2	x16	2
	RC0510L2A	x16	2
I/O module 4	SR2PB	x16	1
		x8	1

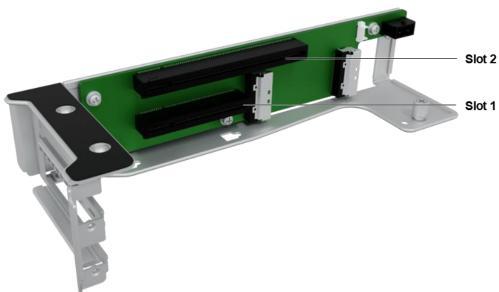
The riser cards supported by I/O modules of a general-purpose server model are as follows:

Serial Number: DS-001 Publishing Date: 2025-05-15 (R1.0))

#### • I/O module 1

Figure 2-2 shows an SR2PB riser card installed in I/O module 1.

Figure 2-2 SR2PB Riser Card Installed in I/O Module 1



#### • I/O module 2

→ Figure 2-3 shows an SR3RB riser card installed in I/O module 2.

Figure 2-3 SR3RB Riser Card Installed in I/O Module 2



→ Figure 2-4 shows an SR2RB riser card installed in I/O module 2.
Figure 2-4 SR2RB Riser Card Installed in I/O Module 2





The slots for installing an SR2RB riser card and an SR2RB\_GPU riser card are the same in I/O module 2. This section uses the installation of an SR2RB riser card as an example.

→ Figure 2-5 shows an SR2RB2 riser card installed in I/O module 2. Figure 2-5 SR2RB2 Riser Card Installed in I/O Module 2



I/O module 3 → Figure 2-6 shows an SR3LB riser card installed in I/O module 3.

Figure 2-6 SR3LB Riser Card Installed in I/O Module 3



→ Figure 2-7 shows an SR2LB riser card installed in I/O module 3.

Figure 2-7 SR2LB Riser Card Installed in I/O Module 3





The slots for installing an SR2LB riser card and an SR2LB\_GPU riser card are the same in I/O module 3. This section uses the installation of an SR2LB riser card as an example.

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→ Figure 2-8 shows an SR2LB2 riser card installed in I/O module 3.





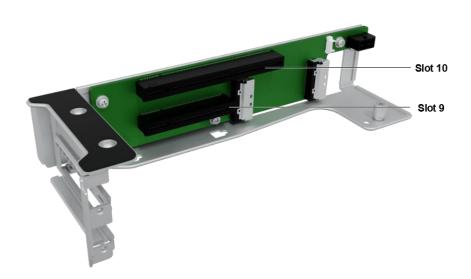
→ Figure 2-9 shows an RC0510L2A riser card installed in I/O module 3.

Figure 2-9 RC0510L2A Riser Card Installed in I/O Module 3



• I/O module 4

Figure 2-10 shows an SR2PB riser card installed in I/O module 4. Figure 2-10 SR2PB Riser Card Installed in I/O Module 4



#### 2.1.2 Positions of the PCIe Slots for a 4-GPU Server Modelx

Figure 2-11 shows the positions of the PCIe slots for a 4-GPU NCS6724 N4 server model.

Figure 2-11 PCIe Slots for a 4-GPU Server Model



- 1. I/O module 1
- 2. I/O module 2

I/O modules can provide more PCIe slots through riser cards. For a description of the riser cards supported by the I/O modules of a 4-GPU NCS6724 N4 server model, refer to Table 2-2.

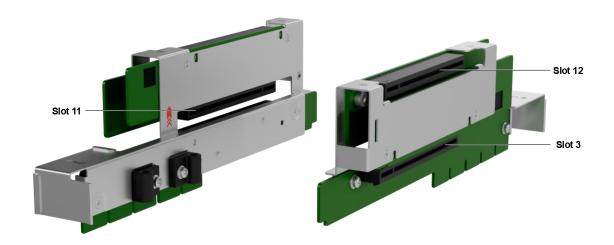
Table 2-2 Riser Cards Supported by a 4-GPU Server Model

I/O Module	Riser Card	PCIe Interface	Quantity
I/O module 1	RC5305N1A	x16	2
	RC5305R1A	x16	1
I/O module 2	RC5305N1A	x16	2
	RC5305L1A	x16	1

The riser cards supported by I/O modules of a 4-GPU server model are as follows:

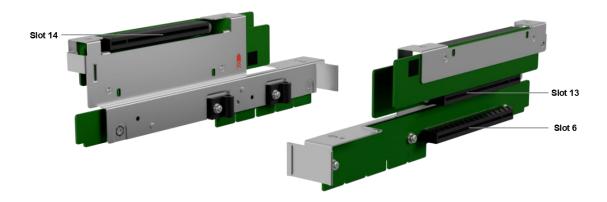
 I/O module 1
 Figure 2-12 shows an RC5305N1A riser card and an RC5305R1A riser card installed in I/O module 1.

Figure~2-12~RC5305N1A~Riser~Card~and~RC5305R1A~Riser~Card~Installed~in~I/O~Module~1



I/O module 2
 Figure 2-13 shows an RC5305N1A riser card and an RC5305L1A riser card installed in I/O module 2.

Figure~2-13~RC5305N1A~Riser~Card~and~RC5305L1A~Riser~Card~Installed~in~I/O~Module~2



#### 2.1.3 Positions of the PCIe Slots for a NCS6722 N3 Model

The PCIe cards of the NCS6722 N3 are installed to the slots provided by the I/O module on the rear panel of the chassis. Figure 2-14 shows the I/O modules and PCIe slot numbers on the rear panel.

Figure 2-14 I/O Modules



- 1. I/O module 1
- 2. I/O module 2
- 3. I/O module 3
- 4. I/O module 4



 $Numbers\ 1-10\ in \quad \textbf{Figure}\ 2\text{-}14 indicate\ the\ PCIe\ slot\ numbers.$ 

For a description of the connections between I/O modules and CPUs, refer to Table 2-3.

Table 2-3 Connections Between I/O Modules and CPUs

I/O Module	СРИ	Description
I/O module 1  Slot 1: CPU2  Slot 2: CPU1		As indicated by Figure 2-5, I/O module 1 is connected to the two CPUs through cables.  • Socket slimline1 (corresponding to PCIe slot
		of I/O module 1 is connected to socket     slimline5 of
		<ul><li>CPU2.</li><li>Socket slimline2 (corresponding to PCIe slot</li></ul>
		②) of I/O module 1 is connected to socket slimline1 of
		CPU1.

		<ul> <li>Socket slimline3 (corresponding to PCle slot</li> <li>of I/O module 1 is connected to socket slimline2 of</li> <li>CPU1.</li> </ul>
I/O module 2	CPU1	Connected through a riser card.
I/O module 3	CPU2	Connected through a riser card.
I/O module 4	CPU2	As indicated by Figure 2-5, I/O module 4 is connected to CPU2 through cables.  Socket slimline1 (corresponding to PCIe slot  10 of I/O module 4 is connected to socket slimline6 of  CPU2.  Socket slimline2 (corresponding to PCIe slot  10 of I/O module 4 is connected to socket slimline3 of  CPU2.
I/O Module	СРИ	Description
		Socket slimline3 (corresponding to PCle slot (10))     of I/O module 4 is connected to socket slimline4 of CPU2.

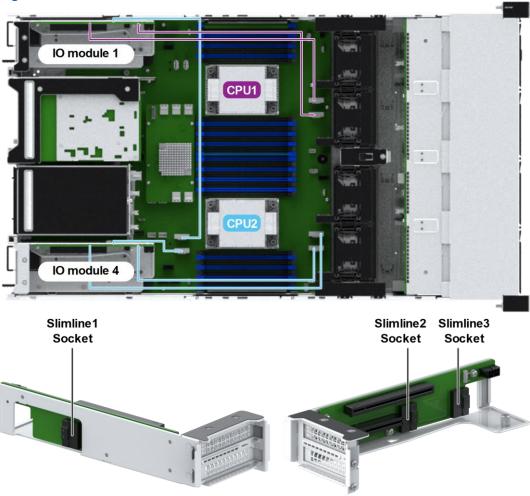


Figure 2-15 Connections Between I/O Module 1/4 and CPUs

Two half-height half-length PCIe 4.0 x8 standard cards are supported by I/O module 1/4. One of the two slots supports the PCIe 4.0 x16 card. Figure 2-16 shows the PCIe card configuration supported by I/O module 1/4.

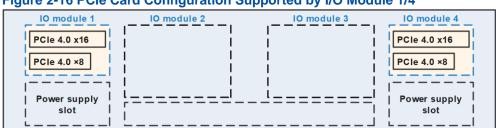
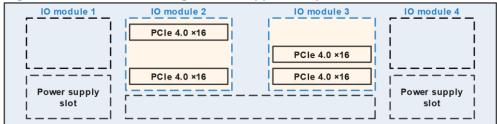


Figure 2-16 PCIe Card Configuration Supported by I/O Module 1/4

I/O module 2/3 supports either of the following configurations:

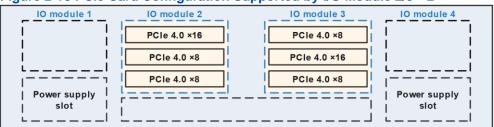
 Two full-height full-length PCle 4.0 x16 standard cards. Figure 2-17 shows the PCle card configuration.

Figure 2-17 PCIe Card Configuration Supported by I/O Module 2/3—1



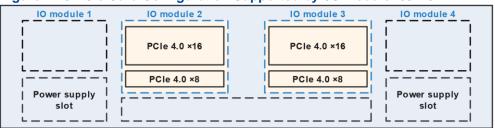
 A full-height full-length PCIe 4.0 x16 standard card, a full-height full-length PCIe 4.0 x8 standard card, and a full-height half-length PCIe 4.0 x8 standard card. Figure 2-18 shows the PCIe card configuration.

Figure 2-18 PCle Card Configuration Supported by I/O Module 2/3—2



A double-height full-length PCle 4.0 x16 GPU card and a full-height half-length PCle 4.0 x8 standard card. Figure 2-19 shows the PCle card configuration.

Figure 2-19 PCIe Card Configuration Supported by I/O Module 2/3—3



### 2.2 PCIe Slot Descriptions

# 2.2.1 Descriptions of the PCIe Slots for a NCS6722 N4 General-Purpose Server Model

For a description of the PCIe slots supported by a general-purpose NCS6722 N4 server model, refer to Table 2-4.

Table 2-4 PCIe Slots for a General-Purpose Server Model

PCIe Slot	Corresponding CPU	PCIe Standard	Supported Bandwidth	Slot Size
Slot1	CPU1/CPU0	PCIe 5.0	x8	Half height and half length
Slot2	CPU1/CPU0	PCIe 5.0	x8/x16	Half height and half length
Slot3	CPU1	PCIe 5.0	<ul> <li>Two-slot SR2RB riser card: x16</li> <li>Two-slot SR2RB_GPU riser card: x16</li> <li>Two-slot SR2RB2 riser card: unavailable</li> <li>Three-slot SR3RB riser card: x8</li> </ul>	<ul> <li>Two-slot SR2RB riser card: full height and half length</li> <li>Two-slot SR2RB_GPU riser card: full height and full length</li> <li>Two-slot SR2RB2 riser card: unavailable</li> <li>Three-slot SR3RB riser card: full height and half length</li> </ul>
Slot4	CPU1	PCIe 5.0	<ul> <li>Two-slot SR2RB riser card: unavailable</li> <li>Two-slot SR2RB_GPU riser card: unavailable</li> <li>Two-slot SR2RB2 riser card: x16</li> <li>Three-slot SR3RB riser card: x8</li> </ul>	<ul> <li>Two-slot SR2RB riser card: unavailable</li> <li>Two-slot SR2RB_GPU riser card: unavailable</li> <li>Two-slot SR2RB2 riser card: full height and half length</li> <li>Three-slot SR3RB riser card: full height and half length</li> </ul>

Slot5	CPU1	PCIe 5.0	• Two-slot SR2RB riser card: x16	Two-slot SR2RB riser card: full height and half
			Two-slot SR2RB GPU	length
			riser card: x16	Two-slot SR2RB_GPU
			• Two-slot SR2RB2 riser card: x16	riser card: full height and full length

PCIe Slot	Correspon	PCle Stan	Supported Bandwidth	Slot Size
	ungero	uaru	Three-slot SR3RB riser card: x16	Two-slot SR2RB2 riser card: full height and half length Three-slot SR3RB riser card: full height and half length
Slot6	CPU0	PCle 5.0	Two-slot SR2LB riser card: x16 Two-slot SR2LB_GPU riser card: x16 Two-slot RC0510L2A riser card: x16 Two-slot SR2LB2 riser card: unavailable Three-slot SR3LB riser card: x8	Two-slot SR2LB riser card: full height and half length Two-slot SR2LB_GPU riser card: full height and full length Two-slot RC0510L2A riser card: full height and half length Two-slot SR2LB2 riser card: unavailable Three-slot SR3LB riser card: full height and half length
Slot7	CPU0	PCIe 5.0	Two-slot SR2LB riser card: x16 Two-slot SR2LB_GPU riser card: x16 Two-slot RC0510L2A riser card: x16 Two-slot SR2LB2 riser card: x16 Three-slot SR3LB riser card: x16	Two-slot SR2LB riser card: full height and half length Two-slot SR2LB_GPU riser card: full height and full length Two-slot RC0510L2A riser card: full height and half length Two-slot SR2LB2 riser card: full height and half length Three-slot SR3LB riser card: full height and half length Three-slot SR3LB riser card: full height and half length
Slot8	CPU0	PCle 5.0	Two-slot SR2LB riser card: unavailable  Two-slot SR2LB_GPU riser card: unavailable	Two-slot SR2LB riser card: unavailable  Two-slot SR2LB_GPU riser card: unavailable

PCIe Slot	Correspon ding CPU	PCIe Stan dard	Two-slot RC0510L2A riser card: unavailable     Two-slot SR2LB2 riser card: x16     Three-slot SR3LB riser card: x8	Two-slot RC0510L2A riser card: unavailable     Two-slot SR2LB2 riser card: full height and half length     Three-slot SR3LB riser card: full height and half length
Slot9	CPU1/CP U0	PCIe 5.0	x8	Half height and half length
Slot10	CPU1/CP U0	PCIe 5.0	x8/x16	Half height and half length



Slots 1, 2, 9, and 10 are connected to the mainboard through cables. The corresponding CPU and supported bandwidth depend on cable connection.

Slots 1 and 2 are preferentially connected to CPU 1, and slots 9 and 10 are preferentially connected to CPU 0.



Full height, half height, full length, and half length are described as follows:

- Full height: not higher than 111.15 mm.
- Half height: not higher than 68.9 mm.
- Full length: between 254.00 mm and 312.00 mm.
- Half length: not longer than 167.65 mm.

# 2.2.2 Descriptions of the PCIe Slots for a NCS6722 N4 4-GPU Server Model

For a description of the PCIe slots supported by a 4-GPU NCS6722 N4 server model, refer to Table 2-5.

Table 2-5 PCIe Slots for a 4-GPU Server Model

PCIe Slot	Correspon ding CPU	PCIe Stan	Supported Bandwidth	Slot Size
Slot3	CPU1	PCIe 5.0	x16	Full height and half length
Slot11	CPU1	PCIe 5.0	x16	Full height and full length
Slot12	CPU1	PCIe 5.0	x16	Full height and full length
Slot13	CPU0	PCIe 5.0	x16	Full height and full length
PCIe Slot	Correspon ding CPU	PCIe Stan	Supported Bandwidth	Slot Size
Slot14	CPU0	PCIe 5.0	x16	Full height and full length
Slot6	CPU0	PCIe 5.0	x16	Full height and half length



Slot 12 corresponds to MCIO cables that are numbered X14 and X48, and the cables need to be connected to the corresponding sockets between the heat sink of CPU 1 and the fan. Slot 14 corresponds to MCIO cables that are numbered X49 and X50, and the cables need to be connected to the corresponding sockets between the heat sink of CPU 0 and the fan.



Full height, half height, full length, and half length are described as follows:

- Full height: not higher than 111.15 mm.
- Half height: not higher than 68.9 mm.
- Full length: between 254.00 mm and 312.00 mm. Half length: not longer than 167.65 mm.

# **Chapter 3**

## **Product Structure**

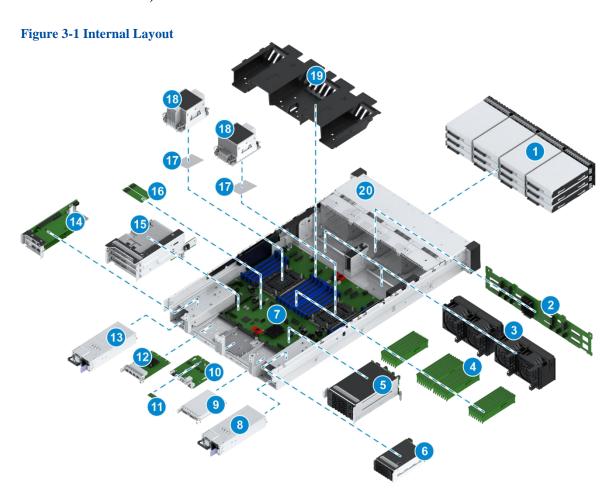
#### **Table of Contents**

Physical Structure......24

#### 3.1 Physical Structure

#### 3.1.1 Physical Structure of the NCS6722 N4 General Model

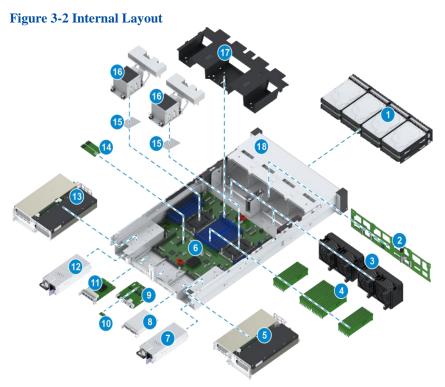
Figure 3-1 shows the internal components of the NCS6722 N4 server (with twelve horizontal disk slots).



No.	Component	No.	Component
1	Front hard disk	2	Front hard disk backplane
3	Fan module	4	Memory module
5	I/O module 3	6	I/O module 4
7	Mainboard	8	Power module 2
9	OCP card 2	10	I/O card
11	TPM card	12	OCP card 1
13	Power module 1	14	I/O module 1
15	I/O module 2	16	M.2 SSD
17	СРИ	18	Heat sink
19	Air duct	20	Chassis

## 3.1.2 Physical Structure of the NCS6722 N4 4-GPU Model

Figure 3-2 shows the internal components of the NCS6722 N4 4-GPU server.



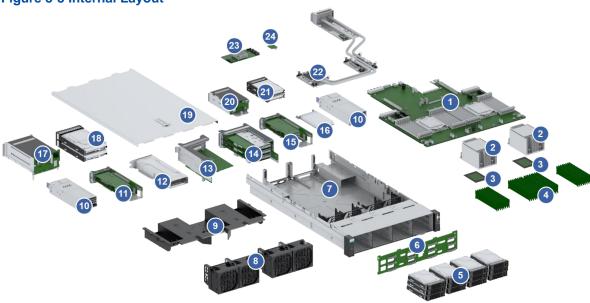
**Table 3-2 Internal Components** 

No.	Component	No.	Component
1	Front hard disk	2	Front hard disk backplane
3	Fan module	4	Memory module
5	I/O module 1	6	Mainboard
7	Power module 2	8	OCP card 2
9	I/O card	10	TPM card
11	OCP card 1	12	Power module 1
13	I/O module 1	14	M.2 SSD
15	СРИ	16	Heat sink
17	Air duct	18	Chassis

#### 3.1.3 Physical Structure of the NCS6722 N3 Model

Figure 3-3 shows the internal layout of the NCS6722 N3 with a 12-disk front panel.





For a description of the internal components of the R5300 G4X server, refer to Table 1-4.

**Table 3-3 Internal Components** 

No.	Name	Description
1	Mainboard	Server mainboard where CPUs, memory, and other components are installed.
2	CPU heat sink	Dissipates heat for a CPU. Each CPU has one heat sink.  For the liquid-cooling model, a liquid-cooling heat sink is configured, and no additional CPU heat sink is required.
3	СРИ	A maximum of two CPUs can be configured.
4	Memory	A maximum of 32 DDR4 RDIMM/LRDIMM memory modules can be configured. The maximum rate of the memory modules can reach 3,200 MT/s.
5	Front hard disk	A maximum of twelve 3.5-inch hard disks or twenty-five 2.5-inch hard disks can be installed.
6	Front hard disk backplane	Provides eight, twelve, sixteen, twenty-four or twenty-five 2.5/3.5-inch hard disk slots.
7	Chassis	Accommodates all internal components of the server.

8	Fan module	Dissipates heat for the components inside the chassis. Four 8038/8056 high-performance fans are installed, supporting dynamic speed adjustment and N+1 redundancy.
9	Air duct	Required for proper airflow within the chassis.
10	Power supply module	Three types of power supply modules (550 W, 800 W, and 1,200 W) are supported. The Platinum power supply module is provided.  • Supports 110 V/220 V AC power supply.  • Supports 240 V/336 V HVDC power supply.  • Supports -48 V DC power supply.  • Supports the maximum efficiency of 94%.  • Supports 1+1 redundancy.
11	I/O module 4	<ul> <li>I/O module 4 supports either of the following configurations:</li> <li>Two half-height half-length PCle 4.0 x8 standard cards. One of the two slots can be extended to the PCle 4.0 x16 card slot.</li> <li>Two 2.5-inch SAS/SATA hard disks. The NVMe SSD is supported.</li> </ul>
12	PCIe card	Supports the full-height and full-length/half-height and half-length/fullheight and half-length/double-height and full-length PCIe 4.0 x8/x16 standard/GPU card. The PCIe card can be installed on the riser card of I/ O module 1/2/3/4.
13	I/O module 3	I/O module 3/2 supports either of the following configurations:

No.	Name	Description
14	I/O module 2	<ul> <li>A full-height full-length PCIe 4.0 x16 standard card, a full-height fulllength PCIe 4.0 x8 standard card, and a full-height half-length PCIe 4.0 x8 standard card.</li> <li>A full-height full-length PCIe 4.0 x16 standard card and a full-height half-length PCIe 4.0 x16 standard card.</li> <li>Two 3.5/2.5-inch SAS/SATA hard disks.</li> </ul>
15	I/O module 1	<ul> <li>I/O module 1 supports either of the following configurations:</li> <li>Two half-height half-length PCIe 4.0 x8 standard cards. One of the two slots can be extended to the PCIe 4.0 x16 card slot.</li> <li>Two 2.5-inch SAS/SATA hard disks. The NVMe SSD is supported.</li> </ul>
16	OCP card	Various OCP NIC 3.0 cards with the interface rate of 1, 10 or 25 Gbps can be installed in the OCP card slot.

17	Rear 3.5-inch hard disk module	Used for I/O module 2/3, supporting two 2.5/3.5 hard disks.
18	Rear 3.5-inch hard disk	A maximum of four hot-swappable 3.5-inch SAS/SATA HDDs can be configured.
19	Chassis cover	Up cover of the chassis. Uncovered detection is allowed.
20	Rear 2.5-inch hard disk module	Used for I/O modules 1/4, supporting two 2.5/3.5 hard disks.
21	Rear 2.5-inch hard disk	A maximum of eight hot-swappable 2.5-inch SAS/SATA HDD/SDDs can be configured.
22	Liquid cooling heat sink	This component is configured for liquid-cooling model only and is used for heat dissipation of CPUs. It occupies the area of I/O module 1 on the rear panel as the liquid inlet and outlet interface area.
23	Mezz RAID card	Supports common RAID modes such as RAID0, RAID1, RAID5, RAID6, RAID10, RAID50 and RAID60. The interface rate can reach 12 Gbps.
24	TPM card	Protects the server from unauthorized access.

## **Glossary**

#### $\mathbf{AC}$

- Alternating Current

#### **ADDDC**

- Adaptive Double Device Data Correction

#### **BIOS**

- Basic Input/Output System

#### **BMC**

- Baseboard Management Controller

#### **CAS**

- Column Address Strobe

#### **COM**

- Component Object Model

#### **CPU**

- Central Processing Unit

#### **CRC**

- Cyclic Redundancy Check

#### DC

- Direct Current

#### **DDR**

- Double Data Rate

#### **DIMM**

- Dual Inline Memory Module

#### **DRAM**

- Dynamic Random Access Memory

#### **ECC**

- Error Check and Correction

#### **ECS**

- Error Check and Scrub

#### **EPLD**

- Erasable Programmable Logic Device

#### **GPU**

- Graphics Processing Unit

#### **HBM**

- High Bandwidth Memory

#### **HVDC**

- High-Voltage Direct Current

#### I/O

- Input/Output

#### **JTAG**

- Joint Test Action Group

#### **NIC**

- Network Interface Card

#### **NVMe**

- Non-Volatile Memory Express

#### **OCP**

- Open Computer Project

#### OS

- Operating System

#### PC

- Personal Computer

#### **PCH**

- Platform Controller Hub

#### **PCIe**

- Peripheral Component Interconnect Express

#### **PCLS**

- Partial Cache Line Sparing

#### **PDU**

- Power Distribution Unit

#### **PPR**

- Post-Package Repair

#### **PSU**

- Power Supply Unit

#### **RAID**

- Redundant Array of Independent Disks

#### **RDIMM**

- Registered Dual Inline Memory Module

#### **RS-232**

- Recommended Standard 232

#### **SAS**

- Serial Attached SCSI

#### **SATA**

- Serial ATA

#### **SDDC**

- Single Device Data Correction

#### **SPD**

- Serial Presence Detect

#### **TPM**

- Trusted Platform Module

#### **UID**

- Unit Identification Light

#### **UPI**

- Ultra Path Interconnect

#### **USB**

- Universal Serial Bus

#### **VGA**

- Video Graphic Adapter