

PRIMEHPC FX700

BMC / CPU-MEM-RAS driver operation confirmation information

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- Regarding hardware repair and maintenance, it is limited to the operating range in the officially supported OS
 environment.
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CentOS		 • • • •	 	2
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PRIMEHPC FX700 CentOS BMC / CPU-MEM-RAS driver operation confirmation information

Software name	Operation check result
CentOS 8.0 (aarch64)	o [details]
CentOS 8.1 (aarch64)	o [details]
CentOS 8.2 (aarch64)	o [details]
CentOS 8.3 (aarch64)	o [details]
CentOS 8.4 (aarch64)	o [details]
CentOS 8.5 (aarch64)	o [details]

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o: Installable x: Not installable -: unconfirmed



PRIMEHPC FX700 CentOS 8.0 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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 environment.
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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores

Clock: 1.8 GHz or 2.0GHz

Theoretical peak performance

: 2.7648 TFLOPS or 3.072 TFLOPS (double precision)

- Memory : 32 GiB (HBM2, 4 stacks)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)

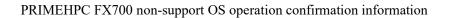
■ Distribution

- Distribution : CentOS 8.0 (aarch64)

 $SHA256 (CentOS-8-aarch64-1905-dvd1.iso) \\ c950 \\ cf7599 \\ a2317 \\ e081506 \\ a3e0684f665 \\ ef9c8fe66963bf7492595d7c6ccc230 \\ c230 \\ c230 \\ c320 \\ c430 \\ c4$

- Kernel version : 4.18.0-80.4.2.el8_0.aarch64

(Update required from 4.18.0-80.el8.aarch64.)





■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.7-13.el8.aarch64
- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.6-10.el8.aarch64



■ Installation and operation check results

PRIMEHPC FX700 CentOS 8.0 (aarch64) 4.18.0-80.4.2.el8 0.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum –y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm
yum –y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 CentOS 8.1 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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 environment.
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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)

■ Distribution

• Distribution : CentOS 8.1 (aarch64)

• Kernel version : (1) 4.18.0-147.3.1.el8_1.aarch64 or

(2) 4.18.0-147.8.1.el8_1.aarch64

(Update required from 4.18.0-147.el8.aarch64)



■ Driver Versions

(1) Kernel version: 4.18.0-147.3.1.el8_1.aarch64

- BMC driver : FJSVxosbmc-0.0.8-0.el8.aarch64
- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.7-1.el8.aarch64

(2) Kernel version: 4.18.0-147.8.1.el8_1.aarch64

- BMC driver : FJSVxosbmc-0.0.10-0_4.18.0_147.8.1.el8_1.aarch64
- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.11-0_4.18.0_147.8.1.el8_1.aarch64



■ Installation and operation check results

PRIMEHPC FX700 CentOS 8.1 (aarch64)

(1) 4.18.0-147.3.1.el8_1.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-147.8.1.el8_1.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm
yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 CentOS 8.2 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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 environment.
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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)

■ Distribution

• Distribution : CentOS 8.2 (aarch64)

 $SHA256 \ (CentOS-8.2.2004-aarch64-dvd1.iso) \ 9d2f066edfc3820fc9e4c6d52f01489a3ed57515cf608773e2b8a04f1903c838$

• Kernel version : (1) 4.18.0-193.el8.aarch64 or

(2) 4.18.0-193.14.2.el8_2.aarch64 or(3) 4.18.0-193.19.1.el8_2.aarch64 or(4) 4.18.0-193.28.1.el8_2.aarch64



■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.10-0_4.18.0_193.el8.aarch64

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.11-0_4.18.0_193.el8.aarch64



■ Installation and operation check results

PRIMEHPC FX700 CentOS 8.2 (aarch64)

(1) 4.18.0-193.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

$(2) \ \ 4.18.0 \hbox{-} 193.14.2.el8_2.aarch64$

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-193.19.1.el8_2.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-193.28.1.el8_2.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	ОК
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 CentOS 8.3 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores
Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)

■ Distribution

• Distribution : CentOS 8.3 (aarch64)

• Kernel version : (1) 4.18.0-240.el8.aarch64 or

(2) 4.18.0-240.1.1.el8_3.aarch64 or (3) 4.18.0-240.10.1.el8_3.aarch64 or (4) 4.18.0-240.15.1.el8_3.aarch64 or (5) 4.18.0-240.22.1.el8_3.aarch64



■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.12-0_4.18.0_240.el8.aarch64

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.14-0_4.18.0_240.el8.aarch64



■ Installation and operation check results

PRIMEHPC FX700 CentOS 8.3 (aarch64)

(1) 4.18.0-240.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-240.1.1.el8_3.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-240.10.1.el8_3.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-240.15.1.el8_3.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(5) 4.18.0-240.22.1.el8_3.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 CentOS 8.4 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)



■ Distribution

• Distribution : CentOS 8.4 (aarch64)

SHA256 (CentOS-8.4.2105-aarch64-dvd1.iso) 6654112602beec7f6b5c134f28cf6b77aedc05b2a7ece2656dacf477f77c81df

• Kernel version : (1) 4.18.0-305.3.1.el8.aarch64 or

(2) 4.18.0-305.7.1.el8_4.aarch64 or (3) 4.18.0-305.10.2.el8_4.aarch64 or (4) 4. 18.0-305.12.1.el8_4.aarch64 or (5) 4. 18.0-305.17.1.el8_4.aarch64 or (6) 4. 18.0-305.19.1.el8_4.aarch64 or (7) 4. 18.0-305.25.1.el8_4.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.15-0_4.18.0_305.el8.aarch64

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.16-0_4.18.0_305.el8.aarch64



Installation and operation check results

PRIMEHPC FX700 CentOS 8.4 (aarch64)

(1) 4.18.0-305.3.1.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-305.7.1.el8_4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-305.10.2.el8_4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-305.12.1.el8_4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(5) 4.18.0-305.17.1.el8_4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



(6) 4.18.0-305.19.1.el8 4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(7) 4.18.0-305.25.1.el8 4.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm
yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 CentOS 8.5 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

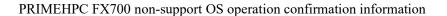
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : CentOS 8.5 (aarch64)

SHA256 (CentOS-8.5.2111-aarch64-dvd1.iso) 146e58624ef3b8842fc9576d9c5b9c046497601b1a0636f934484b0b1929ce21

• Kernel version : (1) 4.18.0-348.el8.aarch64 or

(2) 4.18.0-348.2.1.el8_5.aarch64 or(3) 4.18.0-348.7.1.el8_5.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.16-0_4.18.0_348.el8.aarch64
- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.17-0_4.18.0_348.el8.aarch64



Installation and operation check results

PRIMEHPC FX700 CentOS 8.5 (aarch64)

(1) 4.18.0-348.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-348.2.1.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-348.7.1.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 Rocky Linux BMC / CPU-MEM-RAS driver operation confirmation information

Software name	Operation check result
Rocky Linux 8.5 (aarch64)	o [details]
Rocky Linux 8.6 (aarch64)	o [details]
Rocky Linux 8.7 (aarch64)	o [details]
Rocky Linux 8.8 (aarch64)	o [details]
Rocky Linux 8.9 (aarch64)	o [details]

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o: Installable x: Not installable -: unconfirmed



PRIMEHPC FX700 Rocky Linux 8.5 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

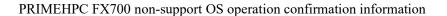
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : Rocky Linux 8.5 (aarch64)

SHA256 (Rocky-8.5-aarch64-dvd1.iso) 58d6a9e604c5e810ad21860a05860c3059d7659e7158708f4e6dfb398e695873

• Kernel version : (1) 4.18.0-348.7.1.el8 5.aarch64 or

(2) 4.18.0-348.12.2.el8_5.aarch64 or(3) 4.18.0-348.20.1.el8_5.aarch64 or(4) 4.18.0-348.23.1.el8_5.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.16-0_4.18.0_348.el8.aarch64

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.17-0_4.18.0_348.el8.aarch64



Installation and operation check results

PRIMEHPC FX700 Rocky Linux 8.5 (aarch64)

(1) 4.18.0-348.7.1.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-348.12.2.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-348.20.1.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-348.23.1.el8_5.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 Rocky Linux 8.6 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

- The operation confirmation information published in this document is only the operation result in the test environment prepared by our company, it does not guarantee the operation of the unsupported OS in the customer's usage environment, and it is not something to recommended to use the unsupported OS.
- We are not responsible for any damage caused by installing or using an unsupported OS based on the operation confirmation information in this document.
- Inquiries regarding unsupported OS related to PRIMEHPC FX700 and other support cannot be accepted at our support desk. Therefore, it is the customer's responsibility to install and use an unsupported OS.
- Regarding hardware repair and maintenance, it is limited to the operating range in the officially supported OS
 environment.
- The contents of this document are subject to change without notice.

■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

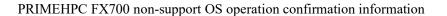
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : Rocky Linux 8.6 (aarch64)

 $SHA256 \ (Rocky-8.6-aarch64-dvd1.iso) \ 5b0eb3830d52d1d136c7473ab6bfbca847c4d9fec5bb2151aeaabed1bd800d2e \ (Rocky-8.6-aarch64-dvd1.iso) \ 6b0eb3830d52d1d136c7473ab6bfbca847c4d9fec5bb2151aeaabed1bd800d2e \ (Rocky-8.6-aarch64-dvd1.iso) \ 6b0eb3830d52d1d136c7475ab6b66666666666666666$

• Kernel version : (1) 4.18.0-372.9.1.el8.aarch64 or

(2) 4.18.0-372.16.1.el8_6.aarch64 or (3) 4.18.0-372.19.1.el8_6.aarch64 or (4) 4.18.0-372.26.1.el8_6.aarch64 or (5) 4.18.0-372.32.1.el8_6.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.16-0_4.18.0_372.9.1.el8.aarch64.rpm

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.17-0_4.18.0_372.9.1.el8.aarch64.rpm



Installation and operation check results

PRIMEHPC FX700 Rocky Linux 8.6 (aarch64)

(1) 4.18.0-372.9.1.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-372.16.1.el8_6.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-372.19.1.el8_6.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-372.26.1.el8_6.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(5) 4.18.0-372.32.1.el8_6.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 Rocky Linux 8.7 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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- Regarding hardware repair and maintenance, it is limited to the operating range in the officially supported OS
 environment.
- The contents of this document are subject to change without notice.

■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

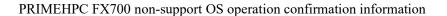
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : Rocky Linux 8.7 (aarch64)

 $SHA256 \ (Rocky-8.7-aarch64-dvd1.iso) \ \ 24fff16daf36066d4cad78544044773798dbe23650bc6da479ff6e042b57e8d3$

• Kernel version : (1) 4.18.0-425.3.1.el8.aarch64 or

(2) 4.18.0-425.10.1.el8_7.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.16-0_4.18.0_425.3.1.el8.aarch64.rpm

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.18-0_4.18.0_425.3.1.el8.aarch64.rpm



Installation and operation check results

PRIMEHPC FX700 Rocky Linux 8.7 (aarch64)

(1) 4.18.0-425.3.1.el8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-425.10.1.el8_7.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 Rocky Linux 8.8 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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- Regarding hardware repair and maintenance, it is limited to the operating range in the officially supported OS
 environment.
- The contents of this document are subject to change without notice.

■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

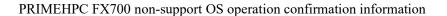
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : Rocky Linux 8.8 (aarch64)

SHA256 (Rocky-8.8-aarch64-dvd1.iso) 66e42db03c677493b0f27c7f8c30223f46f3bb239261a9dc754c14f214cf8d0f

• Kernel version : (1) 4.18.0-477.10.1.el8 8.aarch64 or

(2) 4.18.0-477.13.1.el8_8.aarch64 or (3) 4.18.0-477.15.1.el8_8.aarch64 or (4) 4.18.0-477.21.1.el8_8.aarch64 or (5) 4.18.0-477.27.1.el8_8.aarch64

■ Driver Versions

- BMC driver : Only for kernel version 4.18.0-477.21.1.el8_8.aarch64 or later

 $FJSVxosbmc-0.0.16-0_4.18.0_477.10.1.el8.aarch64.rpm$

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.18-0_4.18.0_477.10.1.el8.aarch64.rpm



Installation and operation check results

PRIMEHPC FX700 Rocky Linux 8.8 (aarch64)

(1) 4.18.0-477.10.1.el8_8.aarch64

No	Items to check	Result
1	CPU-MEM-RAS driver can be installed.	OK
2	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-477.13.1.el8_8.aarch64

No	Items to check	Result
1	CPU-MEM-RAS driver can be installed.	OK
2	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-477.15.1.el8_8.aarch64

No	Items to check	Result
1	CPU-MEM-RAS driver can be installed.	OK
2	CPU-MEM-RAS driver works correctly.	OK

(4) 4.18.0-477.21.1.el8_8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(5) 4.18.0-477.27.1.el8_8.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	ОК



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

1. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

2. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now



PRIMEHPC FX700 Rocky Linux 8.9 (aarch64) BMC / CPU-MEM-RAS driver operation confirmation information

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 environment.
- The contents of this document are subject to change without notice.

■ Hardware environment

PRIMEHPC FX700(node)

- CPU : A64FXTM

Instruction set architecture: Armv8.2-A SVE

Number of cores: 48 cores Clock: 1.8 GHz or 2.0GHz

Theoretical calculation performance

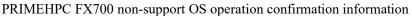
: 2.7648 TFLOPS or 3.072 TFLOPS (Double precision)

- Memory : 32 GiB (HBM2, 4 stack)

- NIC : 1000BASE-T (PCI slot, PCIe Gen1 1lane)

- Interconnect : InfiniBand EDR (PCI slot, PCIe Gen3 16lane)

- HDD : Sandisk Corp WD Black 2018/PC SN720 NVMe SSD (PCI slot, PCIe Gen3 4lane)





■ Distribution

• Distribution : Rocky Linux 8.9 (aarch64)

SHA256 (Rocky-8.9-aarch64-dvd1.iso) f15e13f065dfba5f67ba3b795263ac9aaf37b8c2b369510be01c14c52462de56

• Kernel version : (1) 4.18.0-513.5.1.el8 9.aarch64 or

(2) 4.18.0-513.9.1.el8_9.aarch64 or(3) 4.18.0-513.11.1.el8_9.aarch64

■ Driver Versions

- BMC driver : FJSVxosbmc-0.0.17-0_4.18.0_513.5.1.el8.aarch64.rpm

- CPU-MEM-RAS driver : FJSVxoscpuras-0.0.18-0_4.18.0_513.5.1.el8.aarch64.rpm



Installation and operation check results

PRIMEHPC FX700 Rocky Linux 8.9 (aarch64)

(1) 4.18.0-513.5.1.el8_9.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(2) 4.18.0-513.9.1.el8_9.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK

(3) 4.18.0-513.11.1.el8_9.aarch64

No	Items to check	Result
1	BMC driver can be installed.	OK
2	CPU-MEM-RAS driver can be installed.	OK
3	BMC driver works correctly.	OK
4	CPU-MEM-RAS driver works correctly.	OK



■ Installation procedure

After the OS installation, install the BMC / CPU-MEM-RAS driver by the following procedure.

3. Apply the RPM file.

Apply the RPM file with the yum command on the PRIMEHPC FX700 node.

yum -y install /SOMEWHERE/FJSVxosbmc-x.x.x-xx.xxx.aarch64.rpm

yum -y install /SOMEWHERE/FJSVxoscpuras-x.x.x-xx.xxx.aarch64.rpm

4. Apply the settings.

Execute the following command on the PRIMEHPC FX700 node and reboot.

shutdown -r now