

Hitachi Compute Blade 320 Firmware List & Release Notes

Preface

This is a concise reference of all the recommended firmware, drivers, and utilities for the Hitachi Compute Blade 320 (CB 320). Relevant release notes for firmware versions are also included.

Note:

- Since there are interdependencies, do not simply obtain the latest version and apply it.
- Contact Hitachi Data Systems' (HDS) Global Support Center (GSC) at the phone numbers found at <http://www.hds.com/support/> for guidance.

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Hitachi Compute Blade 320 Firmware List & Release Notes

Contents

Preface	1
Firmware Listing.....	4
Management Module Release Notes	5
Version A1085	5
x5 BIOS/BMC Firmware Update Tool Release Notes	5
Version 02-35 (BIOS:G26 / BMC:01-66)	5
x4 BIOS/BMC Firmware Update Tool Release Notes	5
Version 01-32 (BIOS:F17 / BMC:01-2F)	5
Version 01-31 (BIOS:F16/BMC:01-2F).....	5
Fibre Channel Switch Module Firmware & Accessory DVD Release Notes	6
Version 04-03	6
LAN Switch Module Firmware	7
LAN Switch Module Firmware CD	7
Version 11.6.D/01-00.....	7
Version 10.7.H.....	7
PCIe/Mezzanine Firmware Release Notes	8
4-Gbps FC PCI Adapter Firmware Release Notes	8
Version 26-08-25.....	8
Version 26-08-1F	8
4-Gbps FC Mezzanine Adapter Firmware	8
Version 23-07-9B.....	8
Version 23-07-90.....	8
8-Gbps FC Adapter Firmware Release Notes	8
Version 30-05-08.....	8
Version 30-04-7D	8
Version 30-04-71.....	9
Version 30-04-6F	9
HVM Firmware Release Notes	10
Version 17.94	10
Version 17.93	10
Version 17-92	10
Version 17-85	10
RAID Firmware Release Notes	10
SAS2008 RAID Firmware Update Tool CD Field	10
Version 02-00	10
Version 2.120.104.1284	11

Hitachi Compute Blade 320 Firmware List & Release Notes

- SAS2108 RAID Firmware Update Tool CD Field 12
 - Version 2.120.233-1474 12
- Maintenance Test Program Release Notes..... 12
 - Maintenance Test Program for Field Engineers (BSTP) Release Notes 12
 - Version 3.1.16 12

Hitachi Compute Blade 320 Firmware List & Release Notes

Firmware Listing

This table provides a succinct listing of the most recent versions of firmware or drivers that are available for the CB 2000.

Version	Description	Status	eBOM Date
30-05-08	Hitachi Compute Blade 320 8-Gbps Fibre Channel Adapter Firmware	MGA	01/22/15
01-32	Hitachi Compute Blade 320 x4 BIOS/BMC Update Tool 01-32 (BIOS:F17 / BMC:01-2F)	GA	01/17/14
02-35	Hitachi Compute Blade 320 x5 BIOS/BMC Update Tool 02-35 (BIOS:G26 / BMC:01-66)	MGA	05/15/13
17.94	Hitachi Compute Blade 320 HVM Firmware	GA	04/01/15
11.6.D/01-00	Hitachi Compute Blade 320 LAN Switch Module Firmware CD	GA	02/04/14
2.120.233-1474	Hitachi Compute Blade 320 H5 (LSI SAS2108) RAID Firmware Update Tool CD (Field)	MGA	02/21/13
02-00	Hitachi Compute Blade 320 R5 (LSI SAS 2008) Blade RAID Board Firmware Update Tool (Customer Tool)	MGA	01/17/13
23-07-9B	Hitachi Compute Blade 320 4-Gbps FC Mezzanine Adapter Firmware	RGA	03/10/15
26-08-25	Hitachi Compute Blade 320 4-Gbps FC PCI Adapter Firmware	GA	03/10/15
3.1.16	Hitachi Compute Blade 320 Maintenance Test Program (BSTP)	MGA	07/01/13
A1085-H	Hitachi Compute Blade 320 SVP Firmware	RGA	07/24/12

Management Module Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of firmware.

Version A1085

1. New Functions/Improvements/Countermeasures (Problems found at []Field or []Factory)
 - Additional function of SNMP for detection and isolation of failure.
MAR*1 log information is added to MIB to know failures detected by Management Module firmware.

*1) MAR: Maintenance Action Report

x5 BIOS/BMC Firmware Update Tool Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of firmware.

Version 02-35 (BIOS:G26 / BMC:01-66)

2. New Features and Functions
 - 2-1. Supported Windows Server(R) 2012.
 - 2-2. Added the function "ACPI Power Meter" in BIOS Setup menu.
It must be set to [Disabled] for using Windows Server(R) 2012.

x4 BIOS/BMC Firmware Update Tool Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of firmware.

Version 01-32 (BIOS:F17 / BMC:01-2F)

1. Bug Fixes
 - BIOS F/W was updated to fix the problem that a Hypervisor and its guest OS may hang-up issue when Intel VT Priority function is enabled.
2. Firmware dependency
 - The BMC firmware ver.01-2F is required.

Version 01-31 (BIOS:F16/BMC:01-2F)

- 1.HW/FW/SW/Document-dependencies
 - None
 - 2.New Functions/Improvements/Countermeasures (Problems found at []Field or [V]Factory)
 - BIOS : F16
 - Improvements:
 - Update Nehalem processor D0-Stepping(106A5) from Rev00000011h to 00000016h.
 - New Functions:
 - OS Boot Timer Function (*1) supported (Only for a specific customer)
*1: This function checks OS boot fail using a watch-dog timer. This function is only for a specific customer in Japan and not available for other customers.
- BMC : 01-2F
- Improvements:
- Bug-fix: Wrong "CPU Thermal Trip" rarely display on VMware vSphere Client status.
 - Bug-fix: Wrong "DIMM Voltage warning" rarely occur when system load is high.
- New Functions:
- OS Boot Timer Function supported (Only for a specific customer)

Hitachi Compute Blade 320 Firmware List & Release Notes

Fibre Channel Switch Module Firmware & Accessory DVD Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of Fibre Channel switch firmware & accessory DVD.

Version 04-03

1.HW/FW/SW/Document-dependencies

None

2.New Functions/Improvements/Countermeasures (Problems found at []Field or []Factory)

Changed content by the update from Ver 04-02 to Ver 04-03 is the following.

- Readme.pdf

Supported Access Gateway Mode

Changed the new Compute Blade branding (Old name was BladeSymphony)

- Changed Directory name

A directory name was changed from CFG/BS320 to CFG/CB320.

Please see the Appendix A for the detail.

Hitachi Compute Blade 320 Firmware List & Release Notes

LAN Switch Module Firmware

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of LAN switch module Firmware or Accessory CD.

LAN Switch Module Firmware CD

Version 11.6.D/01-00

1. New Features and Functions

Please refer to "Appendix A" for the details.

2. Improvements

At the previous firmware version, when the LAN controller LSI in the module gets Chip-level soft-error (*1), the firmware reboots the LAN switch module to recover itself. During the rebooting, all the operating systems on the blades lose the link to the switch module and lost the connection of Ethernet.

The new firmware improves the recovery process. When it gets the error, the firmware rewrites only the memory area where the error occurs and recovers the data without rebooting the switch module.

Therefore, the operating systems do not lose the connection of Ethernet.

(*1) These errors occur when the radioactive atoms in the chip's material decay and release alpha particles into the chip. It does not damage the hardware but corrupts the data.

Version 10.7.H

1. New Functions/Improvements/Countermeasures

- Improvements:

Remove word "BS320" from output of the LANSW operation command.

Hitachi Compute Blade 320 Firmware List & Release Notes

PCIe/Mezzanine Firmware Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of firmware.

4-Gbps FC PCI Adapter Firmware Release Notes

Version 26-08-25

1. New Functions/Improvements/Bug-fixes

1-1. Bug-fixes

- (1) In VMware environment, operation of getting snapshots for the guest OS may fail.
- (2) Fibre channel adapter machine check may occur when all the cache in the fibre channel adapter become busy status due to multiple write commands of the large transfer size are issued.
- (3) SCSI timeout may occur if the load balancing option of Access Gateway mode on FCSW is enabled.

See Appendix A for bug fixes.

Version 26-08-1F

1.HW/FW/SW/Document-dependencies

None

2.New Functions/Improvements/Countermeasures (Problems found at []Field or [v]Factory)

Fixes the following problem.

- When one port of 2 port adapter changes into the state where continue auto negotiation of link speed negotiation by failure or setting mistake, SCSI timeout may be occurred in another port. It has improved so that influence on other ports may be made small.

4-Gbps FC Mezzanine Adapter Firmware

Version 23-07-9B

1. New Functions/Improvements/Bug-fixes

1-1. Bug-fixes

- (1) In VMware environment, operation of getting snapshots for the guest OS may fail.
- (2) Fibre channel adapter machine check may occur when all the cache in the fibre channel adapter become busy status due to multiple write commands of the large transfer size are issued.
- (3) SCSI timeout may occur if the load balancing option of Access Gateway mode on FCSW is enabled.

See Appendix A for bug fixes.

Version 23-07-90

1.HW/FW/SW/Document-dependencies

None

2.New Functions/Improvements/Countermeasures (Problems found at []Field or []Factory)

Support the port isolation feature on shared FC mode.

8-Gbps FC Adapter Firmware Release Notes

Version 30-05-08

1. New Functions/Improvements/Bug-fixes

1-1. Bug-fixes

- (1) Improvement to recognize connected devices which upper 2 bytes of PORT_ID are same as Fibre Channel adapter's PORT_ID according to the instruction by the driver at FC switch connection.
- (2) Fibre channel adapter machine check may occur when all the cache in the fibre channel adapter become busy status due to multiple write commands of the large transfer size are issued.
- (3) SCSI timeout may occur if the load balancing option of Access Gateway mode on FCSW is enabled.

See Appendix A for bug fixes.

Version 30-04-7D

1. New Functions/Improvements/Bug-fixes

Hitachi Compute Blade 320 Firmware List & Release Notes

1-1. Bug-fixes

See Appendix A for bug fixes.

Version 30-04-71

1. New Functions/Improvements/Bug-fixes

1-1. Bug-fixes

Fixed the following problems. Please see the Appendix A for the detail.

[Problem]

SAN boot may fail when using the Fibre Channel Switch in the Access Gateway mode or without zoning.

Version 30-04-6F

1.HW/FW/SW/Document-dependencies

None

2.New Functions/Improvements/Countermeasures (Problems found at []Field or [v]Factory)

- Improvements:

- #1 Fixed the following problems. Please see the Appendix A for the detail.

[Problem]

The OS or the application may hang up when the SCSI command timeout and the SCSI reset command timeout occurs together.

Hitachi Compute Blade 320 Firmware List & Release Notes

HVM Firmware Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of firmware.

Note: This applies to both the version provided to customers as well as for the version provided for maintenance personnel.

Version 17.94

1. New Features

None

2. Improvements

- Resolved the following vulnerability problems of OpenSSL: CVE-2014-3567, CVE-2015-0204, CVE-2015-0205, CVE-2014-8275, and CVE-2014-3570.
- Terminated the support of SSL v3.0 due to SSL v3.0 vulnerability (CVE-2014-3566 dubbed POODLE).

3. Bug Fixes

The following problems are fixed.

- No performance data of NICs or HBAs is shown after deleting LPAR.
- No alert is send from LPAR manager to ServerConductor/Blade Server Manager(BSM) after executing HvmSh.

Version 17.93

1. Improvement

- Vulnerability for Bash Code Injection and Open SSL
Apply countermeasures to the vulnerabilities (including CVE-2014-6271 ShellShock) for Bash Code.
Apply countermeasures to the vulnerabilities (including CVE-2014-3508) of OpenSSL.

Version 17-92

1. New Features

None

2. Bug Fixes

- Took countermeasures to the vulnerabilities (including CVE-2014-0224) of OpenSSL.

Version 17-85

2.HW/FW/SW/Document-dependencies

The new firmwares require HvmSh version 5.5 or later and HVM Navigator version 02-03 or later when using them.

3.New Functions/Improvements/Countermeasures (Problems found at []Field or [v]Factory)

New functions of updated programs and Countermeasures of failures
(Refer to HVM Release Note of Appendices)

RAID Firmware Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of RAID Firmware.

SAS2008 RAID Firmware Update Tool CD Field

Version 02-00

1. Description

- Firmware Version of LSI SAS 2008 RAID Board is changed from 2.0.04-0728 to 2.110.74-1218.
- The zip file which is used to update the firmware of LSI SAS 2008 RAID Board is "BS_RAID_FW_2008_0200.zip."
- This update tool is only for the field machine installed customer site.

2. Document to be influenced

WebBIOS screen will be revised with new Firmware.

- Compute Blade 320 USER'S GUIDE (R26)
- BladeSymphony 320 Blade Server Part Maintenance Manual(R1.28)

Hitachi Compute Blade 320 Firmware List & Release Notes

Version 2.120.104.1284

1.HW/FW/SW/Document-dependencies

- Model: Hitachi Compute Blade 320 R5

- RAID Board: LSI SAS 2008 RAID Board

- OS: Red Hat Enterprise Linux Server 6.1

2.New Functions/Improvements/Countermeasures (Problems found at []Field or [v]Factory)

New Functions:

Support Red Hat Enterprise Linux Server 6.1

Hitachi Compute Blade 320 Firmware List & Release Notes

SAS2108 RAID Firmware Update Tool CD Field

Version 2.120.233-1474

1.HW/FW/SW/Document-dependencies
None

2.New Functions/Improvements/Countermeasures (Problems found at [V]Field or []Factory)

Improvements:

Fix the following phenomenon.

- Multibit ECC error occurred and the system broke down in VMware ESXi 5.0 environment.
- It take a long time to initialize RAID board and OS cannot boot.

New Functions:

- Micro Reboot Functions(*1) supported

*1: This function is to continue the system operation by rebooting the system of RAID board when a temporary error (cache parity error or something) is occurred.

When enabling the above function in Red Hat Enterprise Linux 5 or Red Hat Enterprise Linux Server 6 environment, RAID driver version must be updated to "00.00.06.12" or later.

- Added the function that register the error disk using the self-diagnostic function of HDD/SSD.

Maintenance Test Program Release Notes

The following is a listing of the relevant fixes or new features that were implemented in the noted levels of maintenance test programs.

Maintenance Test Program for Field Engineers (BSTP) Release Notes

Version 3.1.16

2. Improvements

2-1. The execution time of memory test was accelerated.

3. Software dependencies

None