

SR870BN4 BIOS Release Notes



Enterprise Platform & Services Marketing

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DATE: October 26, 2005
TO: Intel® SR870BN4 customers
SUBJECT: Intel® SR870BN4 BIOS Release Notes
Production Release 6.1 Build # 958

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About This Release

Release # : 0958.P06 (Itanium 2 Processor with up to 6M L3 cache PR6.1 BIOS)
Build Stamp : S870BN4A.86B.0958.P06.0508191044
Build Date : August 19, 2005

BIOS Components/Contents

PAL Ver. : 5.73*
SAL-A / SAL-B Ver. : 3.0/3.0 (SAL3.20 spec update changes)
EFI Spec. Ver. : 1.10.14.62
FPSWA Ver. : 1.18
SCSI BIOS Ver. (QL12160) : 7.30
SCSI BIOS Ver. (LSI1030) : 01.03.10
ATI BIOS : 0101145700000112
(* indicates new for this release)

Processor stepping(s) supported: Intel® Itanium® 2 Processors with up to 6MB L3 Cache-A2, B0, B1 steppings

System hardware configurations supported: Production Released systems

System FW Requirements/Revisions

BMC FW : BMC32
FRU/SDR : SDR19

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Important Installation Notes

USE LATEST VERSION OF IFLASH64.EFI

To eliminate the chance of flashing an incompatible BIOS binary, please use IFLASH64.efi Version 1.02 or greater with P04. Starting with Version 1.02, Iflash64.efi is capable of verifying that the selected BIOS binary is compatible with the system's Processors type, by matching the Processor's CPU ID. If an incapability is detected, then an error message is displayed. Refer IFLASH64.EFI Ver1.02 Release notes for details. Note that the IFLASH64.efi ver 1.02 is not backward compatible with RC3 BIOS or any of the previous releases, in which case the older version of IFLASH64.efi should be used.

Other instructions:

1. CLEAR CMOS! after updating to this BIOS.
2. Preferably clear the Processor history, by going to the Setup and issuing a Re-arm.
3. Beta3 and greater Bios will detect mismatched DIMMs and incorrect SPD data on DIMMs. Check and replace DIMMs with incorrect SPD data. A faulty DIMM in any row, will cause subject row to be mapped out. In case of systems with only single Row populated, a bad DIMM will prevent it from booting, since no Memory is detected because of the faulty Row.
4. Refer to the user notes below for flash update requirements.
5. See NOTE below for flash upgrade and jumper definitions
6. BIOS BETA3 and greater allows the BMC to program the Core-Ratio for the Processor speed. BMC8 or greater is also required for this functionality. The Core Ratio jumpers on the CPU board at location J8C2 override the auto programming of the Core-Ratio. If jumpers are installed at location J8C2, they can be removed after updating to BIOS RC1 or greater and BMC 11.

Known Issues / Workarounds

- Service Partition testing requires RELEASE 2.2 BUILD 3 of Service Partition or newer.

Features added in this release

- None

Issues Fixed

Changes in PR6.1 Build 958

- PAL 5.73 release related changes
- Cannot install/boot Windows on Emulex LP9802 SAN
- Intermittent boot issues or mapped out rows using 1GB/4GB DIMMs

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Changes in PR6.0 Build 937

- SAL_GET_STATE_INFO ever returns an error when INIT interrupt is called
- SAL_PAL shadow base alignment to 1MB boundary in SAL to fix Windows RTM page boundary issue

Helpful Reference Material

- *Intel® Server System SR870BN4 Product Guide*

BIOS Recovery Instructions

To recover the SR870BN4 platform BIOS follow the procedure outlined below:

Package Contents:

This package contains the BIOS Recovery file S870BN4B.REC used for recovering the system to BIOS 937.P06. Instructions on using Recovery are described below.

Getting Started:

Copy the S870BN4B.rec file to a blank LS-240 diskette from a Win32 system. Alternatively, the S870BN4B.rec file may be burned to a CDROM using the EI Torito format.

BIOS Recovery Procedure:

1. With the system switched off and AC power disconnected:
2. Place I/O Riser board jumper switch #1 to the ON position for BIOS recovery
3. Insert the LS-240 diskette or CDROM containing ONLY the file S870BN4B.REC
4. Reconnect the AC power and switch server power on.
5. LS-240 diskette/CDROM activity will start and one full beep is heard (start load SR870BN4B.REC from disk to memory).
6. Wait two minutes. No indication of LS-240/CDROM activity will be seen until two full beeps are heard that indicate the BIOS recovery has completed successfully
7. Remove the LS-240 recovery diskette or CDROM, switch system power off, and disconnect AC power.
8. Replace I/O Riser jumper switch #1 to the OFF position
9. Reconnect AC power and switch the system on.
10. When the system reboots, go into BIOS setup by hitting 'F2' function key.
11. Tab to the 'Exit' menu. Select 'Load Setup defaults'. Press 'yes' to 'Load Setup Defaults'?
12. Make any changes that you need to do in setup. Press F10 to save and exit.
13. System will automatically reboot to EFI.

Verification of State:

Determine your BIOS version. Read the version in the BIOS banner string.

Final Configuration:

After the update, the following should be the configuration of the system.
S870BN4A.86B.0958.P06

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Safety Notice

THE INTERNAL WORKINGS OF OEM UNITS CARRY HIGH STANDBY VOLTAGES DESPITE BEING POWERED DOWN BY FRONT PANEL. USERS SHOULD UNPLUG BOTH POWER CORDS TO THE UNIT BEFORE ACCESSING THE SYSTEM OR REMOVING ANY BOARDS.