IPMI Firmware Release Notes Form

Product Name	**H12SSG-AN6**
Release Version	**00.01.19**
Release Date	**9/02/2024**
Previous Version	**00.01.17**
Update Category	**Recommended**
Dependencies	**BIOS R 3.0**
Important Notes	**IPMI Image:** **BMC_H12SSG-AST2600-ROT1PLUS-9301MS_20240902_00.01.19_STDsp.bin** **IPMI Update Package:** **BMC_H12SSG-AST2600-ROT1PLUS-9301MS_20240902_00.01.19_STDsp.zip**
Enhancements	**N/A**
New features	**N/A**
Fixes	1. **Fixed CPLD image compare FAIL; the first 4 bytes of downloaded binary was being lost from the original file.** 2. **Fixed RTX 4500 GPU not being detected in IPMI.** 3. **Fixed no response from BMC web when long Group name with AD/LDAP account is input. Customer reported issue in which MEL was unable to parser an event successfully, resulting in no response from the web when logging in.**

00.01.17 (6/7/2024)

1. Added support for the Nvida L40.
2. Fixed: unexpected SEL was triggered when restarting Windows OS.
3. Fixed: SMCIPMITool -- Response value is incorrect when delete user via SMCIPMITool" Synced fixing from OEM branch.
4. Fixed incorrect MEL after enable/disable Host Interface" Synced fixing from OEM branch.
5. Fixed incorrect MEL after configuring and saving Alerts" Synced fixing from OEM branch.
6. Fixed: FRU0 does not sync to FRU1 OK" Synced fixing from OEM branch.
7. Fixed: Fan Mode naming should be "HeavyI/O Speed"" Synced fixing from OEM branch.
8. Fixed failure to log in with user accounts with <>\ special letters" Synced fixing from OEM branch.
9. Fixed repeated MEL after visiting Virtual Media page" Synced fixing from OEM branch.
10. Fixed: GPU Part Number missing from WebGUI" -- Use HBA board part number instead of GPU chip part number. Synced fixing from OEM branch.
11. Fixed: AD username info not displaying completely.
12. Fixed: Troubleshooting table fields doesn't display completely.
13. Fixed issue where the DDNS BMC Hostname "tips" does not match with text error check syntax.
14. Fixed issue where the Help tips dosen't have SSDP.
15. Fixed issue where the Dedicated Link speed has 10M speed.
16. Fixxed issue where there are no related MEL when set DDNS BMC Hostname.
17. Fixed: No related MEL when en/disable LDAP and set Account Lockout Durationa/counter reset.
18. Fixed: NVMe webgui requires more time for ejection.
19. Fixed: Stack buffer write overflow at H12 logout.cgi
20. Fixed: Command injection Cause: BMC config could be revised to make command injection situation Solution.
21. Fixed: MEL Log should be recorded when en/disable Active Directory. Cause: No save system event log when set account service.
22. Fixed: No MEL generated when setting Console Capture Video and Crash Screen Capture.
23. Fixed RTX5000-ADA and RTX6000-ADA GPU sensors
24. Fixed invalid sensor name
25. Fixed: POST request uses invalid parameter with headers/files, status code should be 400 but it is 202
26. Fixed: BMC restarting message does not match with UI spec.
27. Fixed: Mount Floppy image failure via SUM
28. Fixed: Failure to mount CD image via Redfish API
29. Fixed: Can't launch one more ikvm session via Chrome/Firefox/Edge
30. Fixed: Failure to Set LAN AutoConfiguration DHCPv6Mode Configuration
31. Fixed: MEL Log should be recorded when enable/disable LDAP/Active Directory/RADIUS
32. Fixed: AD user password length should support 64 bytes
33. Fixed: BIOS Golden Image version is not displayed at Firmware inventory

00.01.12 (7/20/2022)

1. Response from IPMI OEM CMD to do OEMGetSetDNSServer is incorrect.
2. SUM Test case failed due to password length error. Changed password length criteria to meet Supermicro STD requirements.
3. Fixed CPU's TDP that is showing 0 for Zen3 CPU (e.g. AMD Ryzen Threadripper PRO 5965WX (Chagall (Zen 3)))

4. Changed LAN via BMC configuration failure. Due to the protection range being overlapped, changes in the configuration cannot be saved.
5. Missing power supply DMI (type 39) information is displayed intermittently and DCMI power is reading abnormally.
6. Fixed Redfish automation test failure.
7. Added support for the AMD V620 GPU, "AMD MI100 GPU
8. BIOS ATS tool test Local Mac Address failure. Added support for OEM command 0x30 0x68 0xe1.
9. Change LAN via BMC configuration failure. If changed, network configuration would trigger flash protection filter Modify SPL and TEE to solve this issue caused by address overlapping.
10. WEBGUI sensors are not in order. Sorting sensor of same type.
11. Failed to reject invalid password for creating account through redfish, Failed to log in with user accounts which are the combination of < letters> through GUI
12. Close button is out of the Preference frame for IKVM/HTML5
13. Clicking 'Mount' button in HTML5 iKVM with no file selected will prevent mounting
14. Web Notification Alert issue
15. Redfish 503 Service Not Available. Using wrong image to do FW update would cause Redfish hang.
16. Changed LAN via BMC configuration failure. While setting a BMC static IP, the update would fail.
17. Failed to reject invalid password for creating account through Redfish API.
18. Added i2c protection map file for H12SSG.
19. I2C Channel attack is prevented - Assertion [Event Log]. The protection map should allow IPMI to read different page of VRM, otherwise Assertion log would be triggered.
20. Missing power supply DMI (type 39) information intermittently and DCMI power reading abnormal.

00.01.06 (3/16/2022)

1. "U.2 sensor lost during cburn on and off test" Per BPN CPLD designer's suggestion, we patched the latest I2C driver. Old I2C driver may trigger eSPI hang when I2C error (Issue 128805). In this MB, we did not observe eSPI hang, but still added the latest patch for the I2C driver to prevent it. However, the U.2 sensor loss issue is not related with the eSPI hang. The BPN CPLD designer is still debugging issue #137608.

2. "Can't launch ikvm via JAVA" It is due to a JAVA certificate that expired, renewed certificate.

3. "ROT would wrongly trigger BIOS recovery when AC ON" This happens with BIOS_H12SSG-ANP6-1C2C_20220316_2.4_STDsp.zip. Because new BIOS enlarged ROT table, and triggered SPL's design bug.

4. "LCMC information will disappear and fan function abnormal after reboot." It is due to wishbone's strange behavior, and causes an CPLD internal flash program to not able to end normally. Added a dummy command to CPLD to work around it. So EEPROM -VPD programming could be flashed to CPLD wishbone.

5. "NIC sensor temp drop" issue is fixed.
6. Fixed "False PSU status in WEBgui when power reset".

00.01.04 (12/17/2021)

1. Added RTX A4000, A100 80GB, A100 40GB SXM4 and A100 80GB SXM4 to support list.
2. Supported new IPMI OEM command for OTP features.
3. Supported new IPMI OEM command for CPLD validation.
4. Supported CPLD firmware update with JED file (with 5320 ROT table in UFM) for the motherboard, midplane, and backplane.
5. Extended IPMI OEM command to get the FW version and the RollbackID of the CPLD.
6. Extended IPMI OEM raw command to support CPLDROT table.
7. Extended IPMI OEM raw command to support CPLD FW signature validation.
8. Displayed version of MB CPLD FW file before updating.
9. Supported MB CPLD FW update with signed JED file.
10. Supported MEL for midplane and backplane CPLD firmware update.
11. Supported AIC type sensors in fan control mechanism.
12. Added onboard M.2/U.2 drive Redfish URI.
13. Fixed wrong location of memory sensor reading.
14. Fixed FW ECO failing at BMC Gold image validation.
15. Fixed power supplies sensor incorrect readings.
16. Changed BMC SEL event for AMD CPU thermal sensor; instead of generating CPU throttling event, generate over threshold event if the nine consecutive temperature readings from CPU Tctl are equal to or higher than Tctl_max.
17. Adjusted the thresholds for MEM and VDDCR voltage sensor.
18. Fixed MCX512A-ACAT false overheating SEL NIC AOC temperature value incorrect when DC is on for the first time.
19. Disallowed user to enter 65 characters as Authentication Key and Encryption Key when setting Alerts with SNMPv3 protocol.
20. Fixed GPU power sensor mismatch by adding support for NVidia power consumption reading as an SDR sensor.
21. Fixed the BMC reporting incorrect DIMM.
22. Fixed the BMC returning error on PSU information inquiry when only one PSU is connected to the passive board of H12SSG.
23. Fixed the power consumption displaying 0 for the upper and lower bounds.
24. Fixed Redfish SATC automation test failure.
25. Enabled IPMI FAN heavy IO control.
26. Fixed the BMC firmware upgrade to take less than ten minutes to meet PAS requirement
27. Fixed incorrect PSU power consumption and status.
28. Fixed system UI showing critical icon by filtering the correct PSU and GPU sensor number.
29. Hid misleading LAN MAC address.
30. Enabled NCSI initialization when DC ON.
31. Set fan duty to 20% when the node is DC off in the system.
32. Fixed the fan information in WebGUI when the fan is removed.
33. Fixed the password length to match help info.
34. Enabled permanent display of the BMC static IPv4 address.
35. Added checking condition to disable the user to set Authentication Key and Encryption Key with space or special characters.
36. Fixed the front panel red LED staying on after the system overheats.
37. Fixed the GPU power consumption getting the wrong SEL.
38. Fixed the failure to update the BIOS through Redfish and SUM.

00.00.29 (9/17/2021)
1. Moved BIOS image checking after DC powers on.
2. Added support for RTX A5000.
3. Revised sdrmake.sh to generate SDRBlock files to OEM location.

4. Fixed loss of dynamic sensor when doing firmware update without keeping SDR configuration.
5. Set performance PCH code to reset to recovery BMC's power control and enabled motherboard to be powered.
6. Set FRU block file on Twin Pro type device to be used.
7. Fixed missing sensor readings for the DCMI.
8. Fixed bug with BMC IP 0.0.0.0.
9. Fixed problems of PSU WebGUI showing error while system is booting up with AC ON and BMC reporting NA before detecting PSU.
10. Fixed problem of system UI showing critical icon due to PSU power consumption read error.
11. Fixed problem of H12SSG-AN6 H12SSH-AN6-NC24B WebGUI multi-node showing as empty when system config ID is set to 0x03, and set SSG multi-node default UI as 2 node.
12. Fixed compatibility of multi-node layout with new and old LCMC CPLD firmware showing 2 nodes with top/bottom layout.
13. Fixed issue of CM USI feedback cut-in ECO25597/ECO25502 H12SSG-AN6-NC24B function test finding COM port test.
14. Implemented workaround for Dump CPLD DBoot Image for H12SSW-AN6-NC24B motherboard CPLD.
15. Fixed inability to enable RADIUS when setting server address with IPv6 for NVidia Web.
16. Added multi-node layout for config 3 with MidPlane CPLD 0104.
17. Fixed problem of Sensor Table data corruption causing partial/all sensor readings to freeze or show as NA.
18. Fixed problem of AOC NIC sensor dropping during DC ON/OFF due to I2C MUX error and PLDM protocol being interrupted.
19. Fixed failure of NVMe status polling task to stop in time when motherboard powers off so that false event is generated.
20. Set SSDP to disabled as the default setting.
21. Removed PCH release related code in DC ON process.
22. Corrected PSU power consumption and status.
23. Corrected the inlet temperature offset.

00.00.22 (7/20/2021)
1. Added single firmware image to support both 2600-A3 chips with Big-endian key mode and A1 chips with Little-endian key mode.
2. Added new IPMI command to get AST2600 chip revision.
3. Fixed loss of GPU Temp Sensor.
4. Fixed problem of BBP error message occurring during ON/OFF.
5. Fixed problem of CPU overheating at 35C inlet temperature while CPU performance boost is disabling at C1 OEM SKU, failure of system FAN to reach full speed while system starts up with only 3 fans, failure of fan speed to rise while CPU is overheated, problem of FAN dropping to 50% duty when CPU temperature hits critical threshold, and missing CPU throttling control (program CPLD GPO0 to assert/de-assert throttling signal P0_PROCHOT#).
6. Fixed problem of system showing as "Unhealthy" when temperature polling of NIC is not supported.
7. Adjusted VBAT critical and fixed missing threshold from 2.7~2.5 to 2.6~2.4.
8. Enabled dump of OTP data via RedFish command.
9. Improved midplane CPLD update design, added verification of midplane CPLD ID and hardware reversion before update, and added Redfish command to get midplane CPLD version.
10. Fixed problem of PSU DMI Info dropping during AC ON/OFF.
11. Fixed problem of H12SSG-AN6-NC24B showing a message in event log when running stress test.
12. Fixed issue with FW0.0.17 while doing provision.
13. Corrected CPLD version for midplane CPLD received by the register offset.
14. Set CPLD ROT table and signature to write to CFM for midplane CPLD.

15. Corrected power reading on WebGUI.
16. Corrected display of midplane CPLD version.
17. Fixed issue with IPMI WebGUI compatibility with Firefox browser password management.
18. Fixed failure of WebGUI fan to show as critical before sensor reading while motherboard boots up.
19. Fixed problem of M.2 temperature becoming NA during sensor monitoring.
20. Fixed problem of GPU temperature sensor dropping for high cycle DC ON/OFF test, improved GPU discovery with proper delay and retry when encountering error, and added log when new added code branch is entered and corrects error.
21. Protected GPU Mux switch module to improve GPU discovery.
22. Set GPU discovery to wait until GPU firmware boot completes.
23. Fixed issue with flashing IPMI with A3 chip.

00.00.15 (6/2/2021)
 Initial Release