BIOS Release Notes Form

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Product Name	H12SSW-iN/NT (All)
Release Version	2.7
Release Date	10/25/2023
BIOS Date	10/25/2023
Previous Version	2.6a
Update Category	Recommend
Dependencies	N/A
	ECO #29077
Important Notes	BIOS image: BIOS_H12SSW-1B2B_20231025_2.7_STDsp.bin
	Please update BIOS with attached Flash Utility in package.
Enhancements	1. [Milan] Update AGESA MilanPI to 1.0.0.B. 2. [Rome] Update AGESA RomePI to 1.0.0.G. 3. [Milan][Rome][SmcOptIpmiBoot][Enhancements] Support that changing Pxe from Uefi(U)/Legacy(L) to L/U through Redfish; It can adjust setup option and priority of Pxe boot order according to Boot Flag Command.
New features	N/A
Fixes	1. [Milan][Rome] Fixes when Set RDIMM\LRDIMM\3DSDIMM memory throttling trippoint @85C part II. 2. [Milan]Fix some dmivar unfit with ami smbios settings; AMI using UnicodeSPrint instead of Swprintf. The hex number case was different.

Release Notes from Previous Release(s)

2.6 (09/28/2023)

- 1. [Milan]Update Milan B0/B1/B2 stepping CPU microcode and Milan-X B2 stepping CPU microcode for AMD-SB-7005 Security Bulletin to address CVE-2023-20569 issue.
- 2. [Rome]Update Rome B0 stepping CPU microcode 0x0830107A for AMD-SB-7008 Security Bulletin to address CVE-2023-20593 issue.
- 3. [Milan][Rome]Add Rocky Linux Boot Option Name.
- 4. [Milan][Rome]Enable token ASM1061_Workaround to disable ASM1061 64-bit memory address capability.
- 5. [Milan] [Rome] Restore SMCI secure boot keys and Update Secure Boot DB variable. (Unknown certificate "Addtrust External CA Root" is expired on May 30th 2020).
- 6. [Milan][Rome][Fixes] Fixed that the PCIe Link Width of AOC-SLG4-2H8M2 is downgraded to x4.

2.5 (9/26/2022)

- 1. Update MilanPI to 1.0.0.9 based on 5.22_MilanCrb_0ACOU020.
- 2. Remove "Vendor Keys" in security page, Duplicate item in Security Page and Key Management page. Remove from security page to prevent user confuse.
- 3. Modify String naming from SMCI to Supermicro.
- 4. Update DBX file to fix Secure Boot Bypass issue. CVEs released for this issue: CVE-2020-10713(8.2, High), CVE-2022-34301(8.2, High), CVE-2022-34303(8.2, High) security issues.
- 5. Update AGESA RomePI to 1.0.0.E based on 5.14_RomeCrb_0ACMK025.

2.4 (4/13/2022)

- 1. Change BIOS revision to 2.4.
- 2. Exposed setup item "ASPM Support" in PCIe/PCI/PnP Configuration Page.
- 3. Add the "Factory Mode" function for the Production test.
- 4. Update AGESA RomePI to 1.0.0.D.
- 5. Update Rome B0 stepping CPU microcode 0x08301055 to patch Errata 1161, 1176, 1179, 1183, 1214, 1268, 1386, 1417.
- 6. Update AGESA MilanPI to 1.0.0.8.
- 7. Update Milan B0/B1/B2 stepping CPU microcode and Milan-X B2 stepping CPU microcode to patch Errata 1304, 1310, 1311, 1313, 1329, 1330, 1336, 1343, 1350, 1352, 1361, 1378, 1379, 1381, 1386, 1407, 1415.
- B0 Milan microcode 0x0A001058, B1 Milan microcode 0x0A001173, B2 Milan-X microcode 0x0A001229.
- 8. Exposed setup items "SNP Memory (RMP Table) Coverage" and "Amount of Memory to Cover" in CPU Configuration Page for SEV-SNP feature use.

2.3 (10/20/2021)

- 1. Change BIOS revision to 2.3.
- 2. Add Redfish/SUM Secure Boot feature, update OOB for secure boot, and reserve Key.
- 3. Support SUM upload/delete HTTPS TLS certificate. (Default Enabled by TOKEN "Sum_UploadTlsKey_SUPPORT")
- 4. Per AMD's suggestion, set Relaxed Ordering default to Enabled.
- 5. Update AGESA RomePI to 1.0.0.C.
- 6. Exposed Setup item "Enhanced Preferred IO Mode".
- 7. Update AGESA MilanPI to 1.0.0.6.
- 8. Update Milan BO/B1 stepping CPU microcode and Milan-X B2 stepping CPU microcode to patch Erratum #1381 Processor May Hang When Coherency Probe Hits Instruction Cache Line While Evicted. BO Milan microcode 0x0A00104C, B1 Milan microcode 0x0A001143, B2 Milan-X microcode 0x0A001223.
- 9. Patch BMC Redfish Host Interface was named as ethX when CDN was the disabled case under LinuxOS.
- 10. Disable Legacy/EFI iSCSI support.
- 11. Exposed Setup items "BankGroupSwapAlt", "SEV-SNP Support", "Enhanced Preferred IO Mode", and "Root Complex 0x00~0xE0 LCLK Frequency".
- 12. [Milan BIOS] Fix SUM cannot modify AMD CBS settings.

2.0 (02/22/2021)

- 1. Change BIOS revision to 2.0.
- 2. Support both AMD EPYC 7002 and next generation processors.
- 3. Update A011 GN B1 microcode 0A001119.
- 4. Update AGESA RomePI to 1.0.0.A.
- 5. Per Platform Management FRU Information Storage Definition v1.1 to enhance SMBIOS Type39 System Power Supply information

1.3 (11/25/2020)

- 1. Updated BIOS revision to 1.3.
- 2. Updated AGESA RomePI to 1.0.0.9.
- 3. Updated 8310 SSP-B0 microcode 830104D.
- 4. Displayed TSME, DDR Power Down Enable, and PCIe Ten Bit Support for GPU performance tuning.

1.2 (10/14/2020)

- 1. [Enhancements] Change BIOS revision to 1.2.
- 2. [Enhancements] Update AGESA RomePI to 1.0.0.8.
- 3. [Enhancements] Update 8310 SSP-B0 microcode 8301038.

- 4. [Enhancements] Add SMCI HDD Security feature.
- 5. [Enhancements] Per System LAB request, update help string of item "Input the description".
- 6. [Enhancements] Per PM's request to update M.2 strings of OPROM items and SMBIOS Type9 information.
- 1.[Fixes] Fixed Fru0 Manufacturer Name (PM) doesn't sync. to SMBIOS Type 3 Manufacturer (CM).

Fixed Fru0 - Product Part/Model Number (PPM) doesn't sync. to SMBIOS Type 1 - ProductName(PN).

- 2.[Fixes] Remove "\$SMCUNHIDE\$" string from "PCI AER support" setup item help string.
- 3.[Fixes] Add AMD IOMMU patch code for fixing NVME Devices drop and Hardware error in RH 7.x.
- 4.[Fixes] Fixed TCG admin password reverse bug.
- 5.[Fixes] CPU speed information in not correct in BIOS setup.
- 6.[Fixes] Support function disable of SATA controller for unused SATA controller of M.2 and PCIe devices.
- 7.[Fixes] Fixed system hang post code 95h (Out of resource) when SR-IOV setting is enabled in Setup and Broadcom 57416 OPROM.

1.1a (05/28/2020)

- 1. Change BIOS revision to 1.1a.
- 2. Update AGESA RomePI to 1.0.0.7.
- 3. Update 8310 SSP-B2 microcode 8301038.
- 4. Fix system will hang on POSTCODE 0xB2 when JPG1 set to disabled and plug-in the VGA card.
- 5. Add SMCI HDD Security feature.
- 6. Fixes the Fru0 Manufacturer Name (PM) doesn't sync. to SMBIOS Type 3 Manufacturer (CM).

Fixed Fru0 - Product Part/Model Number (PPM) doesn't sync. to SMBIOS Type 1 - ProductName (PN).

- 6. Fixes the Remove "\$SMCUNHIDE\$" string from "PCI AER support" setup item help string.
- 7. Fixes Add AMD IOMMU patch code for fixing NVME Devices drop and Hardware error in RH 7.x.
- 8. Fixes TCG admin password reverse bug.

1.0b (11/15/2019)

- 1. Change BIOS revision to 1.0b.
- 2. Add "DRAM Scrub Time" in Memory Configuration.
- 3. Update AGESA RomePI to 1.0.0.4 based on 5.14 RomeCrb 0ACMK012.
- 4. Use AMD CBS "PCIe ARI Support" item instead of "ARI Forwarding".
- 5. Update item string "Input the description" and "HTTP Boot One Time" to meet Rome BIOS Setup Template v0.7_20190705.
- 6. Show 3rd IPMI version in BIOS setup.
- 7. According to each project's board ID, update SSID of AMD Host Bridge.
- 8. Set IOMMU default as Auto (Enabled)
- 9. Exposed item "Preferred IO".
- 10. Do not display any AMD memory error messages during the POST phase.
- 11. Fixes recovery function cannot work.
- 12. Support OOB SATA HDD information and asset information of 2 SATA controllers.
- 13. No screen output when Boot Mode is changed to EFI.
- 14. Fixes system will hang when installing NVidia RTX 2080/5000/6000
- 15. Fixes the issue that "SMCI POST Screen Message" might be shown on BIOS setup menu.
- 16. Fixes the issue that "SMCI POST Screen Message" might be shown on POST screen during executing EFI Shell application.
- 17. Patch I/O error message happened when run SPEC CPU2017 test on Asmedia SATA port HDD

Revision 1.0 (2019/07/19)

First release.