BIOS Release Notes Form

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2023 2023 mended
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Change BIOS revision to 4.0. Updated AMI label 5.14_PurleyCrb_OACLA060 for RC0628.P50 IPU 2023.3 for INTEL-SA-00813 Security Advisory to address CVE-2022-37343 (7.2, High), CVE-2022-44611 (6.9, Medium), CVE-2022-38083 (6.1, Medium), CVE-2022-27879 (5.3, Medium) and CVE-2022-43505 (4.1, Medium) security issues; and for INTEL-SA-00828 Security Advisory to address CVE- 2022-40982 (6.5, Medium) security issue. Updated OEM FID table. Updated token RC_VERSION_VALUE setting to 628.P50. Updated token PRICESSO_0_UCODE_VERSION setting to 02007006. Updated

	4. Updated Cascade Lake-SP CPU PV microcode for IPU 2023.3.
	5. Updated Intel Server Platform Services for Purley Refresh
	Server Platforms IPU2023.3 4.1.5.2.
	6. Updated DBX file for AMI-SA50182 SecureBoot DBX Update.
New features	N/A
Fixes	None

Release Notes from Previous Release(s)

3.9 (3/15/2023)

- 1. Changed BIOS revision to 3.9.
- Updated AMI label 5.14_PurleyCrb_0ACLA059 for RC0627.P11 IPU 2023.2 for INTEL-SA-00807
 Security Advisory to address CVE-2022-38087(4.1, Medium) and CVE-2022-33894(7.5, High)
 security issues; and for INTEL-SA-00717 Security Advisory to address CVE-2022-32231 (7.5, High) /
 CVE-2022-26343 (8.2, High) security issues.
- 3. Updated token RC_VERSION_VALUE setting to 627.P11. Updated token PRICESSO_0_UCODE_VERSION setting to 02006F05. Updated token PRICESSO_1_UCODE_VERSION setting to 03000012. Updated token PRICESSO_2_UCODE_VERSION setting to 04003501. Updated token PRICESSO_3_UCODE_VERSION setting to 05003501.
- 4. Updated Cascade Lake-SP CPU PV microcode for IPU 2023.2.

3.8a (10/28/2022)

- 1. Updated AMI label 5.14_PurleyCrb_0ACLA057 for RC0623.D09 2022.3 IPU.
- 2. Updated token RC_VERSION_VALUE setting to 623.D09.
- 3. Updated Intel DCPM UEFI driver to 1.0.0.3536.
- 4. Updated Skylake-SP/Cascade Lake-SP CPU PC microcode for IPU 2022.2.
- 5. Event log page displayed the incorrect DIMM location.
- 6. String name was changed from SMCI to Supermicro.
- 7. "Vendor Keys" has been removed from the security page.
- a.) Improved SMM buffer validation in SmmSmbiosELogInitFuncs.c.
 b.) In DxeSmmRedirFuncs.c, a runtime buffer was allocated to trigger ELog SMI.
- 9. Updated BIOS ACM 1.7.54, SINIT ACM 1.7.55 PW for IPU2022.1 to address Intel-TA-00161: CVE-2021-0159 (7.8 High) CVE-2021-33123 (8.2 High) and CVE-2021-33124 (7.5 High).
- 10. Updated VROC SATA/sSATA legacy driver to VROC PreOS v6.3.5.1003 Hot Fix to fix 10TB or higher volume drive issue.

- 11. Updated VROC SATA/sSATA EFI driver to VROC PreOS v7.8.0.1012 to address... 1. Data Loss Exposure Due to RAID 5 TRIM Support. Document #737276 2. INTEL-TA-00692. CVE-2022-29919(7.8 High), CVE-2022-30338(6.7 Medium), CVE-2022-29508(6.3 Medium), CVE-2022-25976(5.5 Medium)
- 12. Allocated buffer was changed from EfiBootServicesData to EfiRuntimeServicesData.
- 13. Since the product does not use the Intel IE function, the MROM1 device has been disabled.
- 14. Updated DBX file to fix Secure Boot Bypass issue.
- 15. Fixed OA2 key injection issue.
- 16. IScsi SUPPORT has been enabled on the Purley generation.

3.6 (1/3/2022)

- 1. Changed BIOS revision to 3.6.
- 2. Updated SATA/sSATA EFI driver to VROC PreOS v7.7.0.1054.
- 3. Updated AEP uEFI driver to 1.0.0.3531 for IPU2021.2.
- 4. Updated AMI label 5.14_PurleyCrb_0ACLA054 for RC0616.D08 2021.2 IPU for INTEL-SA-00527 Security Advisory to address CVE-021-0103 (8.2, High), CVE-2021-0114 (7.9, High), CVE-2021-0115 (7.9, High), CVE-2021-0116 (7.9, High), CVE-2021-0117 (7.9, High), CVE-2021-0118 (7.9, High), CVE-2021-0099 (7.8, High), CVE-2021-0156 (7.5, High), CVE-2021-0111 (7.2, High), CVE-2021-0107 (7.2, High), CVE-2021-0125 (6.7, Medium), CVE-2021-0124 (6.3, Medium), CVE-2021-119 (5.8, Medium), CVE-2021-0092 (4.7, Medium), CVE-2021-0091 (3.2, Low) and CVE-2021-0093 (2.4, Low) security issues.
- 5. Updated Intel Server Platform Services for Purley Refresh Server Platforms IPU2021.2 HF1 4.1.4.654. 6. Updated BIOS ACM 1.7.51, SINIT ACM 1.7.51 PW for INTEL-SA-00527 Security Advisory to address CVE-2021-0103 (8.2, High), CVE-2021-0114 (7.9, High), CVE-2021-0115 (7.9, High), CVE-2021-0116 (7.9, High), CVE-2021-0117 (7.9, High), CVE-2021-0118 (7.9, High), CVE-2021-0099 (7.8, High), CVE-2021-0156 (7.5, High), CVE-2021-0111 (7.2, High), CVE-2021-0107 (7.2, High), CVE-2021-0125 (6.7, Medium), CVE-2021-0124 (6.3, Medium), CVE-2021-0119 (5.8, Medium), CVE-2021-0092 (4.7, Medium), CVE-2021-0091 (3.2, Low) and CVE-2021-0093 (2.4, Low) security issues.
- 7. Updated Skylake-SP/Cascade Lake-SP CPU PV microcode for INTEL-SA-00532 Security Advisory to address CVE-2021-0127 (5.6, Medium) security issue and for INTEL-SA-00365 Security Advisory to address CVE-2020-8673 (4.7, Medium) security issue.

3.5 (5/18/2021)

- Updated RC 612.D02 and IPU 2021.1 PV for INTEL-SA-00463 Security Advisory to address CVE-2020-12357 (7.5, High), CVE-2020-8670 (7.5, High), CVE-2020-8700 (7.5, High), CVE-2020-12359 (7.1, High), CVE-2020-12358 (6.7, Medium), CVE-2020-12360 (5.6, Medium), CVE-2020-24486 (5.5, Medium), and CVE-2020-0589 (3.8, Low) security issues.
- 2. Updated BIOS ACM 1.7.43 and SINIT ACM 1.7.4A PW for INTEL-SA-00463 Security Advisory to address CVE-2020-12357 (7.5, High), CVE-2020-8670 (7.5, High), CVE-2020-8700 (7.5, High), CVE-2020-12359 (7.1, High), CVE-2020-12358 (6.7, Medium), CVE-2020-12360 (5.6, Medium), CVE-2020-24486 (5.5, Medium), and CVE-2020-0589 (3.8, Low) security issues.
- 3. Updated Skylake-SP/Cascade Lake-SP CPU PV microcode for INTEL-SA-00464 Security Advisory to address CVE-2020-24511 (5.6, Medium) and CVE-2020-24512 (2.8, Low) security issues.
- 4. Updated Intel Server Platform Services for Purley Refresh Server Platforms 4.1.4.505.
- 5. Added support for IPMI UEFI PXE boot to all LAN ports feature.
- 6. Updated SATA/sSATA EFI driver to VROC PreOS v7.5.0.1152.
- 7. Enabled system to boot into PXE with DVD installed.

- 8. Added support for IPv6 HTTP Boot function.
- 9. Corrected typo in "PCIe PLL SSC" setup item help string.
- 10. Removed 4G limit of Intel LAN memory if boot mode is not legacy.
- 11. Updated AEP firmware to FW_1.2.0.5446 and UEFI driver to 3515 for IPU2021.1.
- 12. Synced IPv6 status detection rule with BMC to make sure IPv6 status is the same in BIOS and BMC web.
- 13. Fixed problem of "Configuration Address Source" always showing "DHCP" on IPMI IPv6 page.
- 14. Corrected display of UEFI OS boot option name in BIOS setup.

3.4 (10/30/2020)

- Updated AMI label 5.14_PurleyCrb_0ACLA052_BETA for RC update and IPU 2020.2 PV to address Intel-TA-00358: CVE-2020-0587 (6.7, Medium), CVE-2020-0591 (6.7, Medium), and CVE-2020-0592 (3, Low); Intel-TA-00390: CVE-2020-0593 (4.7, Medium), CVE-2020-8738 (7.5, High), CVE-2020-8739 (4.6, Medium), CVE-2020-8740 (6.7, Medium), and CVE-2020-8764 (8.7, High); Intel-TA-00391: CVE-2020-8752 (9.4, Critical), CVE-2020-8753 (8.2, Critical), CVE-2020-12297 (8.2, Critical), CVE-2020-8745 (7.3, Critical), CVE-2020-8705 (7.1, Critical), CVE-2020-12303 (7.0, Critical), CVE-2020-8757 (6.3, Medium), CVE-2020-8756 (6.3, Medium), CVE-2020-8760 (6.0, Medium), CVE-2020-8754 (5.3, Medium), CVE-2020-8747 (4.8, Medium), CVE-2020-12356 (4.4, Medium), CVE-2020-8746 (4.3, Medium), and CVE-2020-8749 (4.2, Medium); Intel-SA-00358: CVE-2020-0590 (7.7, High), CVE-2020-0587 (6.7, Medium), CVE-2020-0591 (6.7, Medium), CVE-2020-0593 (4.7, Medium), CVE-2020-0588 (3.8, Low), and CVE-2020-0592 (3.0, Low); Intel-TA-00391: CVE-2020-8744 (7.2, High), CVE-2020-8705 (7.1, High), and CVE-2020-8755 (4.6, Medium); AMI SA50080 and AMI SA50081: CVE-2020-0570 (7.6, High), CVE-2020-0571 (5.5, Medium), and CVE-2020-8675 (7.1, High); AMI SA-50085: CVE-2020-10713 (8.2, High); and AMI SA-50084: CVE-2020-10255 (9, High) security issues.
- 2. Added force next boot to UEFI Shell via IPMI support.
- 3. Added function to move all LANs to the top of boot priority when IPMI forces PXE.
- 4. Deleted repeated boot options which have the same description as the new description.
- 5. Added inband flash status event log to IPMI MEL.
- 6. Corrected "Station MAC Address" display order when "Configuration Address Source" is set to "Static".
- 7. Updated SATA/sSATA RAID OPROM/EFI driver to VROC PreOS v6.3.0.1005 PV.
- 8. Fixed problem of EFI version of PassMark MemTest86 hanging when SMCI Redfish Host Interface is not supported in IPMI firmware.
- 9. Fixed inability of 6240R and some refresh 4 serial CPU frequencies to reach maximum when enabling Mwait.
- 10. Fixed failure of Secure Erase Password and problem of BIOS returning "EFI_Device_Error" with SED: Seagate ST1000NX0353.
- 11. Corrected BMC firmware revision in BIOS Setup.
- 12. Fixed problem of system hanging at 0xB2 with some NVMe devices.

3.3 (2/21/2020)

- 1. Updated AMI label 5.14_PurleyCrb_0ACLA050 beta for IPU2020.1 PV.
- 2. Updated SPS_E5_04.01.04.381 from IPU 2020.1 PV.
- 3. Updated BIOS ACM 1.7.40 and SINIT ACM 1.7.48 PW.
- 4. Patched problem of system hanging at 94 with new NVidia RTX 6000/8000.

- Enabled saving memory CE location into PPR variable at runtime even if memory correctable error reporting is disabled.
- 6. Added sighting CLX28 workaround and downgraded patrol scrub UC to CE.
- 7. Added setup item "HDD password prompt Control" to control "Hard-Drive Password Check" for enabling/disabling HDD password prompt window during POST.
- 8. Updated Skylake-SP/Cascade Lake-SP CPU microcode for Intel-SA-00329 (CVE2020-0548 2.8 Low and CVE2020-0549 6.5 Medium), Intel-SA-00288 (CVE2019-11157 5.3 Medium), and Intel-SA-00317 (CVE2019-14607 7.9 High).
- 9. Added SMC HDD Security feature.
- 10. Added support for SMCI USB Remote Network Driver Interface and SMCI USB Universal Network Device Interface, and for Redfish module to get Processor, Memory, and PCIe information.
- 11. Fixed issue of system resetting under ATTO Fiber network card user menu during BIOS POST.
- 12. Fixed mismatch of Secure Boot Mode value.
- 13. Removed requirement to use Admin password for erasing TCG device.
- 14. Fixed problem of two CentOS boot items occurring in boot order if CentOS is installed in RAID 1 system.

3.2 (10/17/2019)

- 1. Updated AMI label 5.14_PurleyCrb_0ACLA049_BETA for BKC WW36 IPU 2019.2 and AMI security update SA50072.
- 2. Updated SINIT/BIOS ACM from BKC WW36 IPU 2019.2 to address CVE-2019-0151 and CVE-2019-0152.
- 3. Updated SPS E5 04.01.04.339.0 from BKC WW36 IPU 2019.2 to address PSIRT-TA-201905-011.
- 4. Updated Cascade Lake-SP CPU microcode and Skylake-SP microcode.
- 5. Displayed Setup item "ARI Support".
- 6. Added setup item to control 16Gb based Single Die Package DIMM tRFC optimization.
- 7. Updated Secure Boot Key to fix the error message of PK key.
- 8. Patched inability of system to boot via onboard LAN2 after IPMI forces PXE boot when there is an OS behind LSI-3108 RAID card.
- 9. Added back erase NVDIMM routine.
- 10. Updated VBIOS and VGA EFI Driver to 1.10.
- 11. Enhanced F12 hot key PXE boot feature.
- 12. Updated the behavior for the feature that updates SMBIOS Type 1 and 3 with FRUO.
- 13. Disabled ADDDC/SDDC and set PPR as hPPR.
- 14. Added Enhanced PPR function and set disabled as default.
- 15. Removed PXE option for "OnBoard LanX Option ROM" when "Boot mode select" is UEFI.
- 16. Corrected display of the IPMI AUX revision.
- 17. Changed OOB download and Upload Bios Configuration sequence.
- 18. Fixed problem of two OS (Redhat & Ubuntu) boot devices appearing in boot order.
- 19. Fixed failure of OPROM control item if CSM is disabled.

3.0b (3/4/2019)

- 1. Added support for Purley Refresh platform.
- 2. Updated SATA RAID OPROM/EFI driver to RSTe PreOS v6.0.0.1024.
- 3. Set BMC MAC address to UUID for system without onboard LAN1 or with onboard LAN1 disabled.
- 4. Set PCIe correctable and uncorrectable (non-fatal) error report to disabled by default.
- 5. Added support for RFC4122 UUID format feature to set RFC4122 encoding from build time produced by IPMICFG 1.29 tool or newer.

- 6. Updated CPU microcodes from SRV P 270.
- 7. Disabled unused SPS ME "CUPS IIO" and "Volumetric Airflow" sensor.
- 8. Added 2933 to memory POR.
- 9. Implemented SMBIOS type 161 for multi-chip ultra riser card.
- 10. Added support for Linux built-in utility efibootmgr.
- 11. Updated valid range of IPMI setup item VLAN ID to 1-4094.
- 12. Added driver health warning message.
- 13. Set NVDIMM ADR timeout to 600us.
- 14. Updated to SPS 4.1.02.174 or above for INTEL-SA-00185 Security Advisory and RC 549.D13 or above for INTEL-SA-00192 Security Advisory.
- 15. Fixed problem of setup item "Quiet Boot" staying enabled after flashing BIOS with "Quiet Boot" disabled.
- 16. Fixed incorrect PBF high frequency core number when Hyper-Threading is disabled.
- 17. Added workaround for failure of BIOS flash with 156 bytes PubKey (Error: "Secure Flash Rom Verify Fail").
- 18. Modified UEFI network description to IPv4/IPv6 to follow Industry Standard.
- 19. Patched problem of system hanging at 0x94 when plugging in Nvidia Tesla T4 card.

2.1 (6/14/2018)

- 1. Updated CPU microcode to address 'Spectre' derivatives (CVE-2018-3639 & CVE-2018-3640) security issue.
- 2. Updated Purley RC 154.R13, SPS 4.0.04.340 and ACM 1.3.7, SINIT ACM 1.3.4.
- 3. Updated SATA RAID OPROM/EFI driver to RSTe PreOS v5.4.0.1039.
- 4. Added support for UEFI mode PXE boot of F12 hot key Net boot.
- 5. Added BIOS/ME downgrade check for SPS 4.0.4.340.
- 6. Added one event log to record that the event log is full.
- 7. Displayed PPR setup item.
- 8. Fixed problem of SUM GetSataInfo showing incorrect "Configuration Type" when setting "Configure sSATA as" to "AHCI" or "RAID" on sSATA controller.
- 9. Fixed problem of Ctrl + Alt + Del causing system to hang after flashing BIOS.
- 10. Fixed problem of system hanging when installing Linux OS after COM1 & COM2 IO/IRQ exchange.
- 11. Fixed failure of WDT function.

2.0b (2/26/2018)

- 1. Updated CPU microcode to address 'Spectre' variant 2 (CVE 2017-5715) security issue.
- 2. Added setup item "SmcBusMasterEn" for enabling Parent bridge of the devices in the qSmcPciForceEnableBusMasterList.
- 3. Updated Purley RC 151.R03.
- 4. Displayed setup item "ACS Control" to Enable/Disable PCIe Access Control Services Extended Capability, with Enabled as default.
- 5. Changed RC default setting to upgrade POST Memory correctable error to uncorrectable error and map out the channel.
- 6. Fixed problem of DMI being cleared when running SUM LoadDefaultBiosCfg.
- 7. Disabled CPU2 IIO PCIe root port ACPI hot plug function.
- 8. Fixed issue with IPMI force boot.
- 9. Fixed problem of SMC skipping first boot option in UEFI mode when retrying boot.

- 10. Fixed inability to reset the system under DOS by pressing "Ctrl-Alt-Del" on USB keyboard when "Port 60/64 Emulation" is disabled.
- 11. Fixed inability of some CPUs to display correct microcode revision under BIOS setup menu.