

BIOS Release Notes

TITLE

SUBJECT: MG51-G21 BIOS Release Notes version [R22](#)
System: [G291-N20-00](#), [G291-281-00](#), [G291-280-00](#), [G291-2G0-00](#), [G291-001-W6](#),
[G291-002-U9](#)

About This Release

Build Date: [2024/02/22](#)
BIOS Checksum: [0xC9E43786](#) (16M), [0xB37683FB](#) (32M)
Release Owner: richard.huang

BIOS Components/Contents

Processor stepping(s) supported: IntelR Skylake-SP/Cascadelake-SP processors
System hardware configurations supported: MG51-G21
Microcode updates versions:

| CPUID | Family | Microcode Update ID |
|-------|----------------------------------|---------------------|
| 50653 | SkyLake-Server Processor B-1 | 01000191 |
| 50654 | SkyLake-Server Processor H-0 | 02007006 |
| 50655 | CascadeLake-Server Processor A-0 | 03000012 |
| 50656 | CascadeLake-Server Processor B-0 | 04003605 |
| 50657 | CascadeLake-Server Processor B-1 | 05003605 |

IPMI support:
AMI Kernel version: [Gbt_Kernel_062_01](#)
Intel CSI/MRC Package version: [0628.P59](#)
SPI Descriptor version: [04.01.05.002.0](#)
OPROM version :

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| OPROM | Version |
|-----------------------|-------------|
| AST2500 VGA | 1.09.00 |
| INTEL 10G LAN EFI | 7.0.19 |
| INTEL 1G PXE | 1.5.53 |
| INTEL 10G PXE | 2.3.24 |
| INTEL 1G LAN EFI | 8.5.21 |
| INTEL RAID PACKAGE | RSTe 6.2 PV |

Installation Notes

IMPORTANT NOTES:

1. Please extract the MG51-G21_ [R22](#).zip to a bootable diskette that use FAT/FAT32 format

BIOS UPDATE INSTRUCTIONS FOR EFI Shell:

1. Insert USB flash drive to system for BIOS upgrade.
2. Power on system and boot to Build-In Shell.
3. Enter your USB filesystem, like "fs0:" or "fsx:", "x" is your USB filesystem number
4. Execute F.nsh for bios update
5. After bios flash finish, system must Power-Off to have the changes take effect.

BIOS UPDATE INSTRUCTIONS FOR Windows:

1. Insert bios update USB flash drive.
2. Use Command Shell.
3. Enter \Tool\Win32 and execute f.bat for Windows 32bit.
Or
Enter \Tool\Win64 and execute f.bat for Windows 64bit.
4. After bios flash finish, system must Power-Off to have the changes take effect.

BIOS Version CHECK INSTRUCTIONS:

1. Power on system and press during POST
2. The bios version shows on the first main page

Known Issues/Workarounds

Issues fixed in this version

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1. [Bug Fix] Update for security of PixieFail: vulnerabilities in Tianocore's EDK II IPv6 network stack include following
CVE-2023-45229, CVE-2023-45230, CVE-2023-45231, CVE-2023-45232, CVE-2023-45233,
CVE-2023-45234, CVE-2023-45235
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R21

1. [Feature] 1. Update RC 0628.P59 (2024.1 IPU PV)
 2. Update microcode SKX B1 - M9750653_01000191, CLX B0 - MBF50656_04003605, CLX B1 - MBF50657_05003605
 3. Update BIOS ACM version v1.7.55 and SINIT version 1.7.56
 4. Update for security INTEL-UA-00985
 5. Update for security AMI SA50198: CVE-2022-36763, CVE-2022-36764
AMI SA50197: CVE-2022-21894
AMI SA50179: CVE-2021-38575
AMI SA50202: CVE-2023-34470
AMI SA50205: CVE-2023-39537
AMI SA50191: CVE-2023-0465
AMI SA50193: CVE-2023-0464
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R20

1. [Feature] 1. Update RC 0628.P50 (2023.3 IPU PV)
 2. Update microcode SKX B1 - M9750653_01000181, SKX H0 - MB750654_02007006, CLX B0 - MBF50656_04003604, CLX B1 - MBF50657_05003604
 3. Update SPS_E5_04_01_05_002_0
 4. Update for security INTEL-SA-00828: CVE-2022-40982
 5. Update for security INTEL-SA-00813: CVE-2022-43505
 6. Update for security AMI SA50170: CVE-2021-38578
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R19

1. [Feature] Update for fix security AMI SMI vulnerabilities of
[1] Improper size validation of SMM Communication Buffer
[2] Improper validation when reading and writing UEFI Variables
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R18

1. [Feature] Update RC 0626.P01 (2023.1 IPU PV)
2. [Feature] Update microcode SKX-H0: MB750654_02006E05, CLX-B0: MBf50656_04003303, CLX-B1: MBf50657_05003303, SKX-B1: M9750653_01000161
3. [Feature] Update SPS_E5_04.01.04.901.0

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4. [Feature] Update for security INTEL-SA-00717: CVE-2022-32231, CVE-2022-26343
 5. [Feature] Update for security AMI SA50162: CVE-2022-34301, CVE-2022-34302, CVE-2022-34303
 6. [Feature] Update for security AMI SA50153
 7. [Feature] Update for security AMI SA50121: CVE-2021-33164
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R17

1. [Feature] Update 2022.1 IPU for security INTEL-SA-00616: CVE-2021-21131, CVE-2021-21136; INTEL-SA-00601: CVE-2021-0189, CVE-2021-0159, CVE-2021-33123, CVE-2021-33124.
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R16

1. [Feature] Update RC 0616.D08 (2021.2 IPU PV)
 2. [Feature] Update microcode SKX-H0: MB750654_02006c0a, CLX-B0: MBf50656_0400320a, CLX-B1: MBf50657_0500320a
 3. [Feature] Update BIOS ACM v1.7.51 / SINIT v1.7.51
 4. [Feature] Update DCPMM UEFI Driver v01.00.00.3531
 5. [Feature] Update SPS_E5_04.01.04.601.0
 6. [Bug Fix] Update for security INTEL-SA-00532, INTEL-SA-00527, INTEL-SA-00525, INTEL-SA-00470
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R15

1. [Feature] release bios
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