

# BIOS Release Notes

## TITLE

---

**SUBJECT:** MG21-OP0 BIOS Release Notes version [R22](#)

**System:** [T181-G20-00](#), [T181-G23-00](#), [T181-G24-00](#)

---

### About This Release

**Build Date:** [2024/03/15](#)

**BIOS Checksum:** [0xCA23528C](#) (16M), [0xB3B59F01](#) (32M)

**Release Owner:** richard.huang

### BIOS Components/Contents

**Processor stepping(s) supported:** Intel® Skylake-SP/Cascadelake-SP processors

**System hardware configurations supported:** MG21-OP0

**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\\_02](#)

**Intel CSI/MRC Package version:** [0628.P59](#)

**SPI Descriptor version:** [04.01.05.002.0](#)

**OPROM version :**

## BIOS Release Notes

OPROM	Version
AST2500 VGA	1.09.00
INTEL 1G PXE	1.5.53
INTEL 1G LAN EFI	8.5.21
INTEL RAID PACKAGE	RSTe 6.2 PV

### Installation Notes

#### IMPORTANT NOTES:

1. Please extract the MG21-OP0\_ [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 <DEL> during POST
2. The bios version shows on the first main page

### Known Issues/Workarounds

### Issues fixed in this version

#### R22

1. [Bug Fix] 1. Update for security of LogoFAIL vulnerability include following

# BIOS Release Notes

CVE-2023-39538, CVE-2023-39539

---

## R21

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
- 

## R20

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
- 

## R19

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
- 

## R18

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
- 

## R17

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

## BIOS Release Notes

3. [Feature] Update SPS\_E5\_04.01.04.901.0
  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
- 

### R16

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.
- 

### R15

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
-