



*This Technical Advisory describes an issue that may or may not affect the customer's product.*

# Intel Technical Advisory

TA-1157

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## Baseboard Management Controller FW update for the Intel® Server Board M10JNP2SB may fail when using an in-band method from FW versions 1.03 and earlier.

### Products Affected

- Intel® Server Board M10JNP2SB

### Description

Intel has found that when performing an update of the Baseboard Management Controller (BMC) FW using the in-band method (directly from the OS), the update process may hang and fail when updating from FW versions 1.03 and earlier. BMC FW versions 1.06 and later do not present this issue anymore and the BMC FW update in-band method can be used normally.

The BMC FW update from versions 1.03 and earlier must be performed via the BMC FW Out of Band (OOB) method using the AMI YAFU tool from a remote manager server, or through the BMC Embedded Web Console. For additional information on the available methods for the BMC FW update please review the BMC Web Console User Guide and Readme, and Update Instructions for the Intel® Server Board M10JNP2SB posted at [www.intel.com](http://www.intel.com).

Customers must avoid using the BMC FW update in-band method for FW versions 1.03 and earlier to prevent failures.

### Root Cause

When performing an in-band update for the BMC FW version 1.03 and earlier, some running software threads will kill themselves while the BMC enters flash mode for update. The IPMI main process then attempts to kill threads that no longer exist and keeps the BMC halted, waiting for a successful completion of the thread termination.

Starting from BMC FW version 1.06 a thread ID requisite was added to the processes running in the BMC to fix this erratic behavior. This fix improves the software thread management, preventing the BMC from blocking during a FW update.

This issue is not encountered during OOB or BMC Web console update methods because the BMC also halts the IPMI main process.

## **Corrective Action/Resolution**

BMC FW update from 1.03 and earlier to 1.06 and later must be done through the BMC web console update method or OOB update method. Update instructions for the mentioned methods are shown in the following section. For additional information customers can consult the Readme and Update Instructions included in the System Update Packages for the Intel® Server Board M10JNP2SB.

### **Intel Recommendations**

Intel recommends that customers follow the update instructions listed below to complete the BMC FW update from versions 1.03 and earlier to versions 1.06 and later.

For BMC FW updates from versions 1.06 and above the three methods for the Readme and Update instructions can be used.

### ***BMC Web Console Update Steps:***

1. Download and unzip M10JNP2SB\_8100.01.06.ima\_enc to a local directory.
2. Enter the BMC Web Console.
3. Navigate to the Maintenance menu and click on 'Firmware Update'
4. Select 'Select Firmware image' and click on the file 'M10JNP2SB\_8100.01.06.ima\_enc'
5. Click the green button 'Start Firmware Update' and wait for the Configuration screen to appear.
6. Click the green button 'Proceed to flash' then click 'Ok' on the pop-up prompt.
7. Wait until the 'Processing' screen disappears. When the BMC image is correctly uploaded, it should say 'Uploading 100%'.
8. The following message should appear on screen: 'The firmware image has been verified. The uploaded image is a different version of the existing device firmware'
9. Click the green button 'Flash to Proceed' and then click 'Ok' on the pop. The progress of installation will appear in a green bar
10. Once installation is complete, 'Firmware reset has been called' will appear. Close the current session and open a new session after a couple of minutes and the prompt will appear. Click 'Ok'.
11. The system automatically reboots, disconnecting you from the BMC Web Console
12. After a couple of minutes, reconnect to the BMC Web Console and find the BMC version in the top left under the Firmware Information tab. All HDDs and SSDs should be listed in the BIOS setup menu/OPROM.

### ***BMC Installation via Script in Windows OS with OOB Method:***

#### ***Steps to follow on system to be updated:***

1. Assign an IP address, user and password to access to BMC Web Console.
  - a. Enter the BIOS Settings, then the Server Management tab and click on the BMC Network Configuration option. Configure all network details for 'Management Port 1' as IP address, Subnet mask, Router IP address and connect your system BMC dedicated port management to a LAN.
  - b. Enter the BIOS Settings, then the Server Management tab and click on the BMC User Settings option, configure a user via the 'Add User' option. For additional information, refer to the BMC Web Console User Guide.

2. Ensure that the system requiring an update can access the BMC Web Console.

### **Steps to Follow on the Remote Manager Server (Remote LAN Installation)**

1. Ensure that your remote manager server is connected to the BMC LAN dedicated port and that your target server has access to the BMC Web Console with a configured IP address, user and password.
2. Unzip the contents of the M10JNP2SBXXXX firmware update package and copy all files to the root directory of a removable media (USB flash drive)
3. Insert the USB flash drive to any available USB port on the system
4. Power on the server and load Windows OS
5. Open the command prompt in administrator mode by right clicking on the command prompt and click on 'Run as Administrator', then find the current FW directory (For example \M10JNP2SBXXXX\)
6. Begin the update process by executing the following command: 'Update\_BMC\_OOB\_win.bat [IP Address] [User] [Password]' using the information of the server you want to update by LAN (target system). Example: E:\Update\_BMC\_OOB\_win.bat 10.99.241.160 User Password1234
7. When the flash has successfully completed, please reboot the target system
8. Confirm the BMC version via POST information or press <F2> to enter the BIOS setup and check the BMC revision of the updated server.

### **BMC Installation with Script in Linux OS with OOB Method:**

#### **Steps to follow on system to be updated:**

1. Assign an IP address, user and password to access the BMC Web Console.
  - a. Enter the BIOS Settings, then the Server Management tab and click on the BMC Network Configuration option. Configure all network details for 'Management Port 1' as IP address, Subnet mask, Router IP address and connect your system BMC dedicated port management to a LAN.
  - b. Enter the BIOS Settings, then the Server Management tab and click on the BMC User Settings option and configure a user via the 'Add User' option. For additional information, refer to the BMC Web Console User Guide.
2. Ensure that the system requiring an update can access the BMC Web Console

#### **Steps to follow on remote manager server (remote LAN installation)**

1. Ensure that your remote manager server is connected to the BMC LAN dedicated port and that your target server has access to the BMC Web Console with a configured IP address, user and password.
2. Unzip the contents of the M10JNP2SBXXXX firmware update package and copy all files to the root directory of a removable media (USB flash drive)
3. Insert the USB flash drive to any available USB port on the system
4. Power on the server and load Linux OS
5. Open the console in root mode and find the current directory (For example \M10JNP2SBXXXX\)
6. Begin the update process by execute the following command: './Update\_BMC\_OOB.sh [IP Address] [User] [Password]' using the information of the server you want to update by LAN (target system) Example: ./Update\_BMC\_OOB.sh 10.99.241.160 User Password1234
7. When the flash has successfully completed, reboot the target system
8. Confirm the BMC version in POST information or press <F2> to enter the BIOS setup and check the BMC revision of the updated server

**Please contact your local Intel Sales Representative if you require more specific information about this issue.**

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