

## Merit LILIN Application Note

NAV OS SSD Might Cause NAV Recorder Instable

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**Dept:** Technical Support, Taipei

**Subject:** LILIN Nav Server. Possible instabilities discovered relating to usage of certain make/model SSD's when being used for the operating system drive. How to identify and fix any issues.

This fix is not critical; however, it is strongly recommended to update the SSD software driver during any routine maintenance visits. However, if a NAV server experiences system freezes or has any blue screen issues, update the SSD software driver immediately.

LILIN NAV Recorders:

NAV3025, NAV1036, NAV1072, NAV1108, NAV08036, NAV08072, NAV08108, NCS3600

### Which problems may be experienced

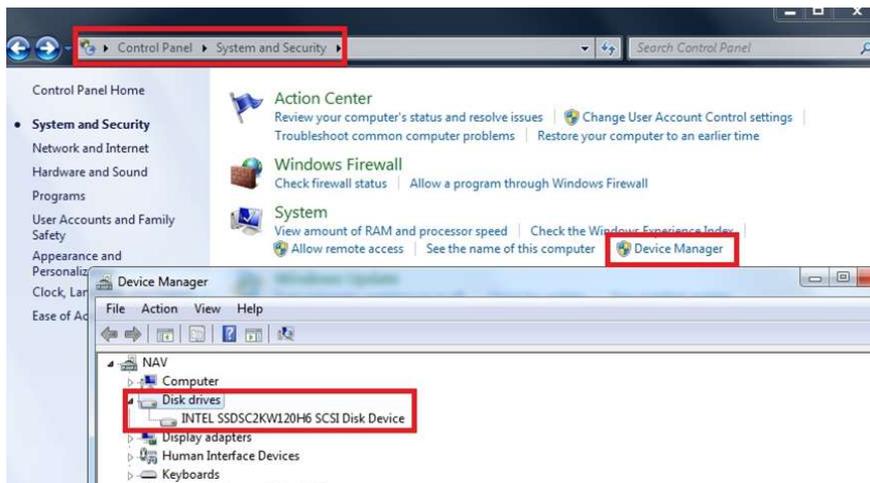
Intel SSD 520, 530, 535, 540S and Kingston SSD SHSS37A, SHFS37A, UV400 are used for LILIN NAV server operating systems drives, it has been discovered that they have a small chance to cause the server operating system to freeze or blue screen.

### How to resolve it?

Intel and Kingston have provided a firmware to address some bugs discovered. Please follow the instruction below to upgrade the SSD's firmware.

#### 1. Upgrade the SSD firmware

First, confirm what model of SSD is installed, and then choose a related update method from the choices below.





1-1. For Intel SSD 520 and 540S

Step1. Download the Intel® Solid State Drive Toolbox from the web site:

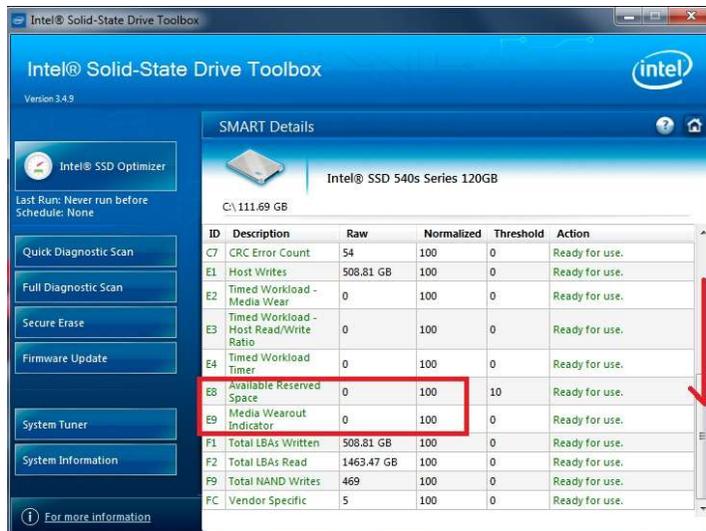
<https://downloadcenter.intel.com/download/27330/Intel-Solid-State-Drive-Toolbox?product=35125>

Step2. Install Intel® Solid State Drive Toolbox.

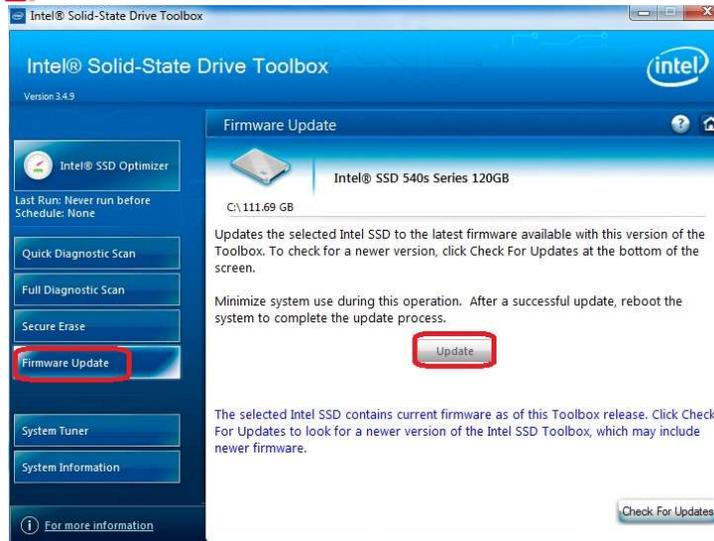
Step3. Make sure that an internet connection is available.

Step4. Execute Intel® Solid State Drive Toolbox from Start>All Programs> Intel® Solid State Drive Toolbox.

Step5. Click to see if the values of E8 & E9 are higher than 30%. If not, please RMA the SSD with the SSD manufacturer for repair.



Step6. Click the Update button to update the SSD firmware.

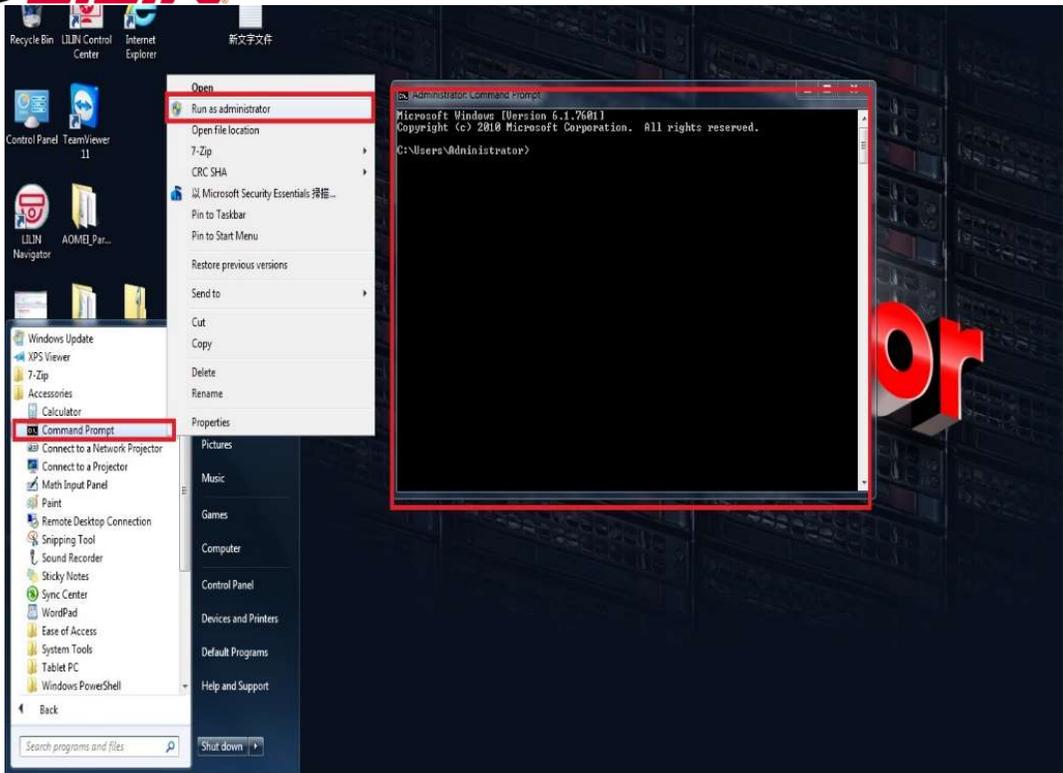


Step7. Reboot the PC once the firmware has updated successfully.

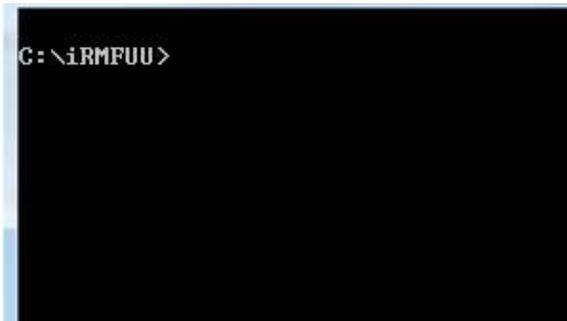
*NOTE: If the NAV server is still unstable after the SSD firmware has been upgraded the firmware, please return the NAV recorder to your local LILIN branch for inspection.*

1-2. For Intel SSD 530 and 535

- Step1. Download the Intel® SSD Non-Searchable Fixes and Misc Tools from the web site:  
<https://downloadcenter.intel.com/download/26452/Write-Amp-Firmware-for-Intel-SSD-530-535-Series>
- Step2. Copy/Unzip files to the root directory (for example, C:\). This creates an “iRMFUU” directory.
- Step3. Make sure an internet connection is available.
- Step4. Open Command Prompt as Admin.  
Click Start > All Programs, and then click Accessories.  
Right-click Command prompt, and then click Run as Administrator.



Step5. Change the directory to :\\iRMFUU (for example, cd c:\\iRMFUU)



Step6. Run the tool executable irmfuu\_7.0.1.exe.



```
C:\iRMFUU>irmfuu_7.0.1.exe

- Intel SSD -

ModelNumber : MR9260-8i
DevicePath : \\.\PHYSICALDRIVE0
ProductFamily : Property not found
Firmware : 2.13
SerialNumber :
FirmwareUpdateAvailable : The selected Intel SSD contains current firmware as of
this tool release.
Index : 0
Bootloader : Property not found
DeviceStatus : Healthy

Updating firmware...

Status : Drive is not an Intel SSD.

- Intel SSD 535 Series CTR53300106120AGN -

ModelNumber : INTEL SSD5C2BW120H6
DevicePath : \\.\PHYSICALDRIVE1
ProductFamily : Intel SSD 535 Series
Firmware : RG21
SerialNumber : CTR53300106120AGN
FirmwareUpdateAvailable : RG2U
Index : 1
Bootloader : Property not found
DeviceStatus : Healthy

Updating firmware...

Status : Firmware Updated Successfully. Please reboot the system.
```

Step7. Reboot the PC after firmware has successfully updated.

*NOTE: If the NAV server is still unstable after the SSD firmware has been upgraded the firmware, please return the NAV recorder to your local LILIN branch for inspection.*

1-3. For Kingston SSD SHSS37A, SHFS37A and UV400

Step1. Download the Kingston SSD Manager from the web site:

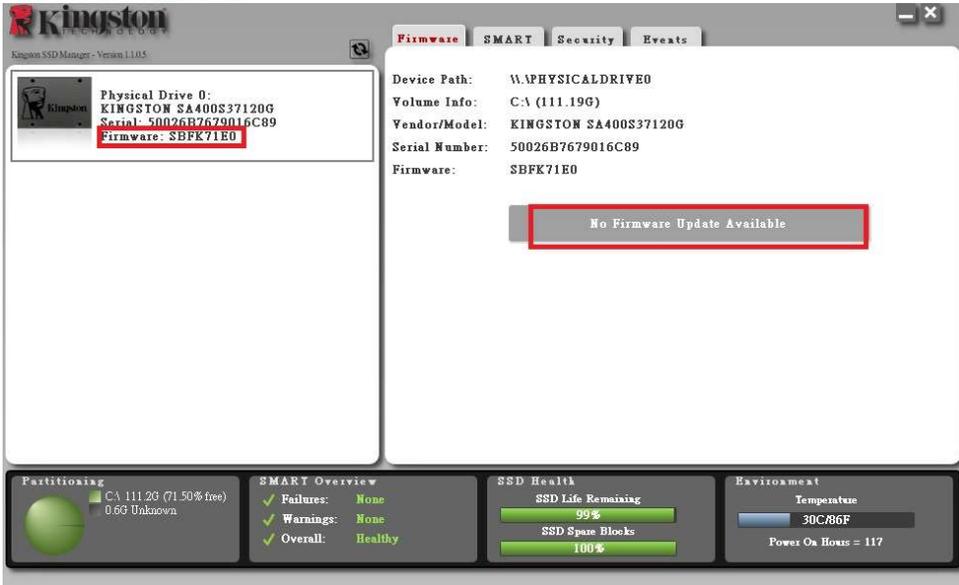
<https://www.kingston.com/us/support/technical/ssdmanager>

Step2. Install Kingston SSD Manager.

Step3. Make sure an internet connection is available.

Step4. Execute Kingston SSD Manager from Start>All Programs>Kingston SSD Manager.

Step5. Click Firmware Update Available button for SSD upgrades the new firmware.



Step6. Reboot the PC after firmware updated successfully.

**NOTE:** If the NAV server is still unstable after the SSD firmware has been upgraded the firmware, please return the NAV recorder to your local LILIN branch for inspection.

## Contact

Contact [lilin.zendesk.com](http://lilin.zendesk.com) for technical support.