

## SE100S3 Firmware Update Procedure (Linux)

### Intended for:

SE100S37/100G	SE100S37/100GBK
SE100S37/200G	SE100S37/200GBK
SE100S37/400G	SE100S37/400GBK

### Release Notes for SE100S3, Firmware Rev. 515ABBF0 (12/05/12)

- Enables TRIM support
- Improved TRIM operation during SATA error handling
- Improved handling of internal command errors
- Improved the efficiency of flash error recovery
- Fixed an issue where S.M.A.R.T. Attribute 194 would not report "128" if the temperature sensor on the I2C times out

**Warning!** - Before attempting to update your SE100S3 SSD, you must make sure that **TRIM is disabled**. Please follow the steps below before proceeding with your firmware update.

### Confirming that TRIM is disabled within Linux

**Step 1:** Open a command prompt and type: ***grep -iwc discard /etc/fstab***

```
user@user6000: ~  
user@user6000:~$ grep -iwc discard /etc/fstab  
0
```

If it returns a value of "0", then TRIM is disabled on all volumes.

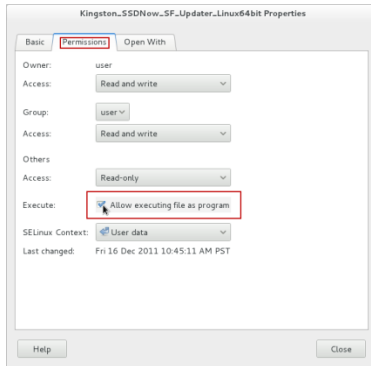
### System Preparation:

- As a precaution, perform a backup of all your data to ensure no data is lost during the firmware update process.
- You must be running Linux in AHCI mode for this to function properly. You cannot update the SSD through a RAID controller or while running in RAID mode.
- Use only native SATA ports to perform upgrade. Do NOT use third party controllers.
- Do not unplug power at any time during the firmware update.
- Notebook users, please charge battery to full charge or use AC power to prevent any power loss during firmware upgrade.

## Step 1: Locating the file and selecting file permissions

Locate your download, right-click the file, select “Properties” and click on the “Permissions” tab. Make sure that “Allow executing file as program” is selected.

\*Note: If you’re using a different GUI (Graphical User Interface) with Linux, you can also ensure the file permissions allow executing via terminal by typing `>sudo chmod +x{name of the update utility}`

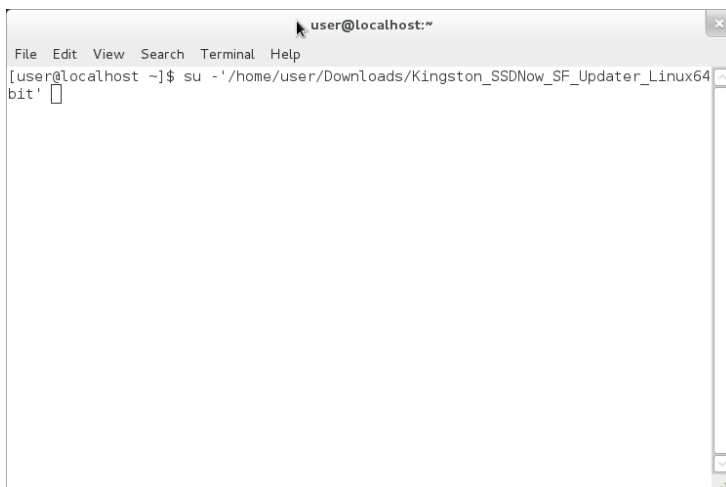


## Step 2: Launching the Updater

Open a terminal window, type “sudo” or “su -”, press the spacebar once and then drag the updater executable from your download location into your terminal window. The path of the update utility will auto-populate in the terminal window (as seen in the image below.)

**To launch the updater, you must reselect the terminal window by clicking on it before pressing “Enter”. This will ensure that you have selected the active window.** Once you do this, you will be prompted for your password to run the executable.

Enter your password and proceed to the next step.

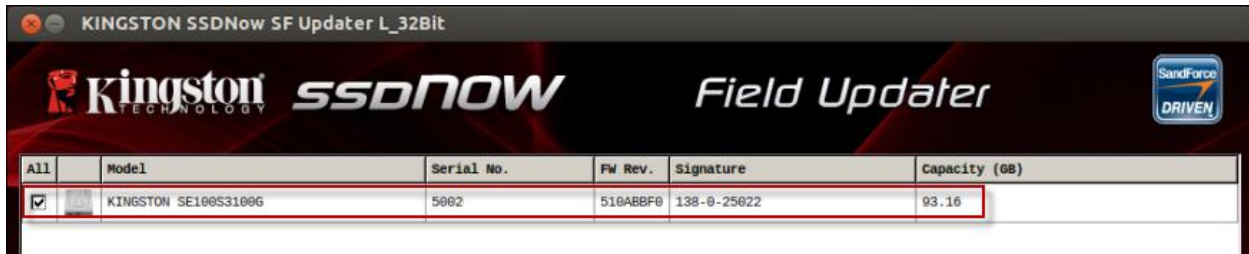


### Step 3: Confirming your model number and firmware revision

Confirm that your model drive is present and select the one you wish to update by checking the selection box next to the model number.

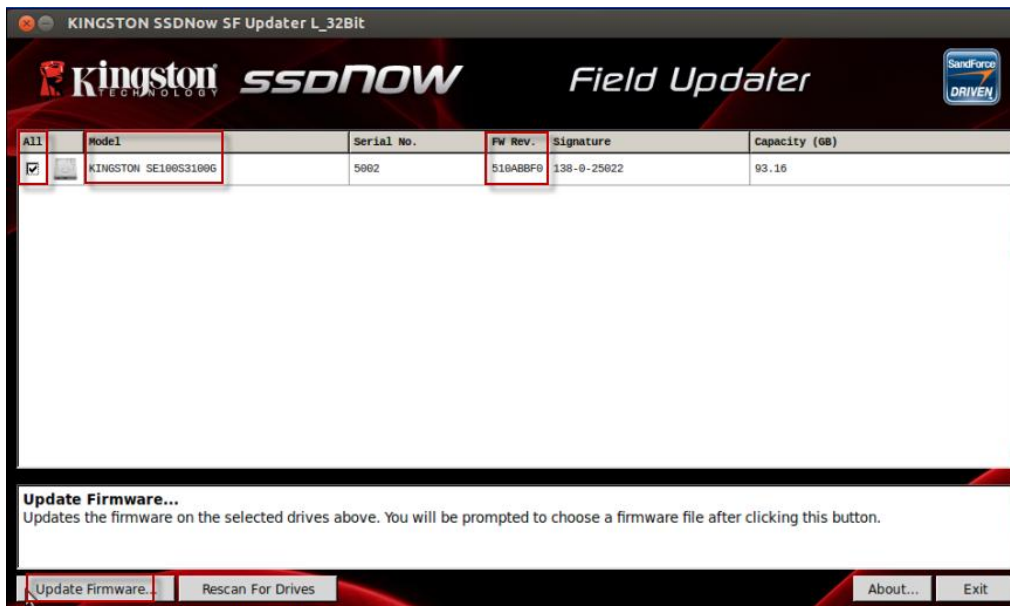
- If you are updating the SE100, you will see SE100S3xxxG

(Note: If you wish to update multiple drives, you must do so one at a time.)



### Step 4: Selecting the “Update Firmware” option

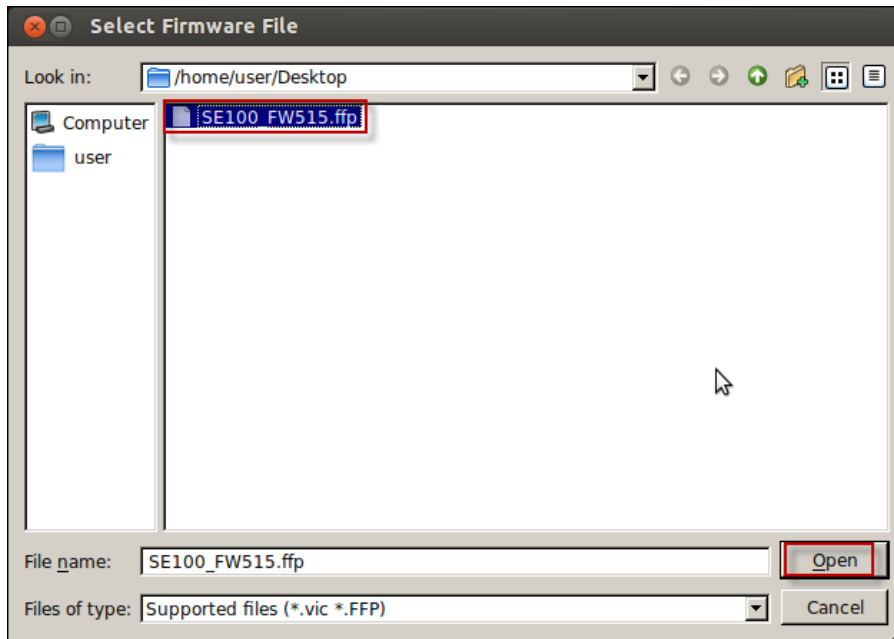
Once you’ve confirmed that you need to update your drive’s firmware and selected the box next to the corresponding Model Name, click on the **Update Firmware** button located in the lower left corner of the application interface.



### Step 5: Locating the update file

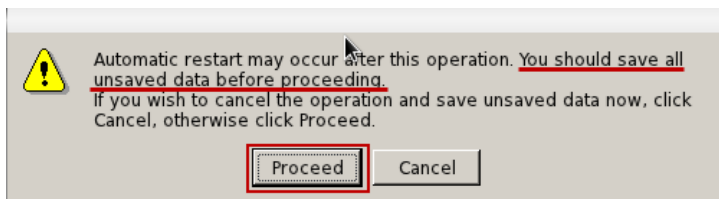
You will be prompted to select the appropriate firmware file you wish to update with. To do this, navigate to where you downloaded the update and select the file that matches the drive you wish to update. (Ex. SE100S3 515 FW shown)

- If you are updating the SE100, you will see SE100\_FWxxx.ffp




### Step 6: Alert messaging and proceeding to update

If you haven't already backed up your data as indicated in the "System Preparation" section of this document, you should cancel the update, back up your data and then proceed back through steps 1-5. If you have successfully backed up your data, select "Proceed" to continue the update process.



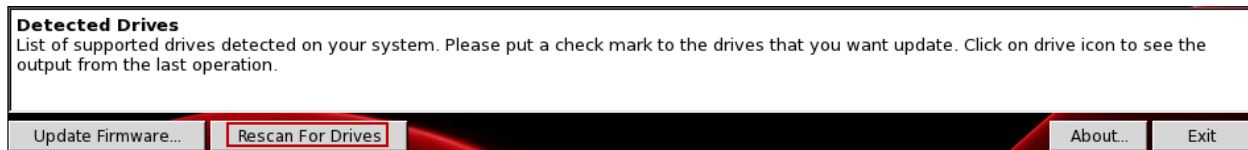
### Step 7: Successful update

The update process will take approximately 1 minute to complete. When it has completed successfully, you will receive a green check next to your Model “**Kingston SE100S3xxxx**”. Proceed to step 8 for additional confirmation information.

All	Model	Serial No.	FW Rev.	Signature	Capacity (GB)
<input checked="" type="checkbox"/>	 KINGSTON SE100S3100G	5002	510ABBF0	138-0-25022	93.16

### Step 8: Confirming successful update

As a secondary confirmation, select the “Rescan for Drives” button in the lower left corner of the application. This will enable the utility to refresh your drive so that you can verify that your SDD’s firmware has been updated. Continue to step 9.



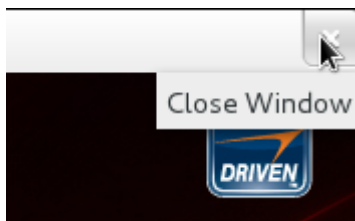
### Step 9: Confirming successful update (cont.)

Your updated firmware revision will be displayed under “**FW Rev.**” and should read “**515xxxxx**”.

All	Model	Serial No.	FW Rev.	Signature	Capacity (GB)
<input type="checkbox"/>	 KINGSTON SE100S3100G	5002	<b>515ABBF0</b>	138-0-25022	93.16

### Step 10: Closing the update utility

Close the Field Updater by clicking the “X” in the top right corner of the application. Your firmware update is complete.



### Step 11: Restarting your system

After completing the firmware update process, Kingston recommends that you safely shutdown your system, wait 10 seconds and then power on.