

# Samsung NVM Express Driver v3.1

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## Installation Guide

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Revision 3.1

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# Table of Contents

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LEGAL DISCLAIMER	01
<hr/>	
COPYRIGHT	01
<hr/>	
TRADEMARKS & SERVICE MARKS	01
<hr/>	
Revision History	03
<hr/>	
Overview	04
- System Requirements	04
- System Configuration	04
<hr/>	
Driver Installation	05
<hr/>	
EULA	09
<hr/>	

## Revision History

Revision	Description	Revision Date
1.0	. Initial release version	November, 2015
1.1	. Driver version update for USB compatibility	January, 2016
2.0	. Support for 960PRO and EVO	November, 2016
2.1	. Improve idle power saving on Windows 10 . Unsafe shutdown bug fix on Windows 8.1 & 10	December, 2016
2.2	. Hyper-V compatibility bug fix	March, 2017
2.3	. Support encrypted drive	October, 2017
3.0	. Support for 970PRO, 970 EVO and 970 EVO Plus	April, 2018
3.1	. Windows 10 RS5 compatibility fix	January, 2019

# Overview

This guide describes how to install the Samsung NVM Express driver 3.1 (hereinafter “driver”) for Windows Operating Systems. The driver supports the Samsung NVMe SSD 970 PRO, 970 EVO, 970 EVO Plus, 960 PRO, 960 EVO and 950 PRO.

## System Requirements

The driver supports Windows 7, Windows 8.1 and Windows 10.

Recommended system configuration (minimum):

- Intel Haswell Refresh Processor
- 2GB RAM
- 50MB free disk space
- UEFI Bios v2.3

## System Configuration

Windows Operating System shall successfully load the driver only when Samsung NVMe SSD 970 PRO, 970 EVO, 970 EVO Plus, 960 PRO, 960 EVO or 950 PRO is installed to

- PCIe slot directly connected to CPU or
- M.2 or PCIe slot connected to PCH.

However, in the PCH case, Windows Operating System cannot load the driver under following BIOS configurations where

- PCH Storage Configuration is set to “Raid Mode, or
- NAND/Storage Remapping option\*” is enabled.

\* The option name can be different according to M/B manufacturers.

Please refer to your M/B manual.

# Driver Installation

The driver installation procedure is as follows

## 1. Download and Decompression

If you download the driver installer file, from Samsung.com\*, you will see the driver installer file, “Samsung\_NVM\_Express\_Driver\_3.1.exe”.



\* <http://www.samsung.com/semiconductor/minisite/ssd/download/tools/>

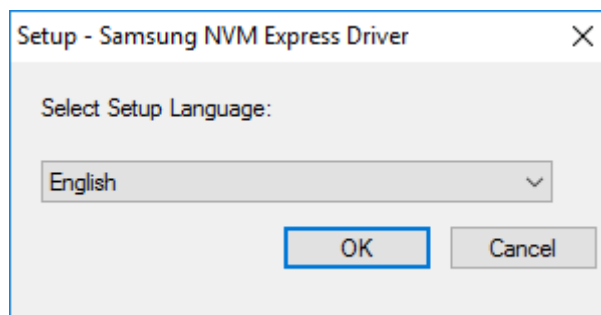
## 2. Installing the SMASUNG NVM Express Driver

### 2.1. Running “Samsung\_NVM\_Express\_Driver\_3.1.exe” file

Double click the “Samsung\_NVM\_Express\_Driver\_3.1.exe” file with the administrator rights.

### 2.2. Language Selection

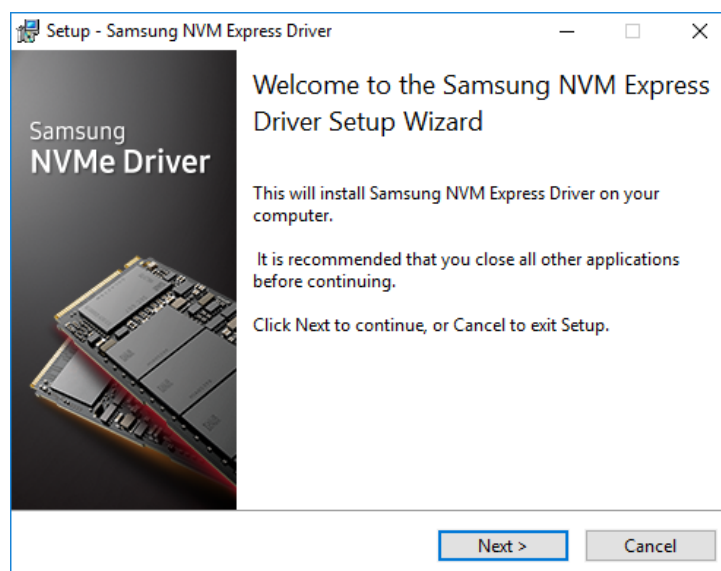
When the below screen pops up, select setup language and click OK to begin the installation.



# Driver Installation

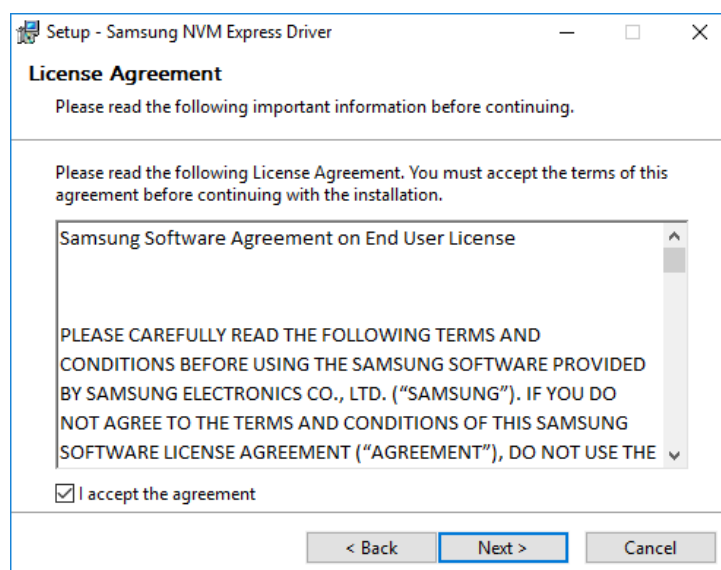
## 2.3 Samsung NVMe Driver Setup Wizard

When the below screen pops up, continue with the installation by clicking next.



## 2.4. License Agreement

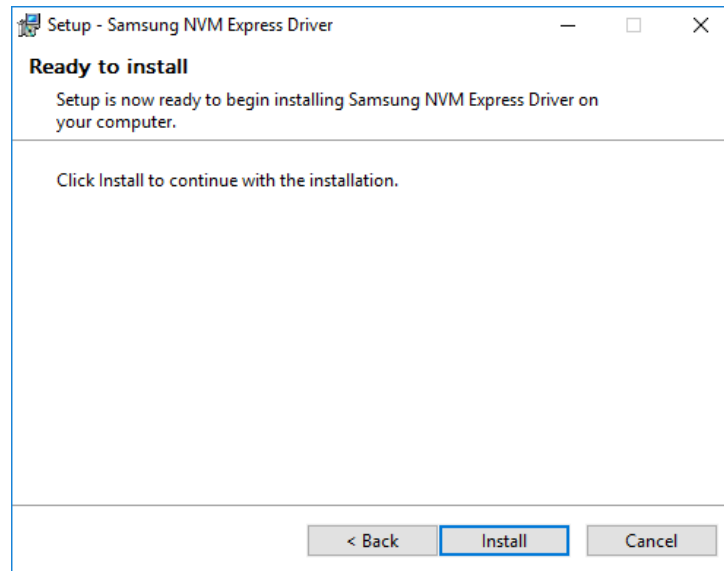
When the below Samsung License Agreement screen pops up, please read the agreement, click the "I accept the agreement" button and click Next to continue with the installation.



# Driver Installation

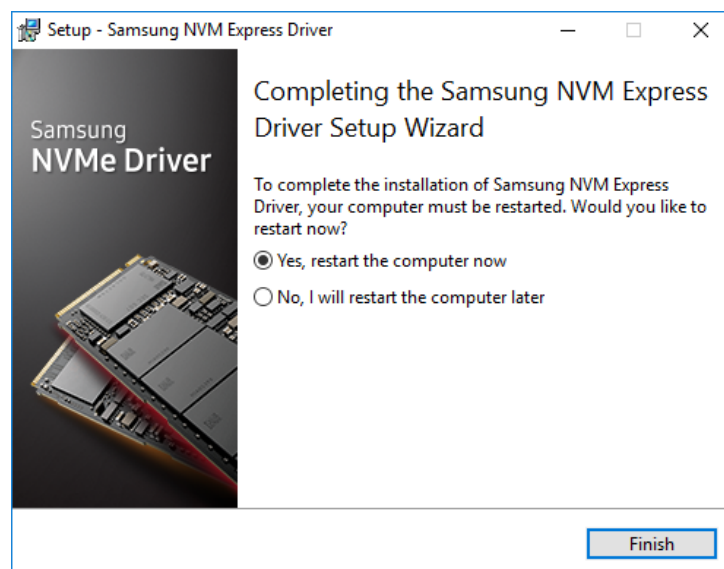
## 2.5 Ready to Install

Now, the Samsung NVM Express driver is ready to install. Click Install to continue with the installation.



## 2.6 Restarting the Computer now

Lastly, when the setup completion screen pops up, complete the installation by clicking "Yes, restart the computer now" or "No, I will restart the computer later" button and then click Finish. (We recommend restarting the computer after the installation)



# Driver Installation

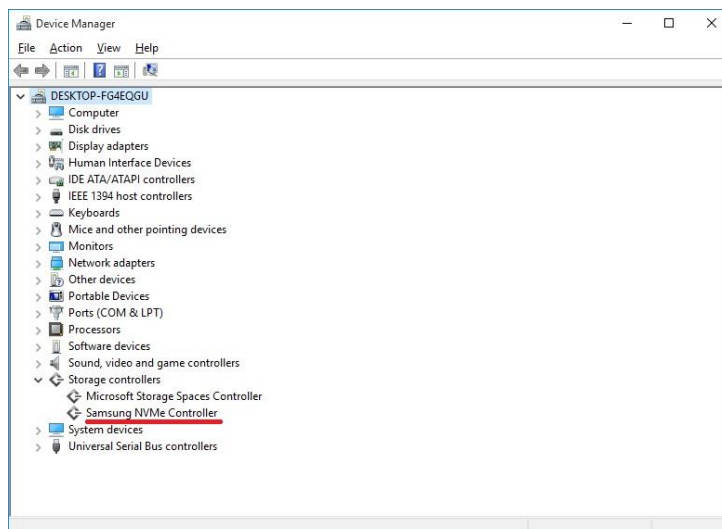
## 2.7 Repair and Uninstall

Repair and uninstallation of the driver can be performed via the Programs and Features section within the Control Panel. Alternatively the user can launch the installer executable file (with administrator rights) and complete the desired action this way. Repair tries to fix errors, while uninstall removes the driver from the computer.



## 3. Confirming the installed driver

If you initiate the Windows Device Manager, a list of all the hardware present in your system is shown. If “Samsung NVMe Controller” is shown below the “Storage controllers” as below, the installation is successful.





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# End of Document

January 2019

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