

SK hynix SSD 펌웨어 업데이트 매뉴얼

본 자료의 저작권은 SK하이닉스가 가지고 있습니다. 본 자료의 무단 복제, 사용은 엄격히 금지되며, 저작권법에 따라 SK하이닉스는 언제든지 예고 없이 매뉴얼의 상세 내용을 변경할 수 있는 권리를 가지고 있습니다. 본 자료에서 SK하이닉스가 제공한 정보는 정확하고 신뢰할 수 있지만, 예외 케이스가 발생할 수 있음을 안내 드립니다.

1) 개요

A. 소개

SK하이닉스에서 제공하는 SSD 펌웨어 업데이트 유틸리티는 모든 SK하이닉스 SSD를 지원합니다. SK하이닉스는 자사 SSD의 성능과 사용자 환경을 개선하기 위하여 새로운 펌웨어를 제공할 수 있으며, 최신 펌웨어 버전이 출시 될 때마다 업데이트를 권장합니다.

B. 주의사항

- 1. SK하이닉스 펌웨어 업데이트 유틸리티는 모든 SK하이닉스 Brand SSD를 지원합니다.
- 2. '펌웨어 업데이트 유틸리티'를 실행하기 전에 기존 SSD에 저장된 모든 데이터를 다른 저장장치에 저장하기를 권장합니다. 이는 펌웨어 업데이트 중 발생 가능한 SSD 초기화 및 부분 또는 전체 데이터 손실로 인한 손상을 방지하기 위해서 입니다. 안전한 데이터 이전을 위하여 SK하이닉스에서 공식적으로 제공하는 소프트웨어를 사용하는 것을 추천합니다.
- 3. 업데이트는 안정적인 전원이 공급된 상태에서 진행 바랍니다. 펌웨어 업데이트 중에는 SSD를 시스템에 항상 연결 바랍니다. 업데이트 중에 전원이 차단되거나 케이블의 연결이 끊어질 경우, SSD가 영구적으로 손상되거나 작동하지 않을 수 있습니다.
- 4. 업데이트가 진행되는 동안 발생 가능한 데이터 손실 및 복구에 SK하이닉스는 책임을 지지 않습니다. 업데이트 실행 전 본 설명서를 숙지하는 것을 추천합니다. 참고로 펌웨어 업데이트는 필수 사항이 아니며, 업데이트 실행 여부는 사용자 본인에게 달려 있습니다.

C. 시스템 요청 사항

제품을 업데이트 하기 전에 다음과 같은 사항을 확인 바랍니다.

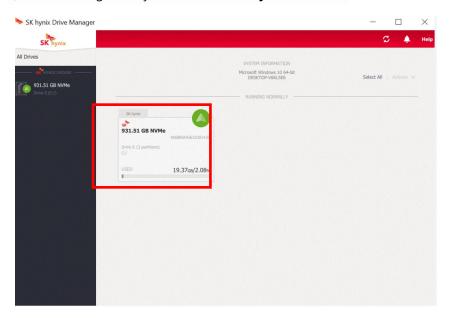
- 1. 하드웨어
- SK하이닉스 SSD
- USB 플래시 디스크 (용량 최소 30MB)
- 2. 소프트웨어
- Drive Manager: SK하이닉스 홈페이지에서 다운로드 가능 (https://ssd.skhynix.com)

2) 펌웨어 업데이트 유틸리티 설치

- 1. SATA (Gold S31)
- ① SK하이닉스 SSD 홈페이지에서 Drive Manager: Easy Kit, Firmware 다운로드.



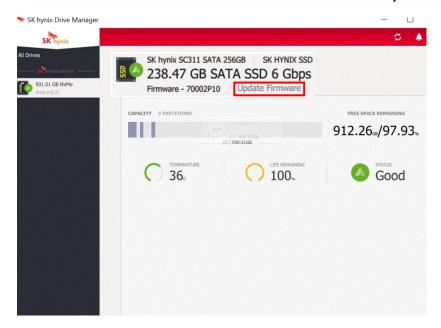
② Drive Manager: Easy Kit 실행 후 SK hynix SSD 클릭



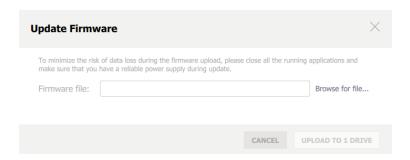
- ③ Update Firmware 클릭.
- 모든 드라이브 창에서 필요한 Drive Area/Areas를 클릭한 다음 작업 메뉴에서 Firmware update를 클릭합니다.

또는

필요한 드라이브의 Drive Information 창에서 Firmware update를 클릭합니다.



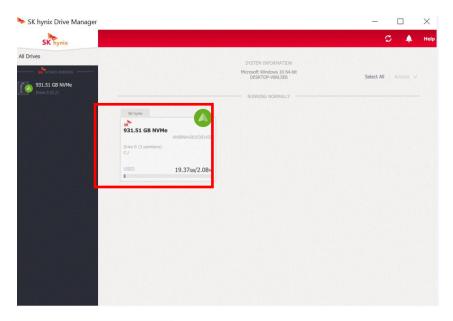
④ Update Firmware 대화 상자가 나타나면, Update에 사용할 파일을 선택하기 위해 Browse for file...을 클릭



- ⑤ UPLOAD 버튼 클릭
 - UPLOAD 버튼에는 Firmware를 업로드할 드라이브 수가 표시 됩니다.
- 2. PCIe NVMe (Gold P31)
 - ① SK하이닉스 SSD 홈페이지에서 Drive Manager: Easy Kit, Firmware 다운로드.



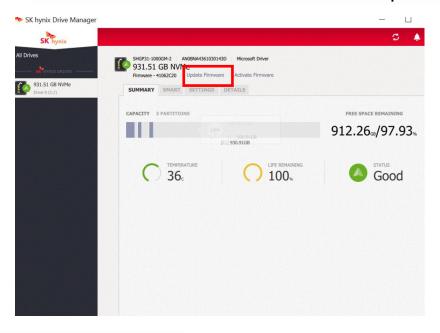
② Drive Manager: Easy Kit 실행 후 SK hynix SSD 클릭



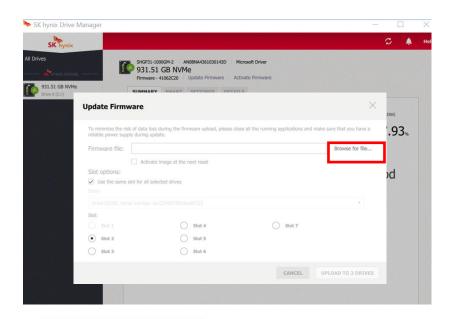
- ③ Update Firmware 클릭.
- 모든 드라이브 창에서 필요한 Drive Area/Areas를 클릭한 다음 작업 메뉴에서 Firmware update를 클릭합니다.

또는

필요한 드라이브의 Drive Information 창에서 Firmware update를 클릭합니다.



④ Slot 선택 후 Firmware 검색

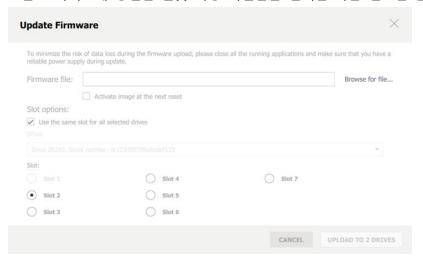


- Drive 하나를 선택한 경우

Firmware update 대화 상자가 나타나면 Browse for file...을 클릭합니다. Update에 사용할 파일을 선택한 다음 필요한 NVMe Slot을 선택

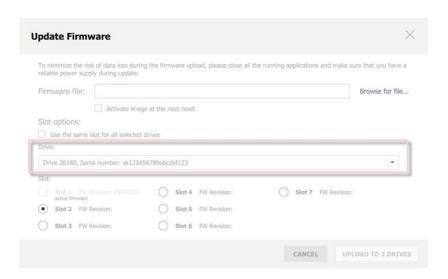
- Drive를 여러 개 선택한 경우

선택한 모든 Drive에 대해 동일한 슬롯에 Firmware update 이미지를 업로드하려면 선택한 모든 드라이브에 동일한 슬롯 사용 확인란을 선택한 다음 필요한 슬롯을 선택

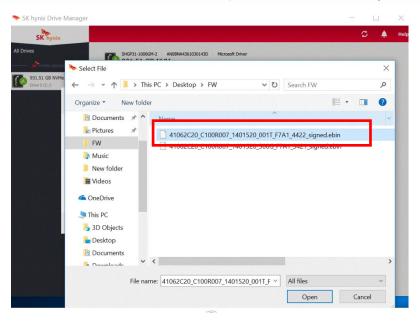


또는

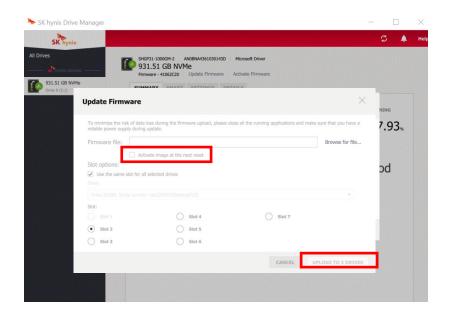
Firmware Update 이미지를 다른 Slot(각 Drive마다 별도의 Slot)으로 업로드하려면 드라이브 필드의 Drop-down 목록에서 Drive 이름을 선택한 다음 필요한 슬롯을 선택



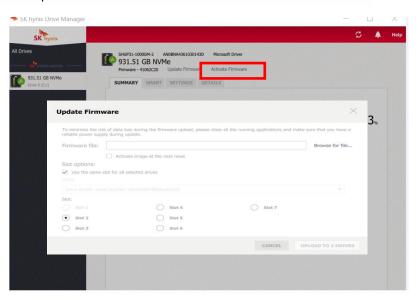
⑤ 기존에 다운 받은 Firmware 선택 후 Upload 버튼 클릭 (Density 별 Firmware 선택 필요)



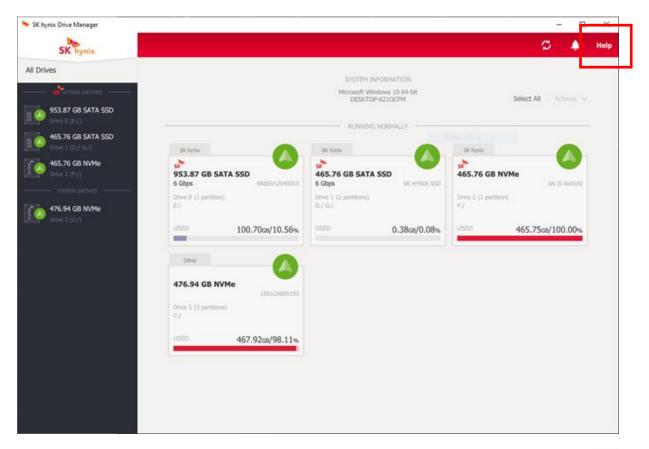
- Firmware를 업로드한 직후에 활성화하려면 **Activate image at the next rest**. 체크 박스를 클릭 합니다. (이러한 경우 Step7: Activate Firmware 과정이 필요하지 않음)
- UPLOAD 버튼을 클릭합니다. Upload된 Firmware를 활성화하려면 Reset이 필요합니다. 재부 팅이 필요할 수 있습니다.
- Windows Server 2012 및 Windows 8.1 firmware의 Microsoft Windows 기본 제공 드라이버 는 업로드 직후에 자동 활성화됩니다.



⑦ Firmware upload 후 **Activate Firmware** 클릭하여 Firmware 실행



*참고: Firmware update관련 추가 정보 필요 시 Drive Manager Easy Kit 실행 후 상단의 **Help** 버튼 클릭하시면 자세한 내용을 확인할 수 있습니다.



-고지문

<Open source Software>

mbedtls

Copyright (C) 2006-2015, ARM Limited, All Rights Reserved

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the

License at http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

Apache License

Version 2.0, January 2004

http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"**License**" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"**Licensor**" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this

definition, "**control**" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"**Source**" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"**Object**" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"**Contributor**" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

- **2. Grant of Copyright License**. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
- **3. Grant of Patent License**. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
- **4. Redistribution**. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - 1. You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - 2. You must cause any modified files to carry prominent notices stating that You changed the files; and
 - 3. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - 4. If the Work includes a "**NOTICE**" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-

party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

- **5. Submission of Contributions**. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
- **6. Trademarks**. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
- **7. Disclaimer of Warranty**. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
- **8. Limitation of Liability**. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer

failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS