

Intel® Solid State Drive Pro Administrator Tool

User Guide

June 2016

Software Version 1.x



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1 Introduction

This guide explains how to use the Intel® Solid State Drive Pro Administrator Tool. This is a Windows* command-line tool, and is designed to support security and manageability settings on the Intel® SSD Professional Family and Embedded Family of products.

This tool supports the following functions:

1. Detects and reports status of Intel® SSDs attached to the system
2. Enables eDrive* (supported on the Intel® SSD Pro 2500 Series)
3. Completes the PSID Revert process†
4. Executes a Secure Erase

†Only available on Intel® SSDs with Opal support. May have limitations based on OEM vendor requirements.

1.1 Revision History

Revision Number	Description	Revision Date
001	Initial release software version 1.0.0	January 2014
002	Updated for software version 1.1.0	July 2014
003	Amended section 4.4, "PSID Revert."	December 2014
004	Updated for software version 1.1.3	June 2016

1.2 Terminology

Term	Description
Opal*	A specification by the Trusted Computing Group* that provides a comprehensive architecture for putting storage devices under a security policy controlled by the platform host
PSID	Physical presence Security ID: A unique code printed on the drive's label
eDrive*	Microsoft* specification for a drive that complies to the TCG* Opal 2.0* and IEEE 1667* standards
SECURE ERASE	An ATA command that removes all user data from a drive
OS	Operating System
RAID	Redundant Array of Independent Disks (formerly Redundant Array of Inexpensive Disks)
SATA	Serial ATA
SSD	Solid State Drive

1.3 Known Issues

Compatibility	Intel SSD Pro Administrator Tool is not compatible with the Supermicro* H8DAi-2, TYAN* Thunder N3600M motherboard – NVIDIA nForce* Pro 3600
Functionality	When selecting CTRL-Z and pressing Enter at one of the prompts, the Intel SSD Pro Administrator Tool will go into an infinite loop.



2 Setting Up the Tool

2.1 System Requirements

Requirements for the Intel SSD Pro Administrator Tool are:

- Intel SSD Professional Family and/or Embedded Family drive.
- Administrator rights are required to run the tool on Windows 7*, Windows 8*, Windows 8.1*, and Windows 10*.

2.2 Installing the Administrator Tool

To install the Intel SSD Pro Administrator Tool:

1. Create a directory on the host (for example: C:\temp).
2. Go to intel.com/ssd.
3. Click on **Tools** to expand the selection box.
4. Select **Intel® SSD Pro Administrator Tool**.
5. Download the tool to the directory you created in step 1.

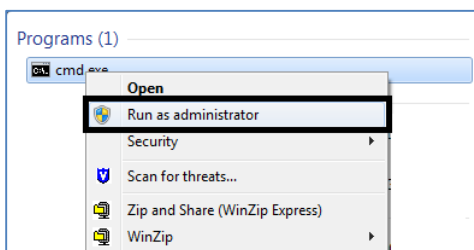
NOTE: The tool is available in 64 and 32-bit versions. Download appropriate version for your system configuration.

The downloaded executable is named in the format: SSDProAdminTool_<version>_[win32|win64].exe. For example, if you downloaded version 1.1.0 for a 64-bit system, the executable would be named: SSDProAdminTool_1.1.0_win64.exe

2.3 Launching the Administrator Tool

To launch the Intel SSD Pro Administrator Tool:

1. Type **cmd** in the Windows* search field to show the cmd.exe program
2. Right click to open the menu and select **Run as administrator**.



3. In the command window, change to the directory where you copied the tool.
4. Run the tool. For example:

```
C:\temp\SSDProAdminTool_1.1.0_win64.exe
```



3 Command Line Options

The Intel SSD Pro Administrator Tool uses a Command Line Interface (CLI). Available command line options and a detailed description of each are provided in the following table. Alternatively, running the tool without any options will output the help.

Table 1: Command Line Options

Option	Description
-help	Displays the command line options table.
-license	Displays the Intel SSD Pro Administrator Tool's end-user license text.
-drive_list	Scans the system for attached drives and display the results. The data will be saved to a file in CSV format if filename is provided. All other CLI arguments are ignored.
-log	Outputs a detailed log of the Intel Pro Administrator Tool's functionality.
-drive_index	Selects which attached drive to execute functions on. Uses index value.
-drive_serial	Selects which attached drive to execute functions on. Uses drive serial value.
-drive_path	Selects which attached drive to execute functions on. Uses drive path value.
-psid_revert	Issues a PSID Revert to the selected drive.
-enable_edrive	Enables eDrive* support on selected drive. (Available only on certain Intel® SSD Professional Family drives. Check product specification for support.)
-format	Erases all data on a selected drive.



Option	Description
<p>-format Erases all data on a selected drive.</p> <p>NOTE: This option will erase everything on a partitioned drive, including the partition. This issues a warning if the Intel SSD Pro Administration Tool detects that the selected drive has a partition.</p>	<p>Erases all data on a selected drive.</p>
<p>Usage</p>	<p>SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -format <SES></p>
<p>Arguments</p>	<p><SES> is the Secure Erase Setting. Supported values are: 0 = Standard Secure Erase (Default) 1 = Enhanced Secure Erase</p>
<p>Used with</p>	<p>-drive_index</p>
<p>Example</p>	<p>SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -format</p>
<p>-secure_erase</p>	



3.1 Command Line Detailed Descriptions

The following sections describe the Command Line Interface (CLI) for the Intel SSD Pro Administrator Tool.

-help

Displays the CLI options table.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -help
Arguments	None
Used with	None
Example	SSDProAdminTool_1.1.0_x64.exe Running the tool without any options will also output the help.

-license

Displays the Intel SSD Pro Administrator Tool end-user license agreement.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -license
Arguments	None
Used with	None
Example	SSDProAdminTool_1.1.0_x64.exe -license

-drive_list

Scans the system for attached drives and adapters and displays the results. Use this option to show the drive indexes that will be used by -drive_index.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_list [<filename>]
Arguments	<filename> is an optional argument. This will save the results to the given filename in CSV format.
Used with	None
Example	SSDProAdminTool_1.1.0_x64.exe -drive_list my_list_file.txt



-log

Saves a detailed output file for the specified execution.

NOTE: This does not log the functionality output displayed on the screen. It is mainly useful for debug purposes.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -log [<filename>]
Arguments	<filename> is an optional argument. When given, the log file will be saved to the given filename. If no filename is given, then the tool will assign filename with a date and time stamp.
Used with	All Intel Pro Administrator Tool functions.
Example	SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -log my_logfile.txt

-drive_index

Selects which attached drive to execute functions on.

NOTE: This is similar to -drive_serial and -drive_path. You only need to use one of them.

Run -drive_list to see the drive indexes for each attached drive. Basic drive information will be displayed if no additional options/functions are used.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value>
Arguments	<value> corresponds to the drive index from -drive_list.
Used with	-psid_revert, -enable_edrive, -secure_erase
Example	SSDProAdminTool_1.1.0_x64.exe -drive_index 1

-drive_serial

Selects the attached drive on which to execute the functions.

NOTE: This is similar to -drive_index and -drive_path. You only need to use one of them.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_serial <num>
Arguments	<num> is the serial number of the drive. See the "Serial Number" field in the -drive_list output.
Used with	-psid_revert, -enable_edrive, -secure_erase
Example	SSDProAdminTool_1.1.0_x64.exe -drive_serial CVTS4093008R180IGN



-drive_path

Selects the attached drives on which to execute functions.

NOTE: This is similar to -drive_index and -drive_serial. You only need to use one of them.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_path <path>
Arguments	<path> is the device path of the drive. See the "Device Path" field in the -drive_list output.
Used with	-psid_revert, -enable_edrive, -secure_erase
Example	SSDProAdminTool_1.1.0_x64.exe -drive_path \\ \PHYSICALDRIVE0

-psid_revert

The -psid_revert command reverts the drive to its original factory state, Opal ready.

This function is supported only on Intel SSD Professional Family.

After the correct drive is selected and -psid_revert is invoked, the Intel SSD Pro Administrator Tool prompts for the drive's PSID. This value will be checked to verify that:

- It is greater than 0 characters and no more than 32.
- It only contains alpha-numeric characters.

If an invalid PSID is entered, the tool prompts for another. It will continue to prompt until a valid PSID is given. CTRL-C will stop the program.

The tool gives a detailed description of the PSID Revert operation.

The tool generates a random 10 character security string which you must enter.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -psid_revert
Arguments	None
Used with	None
Usage	SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -psid_revert



-enable_edrive

Enables eDrive on the selected device.

NOTES:

- eDrive support is available on certain Intel SSD Professional Family drives. Check product specification for support. Configuration cannot be changed if ATA Security enabled (ATA user password set).
- The tool currently only supports enabling eDrive. Enable eDrive if the support is needed for hardware encryption with Windows BitLocker*.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -enable_edrive
Arguments	None.
Used with	None.
Example	SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -enable_edrive

-format

Erases all data on a selected drive.

NOTE: This option will erase everything on a partitioned drive, including the partition. This issues a warning if the Intel SSD Pro Administration Tool detects that the selected drive has a partition.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -format <SES>
Arguments	<SES> is the Secure Erase Setting. Supported values are: 0 = Standard Secure Erase (Default) 1 = Enhanced Secure Erase
Used with	-drive_index
Example	SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -format

-secure_erase

Erases all data on a selected drive.

NOTE: This option will erase everything on a partitioned drive, including the partition. This issues a warning if the Intel SSD Pro Administration Tool detects that the selected drive has a partition.

Usage	SSDProAdminTool_<version>_[win32 win64].exe -drive_index <value> -secure_erase
Arguments	None.
Used with	-drive_index
Example	SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -secure_erase



3.2 Error Codes

The following table contains all of the possible error and status codes returned from the Intel SSD Pro Administration Tool. The first column lists the numeric value of the error/status code returned by tool. To see what the numeric return value is within Windows, type the following command in the command prompt after running the tool:

```
echo %errorlevel%
```

Table 2: Error Codes

Value	Code Name	Description
0	DM_NO_ERRORS	Completed successfully.
1	DM_READY	Ready to run.
3	DM_NOT_ATA	The Intel Pro Administrator Tool cannot communicate with the selected Intel SSD. Consider changing to another storage driver compatible with your system and try the Intel Pro Administrator Tool again.
4	DM_OPEN_DEVICE_FAILED	Error: Could not communicate with drive.
12	DM_SECURITY_FROZEN	Error: The selected Intel SSD is in the Security Frozen state. SECURE ERASE cannot run until the Security Freeze Lock is cleared. To remove the lock, power-cycle the SSD while the operating system is running. This can be done by unplugging and plugging the SSD.
13	DM_HAS_PARTITION	Selected Drive contains a partition
14	DM_NO_PARTITION	The selected Intel SSD has no partition. This feature requires a partition to run.
15	DM_ERASE_UNIT_FAILED	Error: SECURE ERASE Unit command failed. Reboot and try again. If error persists, consider using a DOS-based tool for SECURE ERASE.
16	DM_ERASE_PREPARED_FAILED	Error: SECURE ERASE Prepare command failed. Reboot your system and try again. If error persists, consider using a DOS-based tool for SECURE ERASE.
17	DM_SECURITY_ENABLE_FAILED	Error: Security Set Password command failed. Reboot your system and try again. If error persists, consider using a DOS-based tool for SECURE ERASE.
45	DM_NOT_INTEL	Error: Drive is not an Intel SSD.
73	DM_INVALID_ARGS	Error: Invalid arguments provided.
77	DM_CSMI	Error: This feature cannot run on a RAID member.
81	DM_CANCELED	Canceled.
87	DM_INVALID_DRIVE_INDEX	Error: Given drive index is invalid. Drive could not be found.
97	DM_RAID	This feature cannot run on a RAID volume. Select a specific RAID member to run this feature.
109	DM_ERROR_READ_NATIVE_MAX	Error: ATA read native max command failed.
110	DM_ERROR_SET_MAX_ADDRESS	Error: ATA Set native max command failed.
115	DM_INVALID_DRIVE_SERIAL	Error: Given drive serial is invalid. Drive could not be found.
118	DM_WRONG_GENERATION	Error: The selected drive does not support this feature.
126	DM_INVALID_DRIVE_LETTER	Error: Given drive letter is invalid. Drive could not be found.



Value	Code Name	Description
141	DM_INSUFFICIENT_BUFFER_SIZE	Error: The supplied buffer is not large enough for this command.
148	DM_WRONG_SKU	Error: Invalid drive SKU.
149	DM_SECURITY_ENABLED_SE	SECURE ERASE cannot be run on the selected drive because ATA security is enabled. Consider turning off ATA security before erasing the selected drive with the Intel Pro Administrator Tool.
152	DM_STORAGE_SPACE_MEMBER	The selected Intel SSD is part of a Storage Space. The Intel SSD must be removed from the Storage Space to use this feature.
155	DM_SECURE_ERASE_WIN_8	SECURE ERASE cannot be run on the selected drive because it is not a supported feature under Windows 8* or Windows Server 2012*.
179	DM_STANDBY_IMMEDIATE_FAILED_SE	Error: Standby Immediate command failed. Reboot your system and try again. If error persists, consider using a DOS-based tool for SECURE ERASE.
188	DM_DEVICE_FAULT	Error: The device fault is set on the selected drive. This functionality is not supported in the device fault state.
189	DM_ERROR_NVME_WINDOWS_DRIVER	Error from Windows* NVMe* Driver.
190	DM_ERROR_NVME_COMPLETION_ENTRY	Error: NVMe* Command failed.
198	DM_SCAN_NOT_RUN	Error: Scan was not run. Please run Scan before using GetDeviceList or GetDeviceString.
199	DM_INVALID_DRIVE_ID	Error: Given device ID is invalid. Drive could not be found.
203	DM_INVALID_DRIVE_PATH	Error: Given drive path is invalid. Drive could not be found.
204	DM_INVALID_DRIVE_CSMI	Error: Given CSMI information is invalid. Drive could not be found.
238	DM_ADAPTER_RESET_FAILED	Error: failed to reset adapter.
239	DM_SYSTEM_RESCAN_FAILED	Error: System rescan failed.
246	DM_NO_TPER_COMMAND_SET	Selected drive does not support this command.
247	DM_TPER_REVERT_SP_FAILED	Error: revert SP failed.
248	DM_TPER_START_SESSION_FAILED	Error: failed to start Trusted Peripheral session.
249	DM_TPER_BUSY	Error: Trusted Peripheral is busy. A session may already be open. Try power cycling the drive and rerunning the Intel Pro Administrator Tool.
250	DM_INVALID_PSID	Error: Entered an invalid PSID for the selected drive.
252	DM_DISABLE_LOGICAL_STATE	Error: Selected drive is in a disable logical state.
253	DM_OPAL_NOT_ACTIVATED	Error: Opal is not activated on the selected drive. Unable to revert.
255	DM_RAID_MEMBER	Error: This feature cannot run on a RAID member.
275	DM_IEEE_ALREADY_SUPPORTED	eDrive is already supported.
276	DM_IEEE_INCOMPATIBLE_FIRMWARE	Error: enabling eDrive with this tool is not supported on the selected Intel SSD. Please ensure the tool and the drive's firmware are up to date.
289	DM_IEEE_SECURITY_ENABLED	The configuration cannot be updated on the selected drive because ATA security is enabled. Consider turning off ATA security before changing the configuration with the tool.
290	DM_IEEE_ENABLE_FAILED	Error: Configuration update failed.



4 Tool Use Examples

To display the help table use the `-help` command line option.

```
SSDProAdminTool.exe -help
```

```
SSDProAdminTool.exe Description
-----
Intel SSD Pro Administrator Tool is used to complete a PSID Revert
operation on an Opal Activated drive and/or a secure erase operation.

-help [keyword]
-----
Description
-----
Display the help string and exit.All other arguments will be ignored.

Arguments
-----
[keyword] - (Optional) Perform a keyword search on each feature name
and feature description. Put quotes around the keyword
when wanting to include spaces.

Example
-----
SSDProAdminTool.exe -help
SSDProAdminTool.exe -help drive_index

-license
-----
Description
-----
Display the tool's software license.

Example
-----
SSDProAdminTool.exe -license

-log [filename]
-----
Description
-----
Saves a debug log of the execution steps the tool took to run the selected
functionality. By default the log is saved to a file with the name in the
following format: 'LOG_<date>_<time>.txt'

Arguments
-----
[filename] - (Optional) Save the log file using the given name
instead of the default.

Example
-----
SSDProAdminTool.exe -log
SSDProAdminTool.exe -log myLog.txt

-drive_list [filename]
-----
Description
-----
Display a list of attached drives to the screen. All other arguments
besides -help will be ignored. For each detected drive, the drive's index,
model string, serial number, firmware revision, and device path will be
displayed.

Arguments
-----
[filename] - (Optional) Save the drive list information to the given
file. File will be in CSV format.

Example
-----
SSDProAdminTool.exe -drive_list
SSDProAdminTool.exe -drive_list drive_list_output.txt
```



```

-drive_index <index_num>
-----
Description
Use to select a specific drive to interact with. Drive selection is made by
index value. You must specify a drive for most features to work. If no
other parameters are specified then basic information of the selected drive
will be displayed.

Arguments
-----
<index_num> - <Required> A valid drive index number. See the output
of -drive_list for the index value of each attached
drive.

Example
-----
SSDProAdminTool.exe -drive_index 1

-drive_serial <serial_num>
-----
Description
Use to select a specific drive to interact with. Drive selection is made by
drive serial number. You must specify a drive for most features to work. If
no other parameters are specified then basic information of the selected
drive will be displayed.

Arguments
-----
<serial_num> - <Required> A valid serial number of an attached drive.
See the output of -drive_list for the serial number of
each attached drive.

Example
-----
SSDProAdminTool.exe -drive_serial CUP0893749287GN

-drive_path <path>
-----
Description
Use to select a specific drive to interact with. Drive selection is made by
drive's path. You must specify a drive for most features to work. If no
other parameters are specified then basic information of the selected drive
will be displayed.

Arguments
-----
<path> - <Required> A valid drive path of an attached drive. See the
output of -drive_list for the drive path of each attached
drive.

Example
-----
SSDProAdminTool.exe -drive_path \\.\PHYSICALDRIVE2

-psid_revert
-----
Description
Issue a PSID revert to an Opal-activated drive. If successful, the drive is
reverted back to its Opal Ready state.

Example
-----
SSDProAdminTool.exe -drive_index 1 -psid_revert

-secure_erase
-----
Description
Secure erase the selected drive. The Tool will prompt prior to issuing the
secure erase. See -format to execute an enhanced secure erase.
WARNING! SECURE ERASE WILL ERASE ALL DATA ON THE DRIVE!

Example
-----
SSDProAdminTool.exe -drive_index 1 -secure_erase

```

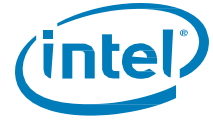


4.1 Display Drives

The `-drive_list` option will display a list of drives currently found on the system.

```
SSDProAdminTool.exe -drive_list
```

```
Drive List
-----
| Drive Index: | 0 |
-----
| Drive Series: | |
| Firmware:    | 6PC10362 |
| Device Path: | \\.\PHYSICALDRIVE0 |
| Opal State:  | No Opal |
-----
| Drive Index: | 1 |
-----
| Drive Series: | Intel SSD Pro 1500 Series |
| Firmware:    | LSQi |
| Device Path: | \\.\PHYSICALDRIVE1 |
| Opal State:  | Opal Ready |
-----
| Drive Index: | 2 |
-----
| Drive Series: | Intel SSD 330 Series |
| Firmware:    | 400i |
| Device Path: | \\.\PHYSICALDRIVE2 |
| Opal State:  | No Opal |
-----
Completed successfully.
```

4.2 Select Drive

Select one of the drive options:

```
-drive_index  
-drive_serial  
-drive_path
```

```
Drive Information  
-----  
| Drive Index:      | 1 |  
-----  
| Drive Series:    | Intel SSD Pro 1500 Series |  
| Model Number:   | INTEL SSDSC2BF180A4 |  
| Serial Number:  | BTDA3231020J1802GN |  
| Firmware:       | LSQi |  
| Current MAX LBA: | 0x14F5C830 |  
| Drive Status:   | Healthy |  
| Opal State:     | Opal Ready |  
| Native MAX LBA: | 0x14F5C830 |  
| Current Percent: | 100 |  
| SMART:          | ON |  
| DIPM:           | OFF |  
| Write Cache:    | ON |  
| Current Capacity: | 180.05 GB |  
-----  
Completed successfully.
```

The Intel SSD Pro Administration Tool has an order of preference so it is important to use only one of these options.

It will check first for `-drive_index`, then `-drive_serial`, and then `-drive_path`.



4.3 Enable eDrive

The `-enable_edrive` command enables support for Microsoft* eDrive* requirements on Intel SSDs with eDrive capability (check product specification for support). Specifically, it enables the IEEE 1667 support required by Windows BitLocker* to work with hardware encryption provided by the Intel® SSD Professional Family.

```
Drive Information
-----
| Drive Index:      | 1 |
| Drive Series:    | Intel SSD Pro 2500 Series Opal Ready |
| Model Number:    | INTEL SSDSC2BF180A5 |
| Serial Number:   | CUTS409300FK180IGN |
| Firmware:        | TG20 |
| Current MAX LBA: | 0x14F5C82F |
| Drive Status:    | Healthy |
| Opal State:      | Opal Ready |
| eDrive Supported: | False |
| Native MAX LBA:  | 0x14F5C82F |
| Current Percent: | 100.00 |
| Current Capacity: | 180.05 GB |
| SMART:           | ON |
| DIPM:            | OFF |
| Write Cache:     | ON |
-----

WARNING! You have selected to enable eDrive support on the drive. It
is not possible to undo this step!
Proceed? (Y|N): y
Completed successfully.
C:\Tools>
```

NOTES:

- Currently, the Intel SSD Pro Administrator Tool only supports enabling eDrive. eDrive should be enabled if the support is needed for hardware encryption with Windows BitLocker.
- The tool cannot make this configuration change if ATA security is enabled (i.e. ATA user password set). Remove ATA user password before enabling eDrive.



4.4 PSID Revert

PSID Revert is described in section 3.1. The following shows an example run for the `-psid_revert` command.

1. Set up the tool as described in section 2.

In this example, the tool is stored in `C:\temp`, and the target drive is attached as a secondary drive to a desktop running Windows 7.

2. Run the `-psid_revert` command to initiate the revert sequence.

For example: `C:\temp> SSDProAdminTool_1.1.0_x64.exe -drive_index 1 -psid_revert`

Drive information will be displayed, and you will be prompted to enter the PSID.

```

Drive Information
-----
| Drive Index:      | 1 |
-----
| Drive Series:    | Intel SSD Pro 1500 Series |
| Model Number:   | INTEL SSDSC2BF180A4 |
| Serial Number:  | BTD9323102UJ1802GN |
| Firmware:       | LSQi |
| Current MAX LBA: | 0x14F5C830 |
| Drive Status:   | Healthy |
| Opal State:     | Opal Activated |
| Native MAX LBA: | 0x14F5C830 |
| Current Percent: | 100 |
| SMART:         | ON |
| DIPM:          | OFF |
| Write Cache:    | ON |
| Current Capacity: | 180.05 GB |
-----

| Enter SSD Pro Series PSID value. |
| This can be located physically on the drive's label. |
| The value is case sensitive. Enter it as it appears on the label. |
| The value may appear as two values on multiple lines. |
| Enter a single value with no spaces or new lines. |
-----

Enter PSID [⟨q⟩ to quit] >

```

3. Verify that the drive information matches that of the target drive.
4. Enter the PSID. It is case-sensitive, and can be found on the drive label.
 - On the 2.5" drive label, it is a 32 character string and a QR code.
 - On the M.2 drive label, it is a QR code only.

After the PSID is entered correctly, you will be prompted to enter the displayed security string.

5. Enter the displayed security string. It is case-sensitive.

```

== You have entered a valid PSID. ==
-----
| The PSID revert operation will revert the drive back to its original factory |
| state. |
| *** THIS OPERATION WILL MAKE ALL THE DATA ON YOUR DRIVE INACCESSIBLE! *** |
| Intel is not responsible for loss of data using this tool. |
| To proceed please enter the following security string: 2)w--(*@b |
-----

Enter the highlighted string above [⟨q⟩ to quit]: >

```



After the security string is entered correctly, the PSID Revert and cryptoerase will start.

After a few seconds of execution, the completion status will be displayed when finished.

```
Enter the highlighted string above [<q> to quit]: > 2))u--(*@b
PSID Revert and cryptoerase was successful.
Completed successfully.
```