Solidigm™ Storage Tool

Release Notes

January 2026
Revision 025

SOLIDIGM™

Contents

List of Tables

Revision History

Revision	Software Version	Description	Revision Date
001	1.0	This is the first revision of the Solidigm™ Storage Tool (SST). This version of the tool contains below fixes; and the functionality of many current tools, see the User Guide for more information, with support for Intel® / Solidigm™ client and data center SSD.	March 2022
002	1.1	• This revision adds a firmware update for 670p, 665p, 660p, 760, Pro 7600p, Pro 6000p, E6100p P3100 and P4101. • CVE document update (see Solidigm Advisory SOLIDIGM-SA-00563)	May 2022
003	1.1	Documentation Correction	May 2022
004	1.2	Firmware update for D7-P5510, D5-P5316, D3-S4520 / S4620	July 2022
005	1.3	• Firmware update for D3-S4510 / S4610 • Added ability to save Identify data as binary • Various bug fixes and small enhancements	Sept. 2022
006	1.4	• Added ability for workload tracker • Ended ESXi 6.x support due to the end of support from VMWare • Various bug fixes and small enhancements	Dec. 2022
007	1.5	• Firmware update for D3-S4510 / S4610 • Various bug fixes and small enhancements	Jan. 2023
008	1.6	• Firmware update for P41 Plus	Feb. 2023
009	1.7	• Firmware update for D3-S4520 / S4620 and D7-P5520 / P5620 • Added ability to bypass full system device scan when user provides device path • Fixed some SST command issues on Microsoft NVMe Inbox Driver • Various bug fixes and small enhancements	March 2023
010	1.8	• Fixed compatibility issue for Latency Monitor on Solidigm NVMe driver • Enabled additional OCP Smart attributes	May 2023
011	1.9	• Firmware update for D3-S4510 / S4610, D5-P5316 and D5-P5430 • Various bug fixes and small enhancements	July 2023
012	1.10	• Firmware update for D7-P5510 • Added support for ESXi 8.0 Update 1 • Fixed the issue in files getting updated after smart logs on Linux system • Removed reboot requirement for installing VIB in ESXi • Various bug fixes and small enhancements	Sept. 2023

Revision	Software Version	Description	Revision Date
013	1.11	• Firmware update for D7-P5510 • Added support for ESXi 8.0 Update 1 • Fixed the issue in files getting updated after smart logs on Linux system • Removed reboot requirement for installing VIB in ESXi • Various bug fixes and small enhancements	Dec. 2023
014	1.12	• Firmware update for selected D7-P5810 • Fix for firmware update not available for few D7-P4511 models • Fixed issue of devices enumerating as SCSI in RHEL 7 • Added support for new models for various products • Various small bug fixes and enhancements	March 2024
015	1.13	• Firmware Update for D5-P5336 Series to 5CV10302 • Firmware Update for D7-P5500 / P5600 Series to 2CV10300 • Added additional model support for S4510 series • Added support for Hardware Component Log page • Added support for Telemetry Data Area 4 • Added ability to stop in-progress Abort command • Product family updated for various models • Fix for Read Scan failure command in Windows • Fix for "unexpected sense" error in S4520 series with RAID configuration	June 2024
016	1.14	• Firmware Update for D7-P5510 OPAL SKU to JCV10501 • Firmware Update for D7-P5510 Non-OPAL SKU to JCV10500 • Firmware Update for D7-P5520 / P5620 to 9CV10490 • Updated Media Wearout messaging • Removed case sensitivity for commands and log names • Updated Status Messages with more clarity • Updated to latest library from Broadcom for 9500 Series • Added support for Broadcom 9600 Series MegaRAID (Beta) • Changed SMART Warning Composite Temperature Time flagging from Failure to Alert • Changed PLL Lock Loss flagging from Failure to Alert • Various small bug fixes, enhancements and model support updates	Aug. 2024
017	1.15	• Firmware update for D3-S4520 / S4620 to 7CV10141 • Updated to latest library from Broadcom for 9600 Series • Various small bug fixes, enhancements and model support updates	Sept. 2024
018	2.0	• Firmware Update for P41 Series to 004C • Updated Architecture to support plug-in mechanism • Added support for Solidigm D7-PS1010 Series • Removed Firmware Updates for end of life products	Sept. 2024

Revision	Software Version	Description	Revision Date
019	2.1	• Firmware update for D5-P5316 Series to ACV10360 • Firmware update for DC P4510, P4511, P4610, P4618 Series to VCV10394, VDV10194, VEV10194 • Added 003C to Firmware update eligibility for update to 004C for P41 Plus Series • Fix for Telemetry dump issue for Ubuntu 22.04 Kernel 6.8 • Renamed dump option "ir" to "debuglogs" for more generic and future enhancements support • Various small bug fixes, enhancements and model support updates	Dec. 2024
020	2.2	• Major Revamp of Get and Set features command line syntax (**Note**: No backward compatibility) • Firmware Update for D7-P5520 / P5620 to 9CV10510 • Enabled sanitize command on Microsoft Inbox driver • Added ability to list features and logs implemented in SST • Added Timeout option for NVMe Format command	Feb. 2025
021	2.3	• Added support for ESX 8.0.u3 • Added SATA logs to debuglogs command • Updated NSID calculation logic for NVMeFormat • Various small bug fixes, enhancements and model support updates	May 2025
022	2.4	• Remove FW Updates for end of life products • Firmware Update for D7-PS1010, D7-PS1030 to G70YG150 / G75YG150 • Updated firmware update eligibility for update to ACV10360 for D5-P5316 Series • Updated Namespace and Maximum LBA commands for more accuracy and informative • Changed default Telemetry data-area to 3 for D7-PS1010, D7-PS1030 Series • Various small bug fixes, enhancements and model support updates	July 2025
023	2.5	• Firmware Update for D5-P5316 Series to ACV10370 • Firmware Update for D5-P5336 Series to 5CV10326 • Firmware Update for D5-P5430 Series to 6CV10241, 6DV10341 • Updated eligibility for 6DV10341 firmware for D5-P5430 Series • Added parsers for VU Logs - Power Usage, NAND Statistics Info and NAND Defect Counts • Corrected Product Family names for various products • Updated Broadcom MegRAID APIs to 7.34, 8,13 • Debuglogs command - Added ability to get logs for all drives • Various small bug fixes, enhancements and model support updates	Sept. 2025

Revision	Software Version	Description	Revision Date
024	2.6	• Firmware Update for D5-P5336 Series to 5DV0608 (122 TB only) • Firmware Update for D7-P5500 / P5600 Series to 2CV10400 • Added bridge firmware in Firmware Update for D7-PS1010, D7-PS1030 Series (U.2 form factor only) • Added Recent Entries option for Persistent Event Log command • Removed deprecated commands from help that were added to assist in transition to new command syntax changes in SST 2.2 • Various small bug fixes, enhancements and model support updates	Nov. 2025
025	2.7	• Removed Linux 32-bit OS support • Firmware update for D3-S4520/S4620 Series to 7CV10150 • Removed FW updates for EOL products (S4500, S4600, S3520 and P3100 series) • Truncate telemetry binary to reported size • ESXi - Changed debuglogs default location to tmp	Jan. 2026
Upcoming features	TBD	• Update to an industry-standard command interface with enhanced Help functionality. Legacy interface will be supported.	TBD

Note: This document is applicable for CLI and GUI. However, since GUI is only available in Windows and has limited features, not all notes are applicable to GUI.

1   Solidigm Data Center SSD Products Revision History

Table 1:   Solidigm™ D7-PS1010 / PS1030

Date	Revision	Description
July 2025	G70YG150 (U2) G75G150 (E3.S)	• Mitigates the following issues besides come other minor/corner case fixes: - Improvements toward PCIe Stability, Link Reset Handling, and Signal Glitching - Common fixes and mitigations toward Management Command Handling and Active-Idle State Transitions - Feature enhancements toward U.2 LED Behaviour, Vendor Unique Log F2h, Vendor Unique Feature FCh

Table 2:   Solidigm™ D5-P5336

Date	Revision	Description
Nov. 2025	5DV10608 (122 TB only)	• Mitigates the following issues besides come other minor/corner case fixes: - Provides critical fixes and improvements
Sept. 2025	5CV10326	• Mitigates the following issues besides come other minor/corner case fixes: - Deliver critical fixes and improvements
June 2024	5CV10302	• Mitigates the following issues besides come other minor/corner case fixes: - Firmware Downgrade Counter not incrementing on first downgrade after reset - High queue-depth sequential temporary performance degradation after long idle periods - Failure to commit same firmware as active when using firmware download and activate command with activate action = 3 - FIPS/OPAL drives only: incorrect parameters returned when traversing TCG ACE table UIDs via TableNext method

Table 3:   Solidigm™ D7-P5500 / P5600

Date	Revision	Description
Nov. 2025	2CV10400	• Mitigates the following issues besides come other minor/corner case fixes: - Minor fixes
June 2024	2CV10300	• Mitigates the following issues besides come other minor/corner case fixes: - Environment that does not Implement Required Command Ordering Enforcement May Cause Drive to Return Last Data Written to NAND - Incorrect NMVe MI Response Message Status During Drive's Time To Ready - Following Ungraceful Shutdown, admin / IO commands may Timeout After Config Ready Bit is Set

Table 4: Solidigm™ D7-P5810

Date	Revision	Description
March 2024	1CV10200	1.6TB SKU only • Mitigates the following issues besides some other minor/corner case fixes: - Support for 1.6TB SKU

Table 5: Solidigm™ D7-P5520 / P5620 (formerly Intel®)

Date	Revision	Description
Feb. 2025	9CV10510	• Mitigates the following issues besides some other minor/corner case fixes: • - Minor Fixes

Aug. 2024	9CV10490	• Mitigates the following issues besides some other minor/corner case fixes:
		    - Admin Command Timeout During Read Intensive Workloads
		    - Drive May Fail to Enumerate Following Unplanned Power Cycle
		    - Failure of MOS-FET Component Leads to Higher Drive Failure Rate

Dec. 2023	9CV10450	• Mitigates the following issues besides some other minor/corner case fixes:
		    - NVMe-MI Basic Throttle State Value May Persist After Exiting Throttling State
		    - Power Management Set Feature Command sent Over NVMe MI Causes Drive to go into Disable Logical Mode
		    - Vendor Unique Feature Identifier C6h Not Reflecting Power Mode Setting Changes Made with Feature Identifier 02h
		    - Drive May Fail to enumerate During Drive Boot Up Sequence
		    - PCIe Link up Sequence May Fail During AC/DC Cycle

March 2023	9CV10410	• Mitigates the following issues besides some other minor/corner case fixes:
		    - Non-Graceful Shutdown Counter Not Incrementing During Unsafe Shutdowns within DEh Log Page
		    - UEFI Driver Health Status GetHealthStatus Returning Unsupported
		    - PCIe Unsupported Request Errors Observed by Host during Drive Power Cycle
		    - Drive De-Enumeration During PCIe Link Up Sequence
		    - Intermittent Failure During Drive Boot Sequence Causes No Drive Attached
		    - Incorrect NVMe MI Response Message Status During Drive's Time to Ready

Table 6: Solidigm™ D7-P5510 (formerly Intel®)

Date	Revision	Description

Aug. 2024	OPAL: JCV10501
	
	Non-OPAL: JCV10500
		• Mitigates the following issues besides some other minor/corner case fixes:
		    - Failure of a MOS-FET component leads to failure in the power delivery circuitry of the drive
		    - I/O error exception after NVMe reset command
		    - Drive may fail to enumerate during boot up sequence
		    - Telemetry check may return wrong value for Firmware revision

Table 6:   Solidigm™ D7-P5510 (formerly Intel®)

Date	Revision	Description

Dec. 2023	JCV104044	OPAL drives only:
		• Mitigates the following issues besides some other minor/corner case fixes:
		  - Allow the Opal drive to undergo an MR3 update without the drive becoming locked
		  - Adjustments to wear levelling mechanism
		  - Mitigate issue that cause drive to return last data written to NAND

Sept. 2023	JCV10400	Non-OPAL drives only:
		• Mitigates the following issues besides some other minor/corner case fixes:
		  - Environment that does not Implement Required Command Ordering Enforcement may cause drive to return last data written to NAND
		  - Drive may encounter bad ctx 3014 due to wear leveling

July 2022	JCV10300	• NAND Read Disturb Impact Due to Unique NAND Background Activity Fix • BM459 Assert No Available Band/Erase Block Fix • Other various fixes and improvements

Table 7:   Solidigm™ D5-P5430

Date	Revision	Description
Sept. 2025	4k: 6CV10241 8k: 6DV10341	• Mitigates the following issues besides some other minor/corner case fixes: - Deliver critical fixes and improvements

July 2023	6CV10110	• Mitigates the following issues besides some other minor/corner case fixes:
		  - Environment that does not Implement Required Command Ordering Enforcement may cause drive to return last data written to NAND
		  - Host OS fails to boot with the Vendor Defined Firmware option

Table 8:   Solidigm™ D5-P5316 (formerly Intel®)

Date	Revision	Description

Sept. 2025	ACV10370	• Mitigates the following issues besides some other minor/corner case fixes:
		  - Firmware mishandling of NAND die missing at power on leads to No Drive Attached
		  - Access denied error may be seen following an IO Timeout [OPAL Only]

Dec. 2024	ACV10360	• Mitigates the following issues besides some other minor/corner case fixes: - Mitigates security vulnerabilities

July 2023	ACV10340	• Mitigates the following issues besides some other minor/corner case fixes:
		  - Failure of a MOS-FET component Leads to Higher Drive Failure Rate
		  - Environment that does not Implement Required Command Ordering Enforcement may cause drive to return last data written to NAND
		  - PCIe unsupported request errors observed by host during drive power cycle

July 2022	ACV10310	• Add additional support for OPAL 2.0, NVMe 1.4c, NVMe-MI 1.1c, and OCP 0xC0 Log Page

Table 9:   Solidigm™ D3-S4520 / S4620 (formerly Intel®)

Date	Revision	Description
Jan. 2026	7CV10150	• Mitigates the following issues besides some other minor/corner case fixes: - Updated previous bug fixes to apply to M.2 form factor
Sept. 2024	7CV10141	• Mitigates the following issues besides some other minor/corner case fixes: - Failure of a MOS-FET component leads to failure in the power delivery circuitry of the drive - Drive hang after uncorrectable read
Dec. 2023	7CV10130	• Mitigates the following issues besides some other minor/corner case fixes: - SMART return status 2CF4H, and SMART attribute AFh and EBh = 1 after ~2 years storage without power, indicating PLI capacitor test failure (U.2 FF only) - Drive did not correctly throttle when end of life defect threshold was reached - Unable to format and possible de-enumeration during installing image operation containing crypto scramble command
March 2023	7CV10120	• Mitigates the following issues besides some other minor/corner case fixes: - SMART attribute AFh and EBh was going to 1 after ~2years of storage without power, when the PLI capacitor was in fact healthy - A non-warranty SMART attribute C5h (pending sector count) was increasing in a corner case scenario
July 2022	7CV10111	• Mitigates the following issues besides some other minor/corner case fixes: - Command timeouts CI054, sometimes followed by ASSERT_SR002 and The SATA link going down. - AFh Smart attribute accidentally drops from 100 to 1 upon power on or power cycle. False failure of the cap test. However, nothing is/was wrong with the capacitor. - SMART attribute B7h SATA downshift counter not updating accurately when a SATA downshift occurs. - SSD warm reboot issue in RAID mode: BIOS hangs and drive not enumerating after OS install and warm reset in RAID mode

Table 10:   Solidigm™ D3-S4510 / S4610 (formerly Intel®)

Date	Revision	Description
July 2023	XCV10165 (2.5")	• Follow up fix for SMART attributes (AFh, EBh) incorrectly triggered after long-term storage (Only 2.5" SKUs are impacted) • SMART return status fix
Jan. 2023	XCV10160 (2.5")	• Mitigates the following issues: - SMART attributes (AFh, EBh) incorrectly triggered after long-term storage (Only 2.5" SKUs are impacted)
Sept. 2022	XC311151 (M.2) XCV10151 (2.5")	• Mitigates the following issues: - Occasional IO timeout under heavy workloads potentially leading to drive drops

Table 11:   Solidigm™ DC-P4510 / P4511 / P4610 / P4618 (formerly Intel®)

Date	Revision	Description
Dec. 2024	VCV10394 VDV10194 VEV10194	• Mitigates security vulnerabilities

Table 12:   Solidigm™ DC P3100 (formerly Intel®)

Date	Revision	
May 2022	119D	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

Table 13:   Solidigm™ DC P4101 (formerly Intel®)

Date	Revision	Description
May 2022	009D	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

2   Solidigm Client SSD Products Revision History

Table 14:   Solidigm™ P41 Plus

Date	Revision	Description
Sept. 2024	004C	• Firmware would postpone info block refresh if there is a shutdown notification from host to prevent data loss in abnormal edge cases of host shutdown events.
Feb. 2023	002C	• Fixes possible early disablement of DSLC • Fixes SMART Health info corruption and NDA that occasionally occur due to unexpected power loss • Improves drive power on to ready time during certain rebuild conditions after unexpected power loss • Corrects Verify Command missing in NVMe Commands Supported and Effects Log as reported by drive • Fixes occasional drive hang experienced during OS imaging process in WinPE environment

Table 15:   Solidigm™ 660p (formerly Intel®)

Date	Revision	Description
May 2022	005C	• Potential BSOD during Power State Transition • Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

Table 16:   Solidigm™ 665p (formerly Intel®)

Date	Revision	Description
May 2022	002C	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

Table 17:   Solidigm™ 670p (formerly Intel®)

Date	Revision	Description
May 2022	003C	• Fix to thermal throttling Flow • Fix for Null pointers • Block SID Fix • Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

Table 18:   Solidigm™ 760p (formerly Intel®)

Date	Revision	Description
May 2022	006C	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

Table 19:   Solidigm™ 7600p (formerly Intel®)

Date	Revision	Description
May 2022	006P	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

3 Solidigm Other SSD Products Revision History

Table 20: Solidigm™ E 6100p (formerly Intel®)

Date	Revision	Description
May 2022	006E	• Mitigates security vulnerability (see Solidigm Advisory SOLIDIGM-SA-00563)

4   List of Solidigm SSD Products

Please check all supported Solidigm™ SSDs (formerly Intel®) in the following link:

https://www.solidigm.com/us/en/support-page/product-doc-cert/ka-00099.html