# Qualified Vendor List (QVL)

1. I2C Key Token Master Mode, HMAC Master Mode (Atmel Key Token), I2C Key Token Slave Mode, SetDEK Mode, HMAC slave function were tested.
2. There are 21 disks tested. 18 were passed. 3 were unstable during un-plug/re-plug test therefore we donot recommend using those.
3. HMAC Key Token Slave Mode functional test is on-going.

## Test Environment

CPU : Intel Core i3-4160
Chipset : Intel Z97
OS :Windows 10 Professional(x64) Build 14393.447(RS1)
EVB : EVB00001_003

| Disk Characteristics | | | | | | | | | I2C Key Token Master Mode | | | | | | | | | HMAC Master Mode (Atmel Key Token) | | | | | | SetDEK Mode | | | | | I2C Key Token Slave Mode | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Test Procedure | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| | Brand Name | Disk Model | Media Type | Controller | Flash | Form Factor | SATA speed | Comment | Format 1 time & Copy/compare 2GB data | Data OS reboot 1 time | OS Shut down & power on 1 time | OS sleep 1 time | OS Hibernate 1 time | Power on/off 10 times | Un-plug/re-plug Disk side cable 10 times | Un-plug/re-plug host side cable 10 time | Compare 2GB data | Format & Copy/Compare 2GB data | Data OS reboot 1 time | OS Shut down & power on 1 time | OS Hibernate 1 time | OS Sleep 1 time | Compare 2GB data | Basic SetDEK function | Shut down power & perform new POR 1 time | Hybernate (S4) & Resume 1 time | Sleep (S3) & wake up 1 time | Compare 2GB data | Basic I2C slave Function | OS warm boot 1 time (Ctrl-Alt-Del pressed) | OS Shut down & perform new POR 1 time | OS Hibernate (S4) 1 time | Compare 2GB data |
| | | | | | | Passing Criteria | | | Format okay & Copy/Compare 2GB data without error | Disk & data directory exist after reboot | Disk & data directory exist after power on | Disk & data directory exist after wake up | Disk & data directory exist after wake up | 1. Disk & data directory exist 2. error LED on then off in any tested power on cycle | 1. Disk & data directory exist 2. error LED on then off in any re-plug cycle | 1. Disk & data directory exist 2. error LED on then off in any re-plug cycle | Compare 2GB data without error | Format okay & Copy/Compare 2GB data without error | Disk & data directory exist | Disk & data directory exist | Disk & data directory exist | Disk & data directory exist | Compare 2GB data without error | Disk can't be recognized after power on & error LED is on. OS refreshes then disk re-appears & error LED is off after SetDEK | Disk re-appears after the completion of the SetDEK procedure | Before SetDEK, refreshes disk shows no sign of disk available. At the completion of the SetDEK procedure. Disk re-appears after refreshing. | Before SetDEK, refreshes disk shows no sign of disk available. At the completion of the SetDEK procedure. Disk re-appears after refreshing. | Compare 2GB data without error | Disk can't be recognized after power on & error LED is on. OS refreshes then disk re-appear & error LED is off after sending the I2C Key | Disk can't be recognized after warm boot & Error LED is on. OS refreshes then disk re-appears & Error LED is OFF after sending the I2C Key. | Disk can't be recognized after power on & error LED is on. OS refreshes then disk re-appear & error LED is off after sending the I2C Key | Disk can't be recognized after power on & error LED is on. OS refreshes then disk re-appear & error LED is off after sending the I2C Key | Compare 2GB data without error |
| Disk 1 | Toshiba | MQ02ABF050H | SSHD | | | 2.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 2 | Seagate | ST3000DM001 | HDD | | | 3.5" | 6Gb/s | Install Win 8.1 OS | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 3 | WD | WD10EZEX-22BN5A0 | HDD | | | 3.5" | 6Gb/s | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk 4 | Samsung | 850 EVO MZ-75E120 | SSD | Samsung MGX | Samsung 32 layer 3D V-NAND | 2.5" | 6Gb/s, 3Gb/s , 1.5Gb | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 5 | Crucial | M500 2.5SSD CT120M500SSD1 | SSD | SMI SM2246EN | Micron 20nm MLC | 2.5" | 6Gb/s 3Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 7 | WD | WD6400AARS | HDD | | | 3.5" | 3Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 9 | Seagate | ST3250620NS | HDD | | | 3.5" | 3Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 10 | Seagate | ST2000DX001 | SSHD | | MLC | 3.5" | 6Gb/s, 3Gb/s, 1.5Gb/s | Install Win 10 OS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk 11 | Seagate | ST3320620NS | HDD | | | 3.5" | 3Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 12 | Seagate | ST98823AS | HDD | | | 2.5" | 1.5Gb | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 13 | HITACHI | HDS723030ALA640 | HDD | | | 3.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | F 1/10 | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 14 | Crucial | CT128MX100SSD1 | SSD | Marvell 88SS9189 | MLC | 2.5" | 6Gb/s | Install Win 10 OS | | | | | | | | | | | | | | | | | | | | | | | | | |
| ~~Disk 15~~ | ~~Seagate~~ | ~~ST9500327AS~~ | ~~HDD~~ | | | ~~2.5"~~ | ~~3Gb/s 1.5Gb/s~~ | Disk is damaged | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk 16 | HITACHI | 5K250-160 | HDD | | | 2.5" | 1.5Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 17 | Seagate | ST1000DM003 | HDD | | | 3.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 18 | WDC | WD10EZEX-22BN5A0 | HDD | | | 3.5" | 6Gb/s | Same as Disk 3 | OK | OK | OK | OK | OK | OK | OK | F 1/10 | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 19 | WDC | WD2500BEVS-00UST0 | HDD | | | 2.5" | 1.5Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 20 | CORSAIR | CSSD-F40GB2 | SSD | SandForce SF-1200 | | 2.5" | 3Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 21 | Seagate | ST9500325AS | HDD | | | 2.5" | 3Gb/s 1.5Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 24 | Toshiba | DT01ACA300 | HDD | | | 3.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| ~~Disk 27~~ | ~~Seagate~~ | ~~ST9160824AS~~ | ~~HDD~~ | | | ~~2.5"~~ | ~~1.5Gb/s~~ | Disk is damaged | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk 28 | Seagate | ST500LT015 | HDD | | | 2.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 29 | Transcend | SSD370 | SSD | 創見TS6500 | Micron 20nm MLC | 2.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | F 2/10 | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 30 | Seagate | ST3320620NS | HDD | | | 3.5" | 3Gb/s | Install Ubuntu OS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk 31 | Intel | SSDSC2BW120A4 | SSD | SandForce SF-2281 | 20nm MLC | 2.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 32 | PLEXTOR | PX-128M7VC | SSD | Marvell 88SS1074B1 | TLC | 2.5" | 6Gb/s | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| Disk 33 | Cactus | KD1TFI-240-95 | SSD | | | 2.5" | 6GB | | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |
| | | | | | | 2.5" | | | | | | | | | | | | | | | | | | | | | | | | | | | |