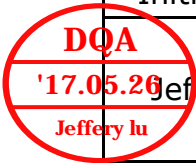**AIC**

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# 3U32–12G JBOD Functionality DVT Test Report

## DOC NO. : FM170526A1-X3JZC680

| Initiated by | Reviewed by | | | Approved by |
|---|---|---|---|---|
| Jeffery Lu | Scott Lin | Ruby Wu | Wilson Hung | David.Yu |

| Originate Date | Revision | Status |
|---|---|---|
| 2017/5/26 | A1 | DVT |

# Revision History

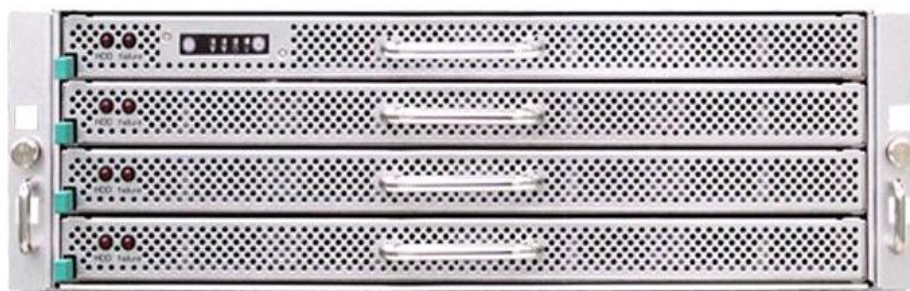| REV. | DESCRIPTION | DATE | Engineer |
|------|-------------|------|----------|
| | **Revisons** | | |
| A0 | **3U32-12G JBOD Functionality EVT Test**<br>**Backplane:B40-1SM4CMAF00B100**<br>**Expander:B46-LSSCXXK-00B000**<br>**F/W:** 0.0.0.0 03/28/2016 18:02<br>**MFG:** 0.0.0.0 03/29/2016 09:02<br>**MCU:**0.2 | 2016/7/11 | Jeffery Lu |
| A0 | **3U32-12G JBOD Functionality DVT Test**<br>**Backplane:B40-1SM4CMAF00B100**<br>**Expander:B46-LSSCXXK-00D000**<br>**F/W: 0.0.0.0 12/06/2016 17:25**<br>**MFG: 0.0.0.0 12/6/16 7:34**<br>**MCU:**0.2 | 2017/5/26 | Jeffery Lu |

| Date of Test: | |
|---------------|---|
| Test Started | Test Completed |
| 2017/5/16 | 2017/5/26 |

# Table of Contents

# 1 DUT Images

**Front Angle**

**45° Angle**

# 2 Target Device Configuration and Environment

## 2.1 Table of Test Configuration

### Host Configuration

| Item | Vender / Model | Detail |
|---|---|---|
| Mortherboard | Intel S2600CP | Motherboard of the host |
| Operation System 1 | CentOS 6.5 x64 | 2.6.32-431.el6.x86_64 |
| Operation System 2 | Microsoft Windows | Server 2012 R2 64-bit |
| CPU | Intel | Xeon X5677 3.47GHz *2 |
| Memory | Micron | 8GB DDR3-1600 * 2 |
| Hard Disk Drive | Seagate / ST9160511NS | SATA HDD / 160GB *1 |

### HBA Card Configuration

| Card | Vender / Model | Firmware ver. | BIOS ver. | Driver ver. | GUI ver. |
|---|---|---|---|---|---|
| 12G HBA | Avago 9300-16e | 10.00.00.00 | 8.17.00.00 | 2.50.96.00 | NA |
| 12G RAID | Avago 9380-4i4e | 4.620.00-5026 | 6.30.03.0_4.17.08.00 | 6.707.7.0 | 16.02.00.04 |

### 3U32 JBOD HDD Configuration

| Vender / Model | Interface | Detail |
|---|---|---|
| Toshiba /MG04SCA40EE | SAS 12G | 4TB/ FW:0103 |
| Seagate/ST4000NM0023 | SAS 6G | 4TB/ FW:0003 |
| Toshiba /MG04ACA6 | SATA 6G | 6TB/ FW:FS2B |

## 2.2 DUT Main Hardware Configuration

### DUT Main Hardware Configuration

| Item | Product Number | Quantity | Detail |
|---|---|---|---|
| Expander board | B46-LSSCXXK-00D00 | 1 | DB-EXPD18-TY Rev:D |
| Backplane board | B40-1SMC4CMAF00B100 | 8 | BP-HD1S04-TY rev:B |
| Firmware | **0.0.0.0 12/06/2016 17:25** | | |
| MFG | **0.0.0.0 12/6/16 7:34** | | |
| MCU | 0.2 | | |
| Item | Product Number | Quantity | Detail |
| Power House | PSU1A2B0800115C1Z0 | 1 | ZIPPY/2U/1+1 REDUNDANT/3C CERTIFIED |

# 3 JBOD Functional Test

| No. | Item Test | | |
|---|---|---|---|
| 3.01 | **Redundant Power Module** | | |
| Test Procedure | Criteria | | Result |
| Perform Hot-swap the power module and power cord ten times, and verify the functions be listed on right side. | Hot-swap PSU under 'power on' state, check fail led, beeper, and console status that can work properly. | | Pass |
| | Power cord interrupt, check fail led, beeper, and console status that can work properly. | | Pass |
| | PSU status under GUI that can work properly. | | Pass |
| | PSU status under console that can work properly. | | Pass |
| | Mute button of PSU that can work properly. | | Pass |

| No. | Item Test | | |
|---|---|---|---|
| 3.02 | **System Fan** | | |
| Test Procedure | Criteria | | Result |
| Perform the fan function, and verify the functions be listed on right side. | Remove the fan ten times, check fail led, GUI, and console status that can work properly. | | Pass |
| | Fan status under GUI that can work properly. | | Pass |
| | Fan status under console that can work properly. | | Pass |
| | For Smart Fan feature, if temperature upgrade, the rotational speed of fan was increased (depend on spec.) that can work properly. | | Pass |

| No. | Item Test | | |
|---|---|---|---|
| 3.03 | **Expander** | | |
| Test Procedure | Criteria | | Result |
| Check channel of expander that function is ok or not. | Check PHY state and negotiated link speed, confirm the PHY contents with actual HDD configuration are correct. | | Pass |
| | Up connector is correct with substrate type. | | Pass |
| | Down connectors were correct with table type. | | Pass |

| No. | Item Test | |
|---|---|---|
| 3.04 | **Burn-in Test** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| Using performance assessment tool, let JBOD status was maintain full loading on 12 hours. | Adjust conf. to 100% read (in Iometer), the function can work properly after burn-in test. | Pass |
| | Adjust conf. to 100% write (in Iometer), the function can work properly after burn-in test. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.05 | **LED Function** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| Check the function of UUT's LED by visual inspection. | Power LED blue, support enclosure ID, that can display as spec. defined. | Pass |
| | PSU alarm LED, that can display as spec. defined. | Pass |
| | Temperature LED Red, that can display as spec. defined. | Pass |
| | Fan fail LED Red, that can display as spec. defined. | Pass |
| | Tray 1 HDD failed LED, that can display as spec. defined. | Pass |
| | Tray 2 HDD failed LED, that can display as spec. defined. | Pass |
| | Tray 3 HDD failed LED, that can display as spec. defined. | Pass |
| | Tray 4 HDD failed LED, that can display as spec. defined. | Pass |
| | HDD accessed LED, that can display as spec. defined. | Pass |
| | System Fail LED Red, that can display as spec. defined. | Pass |

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| No. | Item Test | |
|---|---|---|
| 3.06 | **Mute Button** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| When the warning sound was activated, press the mute button to stop the warning sound. | Hot swap the power module ten times (Redundant), and warning sound can be stopped by mute button. | Pass |
| | Hot swap the fan module ten times, and warning sound can be stopped by mute button. | Pass |
| | Temperature was detected over default alarm value (over 55 degrees centigrade), and warning sound can be stopped by mute button. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.07 | **Firmware Upgrade** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| Upgrade the firmware, then check the upgrade is successful or not. | Upgrade via debug port, it can be done successfully. | Pass |
| | Upgrade via console port, it can be done successfully. | Pass |
| | Upgrade via inband, it can be done successfully. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.08 | **Temperature Sensor** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| When temperature sensor ≧ designated degree, the GUI will pop-up warning message, then check the sensor statuses (w/ fan speed) from the RS232 console that are showing normally or not. | T1, T2, warning, Alarm value configuration setting, that statuses are showing normally. | Pass |
| | Temperature detected status under GUI, that statuses are showing normally. | Pass |
| | Temperature detected status under HyperTerminal, that statuses are showing normally. | Pass |
| | Break through alarm value, then the fail led will light up, that statuses are showing normally. | Pass |
| | Break through alarm value, RPM of fan is the highest, that statuses are showing normally. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.09 | **SES Lighting Signal** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| To verify SES lighting signal, using sg3_utils tool to check lighting mode of each status is correct or not. | Request OK | Pass |
| | Request RSVD device | Pass |
| | Request hot spare | Pass |
| | Request consistency check | Pass |
| | Request in critical array | Pass |
| | Request in failed array | Pass |
| | Request rebuild/ remap | Pass |
| | Request rebuild/ remap aborted | Pass |
| | Request active | Pass |
| | Request do not remove | Pass |
| | Request device missing indication | Pass |
| | Request insert | Pass |
| | Request removal | Pass |
| | Request identify | Pass |
| | Request fault indication | Pass |
| | Request device off | Pass |
| | Request Canister | Pass |
| | Request Power supply off | Pass |
| | Request PRD fail | Pass |

| No. | Item Test | |
|---|---|---|
| 3.10 | **Shake Test** | |

| Test Procedure | Criteria | Result |
|---|---|---|
| Power up the enclosure and use SAS Cable to plug in backplane connector, then shake SAS Cable with connector gently by hand, and check the PHY status is normally or not. | Bend the SFF-8644 cable, that the PHY status is showing normally. | Pass |
| | Shaking cable around the SFF-8644 junction, that the PHY status is showing normally. | Pass |

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| No. | Item Test | |
|---|---|---|
| 3.11 | **HDD Hot-swap** | |
| Test Procedure | Criteria | Result |
| Perform hot-swap HDD ten times under operating of JBOD. | Plug-in HDD, that JBOD function can work properly. | Pass |
| | Remove HDD, that JBOD function can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.12 | **External 8644 Hot-swap** | |
| Test Procedure | Criteria | Result |
| Perform external 8644 hot-swap ten times under operating of JBOD. | Plug-in external 8644, that JBOD function can work properly. | Pass |
| | Remove external 8644, that JBOD function can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.13 | **AC/DC Power cycling** | |
| Test Procedure | Criteria | Result |
| Perform JBOD power cycling for ten times | Power on/off by AC power core (plug-in/removed), that JBOD function can work properly. | Pass |
| | Power on/off by power button, that JBOD function can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.14 | **SAS Zoning** | |
| Test Procedure | Criteria | Result |
| Applying SAS Zoning function to segment HDD group, and obtain benefit of dual host that could connect the same JBOD simultaneously. | Group8 and Group9 were run independently. | Pass |
| | Group1 can detect Group8 and Group9. | Pass |
| | All HDD of Group8 could build RAID and run Iometer properly. | Pass |
| | And all HDD of Group9 could build RAID and run Iometer properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.15 | **JBOD Cascade** | |
| Test Procedure | Criteria | Result |
| Cascade two 12G JBOD, check substrate table and perform Diameter for 12 hrs. | check substrate table and Diameter for 12 hrs without error. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.16 | **Manually PWM** | |
| Test Procedure | Criteria | Result |
| Under OS terminal, set up manual PWM function. | Check PWM % can be changed and FAN rpm will speed up or low down by manual setting that can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.17 | **DD command stress JBOD** | |
| Test Procedure | Criteria | Result |
| Under Linux, use DD command to stress HDD | Stress JBOD without any CDB or error. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.18 | **diag_drive_led** | |
| Test Procedure | Criteria | Result |
| Key in "diag_drive_led" command under console, then enter diag mode to check LED indicator. | The "diag_drive_LED" function can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.19 | **enclosure addr** | |
| Test Procedure | Criteria | Result |
| Key in "enclosure_addr xxxxxxxxxxxxxxx" (x is number), and key in "enclosure addr" to check function under console. | The function of CLI enclosure addr function can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.20 | **sensor** | |
| Test Procedure | Criteria | Result |
| Key in "sensor" and check sensor items can be listed | The function of CLI sensor can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.21 | **serial number and enclosure number** | |
| Check CLI serial number and enclosure number function is ok. | Key in "serial_number xxx-xxxxxxxxxxxxxx xxx-xxxxxxxxxxxxxx" (x is number) and key in "serail_number" to check function is ok under console. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.22 | **EDFB ON/OFF** | |
| Check CLI EDFB ON/OFF function is ok. | Key in " EDFB ON/OFFr" and check EDFB ON/OFF items can be listed then running Iometer check  EDFB ON/OFF function | Pass |

| No. | Item Test | |
|---|---|---|
| 3.23 | **MPIO** | |
| Test Procedure | Criteria | Result |
| While using MPIO feature which was one of Windows Server OS functions, if MPIO was enabled under OS, then check UUT mechanism supports this test item and is workable or not. | Single HBA card(at least 2 wide ports) was set upon motherboard, one piece of wide port cable connected primary expander board, another cable was connected secondary expander board.<br>Enable MPIO feature, dual expander boards were worked properly at the same time.<br>If one of cables was extracted and inserted into another wide port on same expander board, dual expander boards must still work properly.<br>(It needs to wait for few minutes until MPIO was recovered.) | Pass |

| | | |
|---|---|---|
| While using MPIO feature which was one of Windows Server OS functions, if MPIO was enabled under OS, then check UUT mechanism supports this test item and is workable or not. | Dual HBA cards were set upon the same motherboard, one piece of wide port cable connected primary expander board, another cable was connected secondary expander board. Enable MPIO feature, dual expander boards were worked properly at the same time. If one of cables was extracted and inserted into nearby wide port on same expander board, dual expander boards must still work properly. (It needs to wait for few minutes until MPIO was recovered.) | Pass |

| No. | Item Test | |
|---|---|---|
| 3.24 | **AT Switch test : by power cord** | |
| Test Procedure | Criteria | Result |
| Key in "power_setting keep_on" command under console, and AC power off by power cord removed, then wait 10 seconds to re-plug power cord to check JBOD can auto power on. | The function of "power_setting keep_on" can work properly. | Pass |
| Key in "power_setting keep_off" command under console, and AC power off by power cord removed, then wait 10 seconds to re-plug power cord to check JBOD can not auto power on. | The function of "power_setting keep_off" can work properly. | Pass |
| Key in "power_setting keep_last_state" command under console, and AC power off by power cord removed, then wait 10 seconds to re-plug power cord to check JBOD can auto power on. | The function of "power_setting keep_last_state" can work properly. | Pass |

| No. | Item Test | |
|---|---|---|
| 3.25 | **AT Switch test : by front power SW** | |
| Test Procedure | Criteria | Result |
| Key in "power_setting keep_on" command under console, DC power off by front power SW, then unplug power cord and wait 10 seconds to re-plug power cord to check JBOD can auto power on. | The function of "power_setting keep_on" can work properly. | Pass |
| Key in "power_setting keep_off" command under console, DC power off by front power SW, then unplug power cord and wait 10 seconds to re-plug power cord to check JBOD can not auto power on. | The function of "power_setting keep_off" can work properly. | Pass |
| Key in "power_setting keep_last_state" command under console, AC power off by power cord, then wait 10 seconds to re-plug power cord to check JBOD can auto power on. | The function of "power_setting keep_last_state" can work properly. | Pass |

# 4 RAID Card Test

| 12G Raid Card | AVAGO 9380-4i4e |
|---|---|

## 4.1 AVAGO 9380-4i4e with SAS 12G HDD config

| SAS 6G configuration | | | |
|---|---|---|---|
| RAID Function | Test Procedure | Criteria | Result |
| AVAGO 9280-16i4e SAS RAID Card | Create a RAID 0 volume | The RAID function can work properly. | Pass |
| | Create a RAID 1 volume | | Pass |
| | Create a RAID 5 volume | | Pass |
| | Create a RAID 6 volume | | Pass |
| | Create a RAID 00 volume | | Pass |
| | Create a RAID 10 volume | | Pass |
| | Create a RAID 50 volume | | Pass |
| | Create a RAID 60 volume | | Pass |
| | Remove a RAID 0 volume | | Pass |
| | Remove a RAID 1 volume | | Pass |
| | Remove a RAID 5 volume | | Pass |
| | Remove a RAID 6 volume | | Pass |
| | Remove a RAID 00 volume | | Pass |
| | Remove a RAID 10 volume | | Pass |
| | Remove a RAID 50 volume | | Pass |
| | Remove a RAID 60 volume | | Pass |
| AVAGO 9280-16i4e SAS RAID Card | Rebuild a RAID 1 volume | The RAID function can work properly. | Pass |
| | Rebuild a RAID 5 volume | | Pass |
| | Rebuild a RAID 6 volume | | Pass |
| | Rebuild a RAID 10 volume | | Pass |
| | Rebuild a RAID 50 volume | | Pass |
| | Rebuild a RAID 60 volume | | Pass |
| | Full initialization a RAID 0 volume | | Pass |
| | Full initialization a RAID 1 volume | | Pass |
| | Full initialization a RAID 5 volume | | Pass |
| | Full initialization a RAID 6 volume | | Pass |
| | Full initialization a RAID 00 volume | | Pass |
| | Full initialization a RAID 10 volume | | Pass |
| | Full initialization a RAID 50 volume | | Pass |
| | Full initialization a RAID 60 volume | | Pass |

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| | | Page 15 of 19 |

## 4.2 AVAGO 9380-4i4e with SAS 6G HDD config

| RAID Function | Test Procedure | Criteria | Result |
|---|---|---|---|
| | SATA 6G configuration | | |
| AVAGO 9280-16i4e SAS RAID Card | Create a RAID 0 volume | The RAID function can work properly. | Pass |
| | Create a RAID 1 volume | | Pass |
| | Create a RAID 5 volume | | Pass |
| | Create a RAID 6 volume | | Pass |
| | Create a RAID 00 volume | | Pass |
| | Create a RAID 10 volume | | Pass |
| | Create a RAID 50 volume | | Pass |
| | Create a RAID 60 volume | | Pass |
| | Remove a RAID 0 volume | | Pass |
| | Remove a RAID 1 volume | | Pass |
| | Remove a RAID 5 volume | | Pass |
| | Remove a RAID 6 volume | | Pass |
| | Remove a RAID 00 volume | | Pass |
| | Remove a RAID 10 volume | | Pass |
| | Remove a RAID 50 volume | | Pass |
| | Remove a RAID 60 volume | | Pass |
| AVAGO 9280-16i4e SAS RAID Card | Rebuild a RAID 1 volume | The RAID function can work properly. | Pass |
| | Rebuild a RAID 5 volume | | Pass |
| | Rebuild a RAID 6 volume | | Pass |
| | Rebuild a RAID 10 volume | | Pass |
| | Rebuild a RAID 50 volume | | Pass |
| | Rebuild a RAID 60 volume | | Pass |
| | Full initialization a RAID 0 volume | | Pass |
| | Full initialization a RAID 1 volume | | Pass |
| | Full initialization a RAID 5 volume | | Pass |
| | Full initialization a RAID 6 volume | | Pass |
| | Full initialization a RAID 00 volume | | Pass |
| | Full initialization a RAID 10 volume | | Pass |
| | Full initialization a RAID 50 volume | | Pass |
| | Full initialization a RAID 60 volume | | Pass |

## 4.3 AVAGO9380-4i4e with SATA 6G HDD config

| RAID Function | Test Procedure | Criteria | Result |
|---|---|---|---|
| **SATA 6G configuration** | | | |
| AVAGO 9280-16i4e SAS RAID Card | Create a RAID 0 volume | The RAID function can work properly. | Pass |
| | Create a RAID 1 volume | | Pass |
| | Create a RAID 5 volume | | Pass |
| | Create a RAID 6 volume | | Pass |
| | Create a RAID 00 volume | | Pass |
| | Create a RAID 10 volume | | Pass |
| | Create a RAID 50 volume | | Pass |
| | Create a RAID 60 volume | | Pass |
| | Remove a RAID 0 volume | | Pass |
| | Remove a RAID 1 volume | | Pass |
| | Remove a RAID 5 volume | | Pass |
| | Remove a RAID 6 volume | | Pass |
| | Remove a RAID 00 volume | | Pass |
| | Remove a RAID 10 volume | | Pass |
| | Remove a RAID 50 volume | | Pass |
| | Remove a RAID 60 volume | | Pass |
| AVAGO 9280-16i4e SAS RAID Card | Rebuild a RAID 1 volume | The RAID function can work properly. | Pass |
| | Rebuild a RAID 5 volume | | Pass |
| | Rebuild a RAID 6 volume | | Pass |
| | Rebuild a RAID 10 volume | | Pass |
| | Rebuild a RAID 50 volume | | Pass |
| | Rebuild a RAID 60 volume | | Pass |
| | Full initialization a RAID 0 volume | | Pass |
| | Full initialization a RAID 1 volume | | Pass |
| | Full initialization a RAID 5 volume | | Pass |
| | Full initialization a RAID 6 volume | | Pass |
| | Full initialization a RAID 00 volume | | Pass |
| | Full initialization a RAID 10 volume | | Pass |
| | Full initialization a RAID 50 volume | | Pass |
| | Full initialization a RAID 60 volume | | Pass |

# 5 HBA Card Test

| 12G HBA Card | AVAGO 9300-16e |
|---|---|

## 5.1 AVAGO 9300-16e with SAS 12G HDD Config

| SAS 12G configuration | | | |
|---|---|---|---|
| HBA Function | Test Procedure | Criteria | Result |
| AVAGO 9300-16e HBA Card | Perform AVAGO BIOS utility to verify HDD information. | All hard drives can be detected by AVAGO BIOS utility. | Pass |
| | Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | Pass |

## 5.2 AVAGO 9300-16e with SAS 6G HDD Config

| SAS 6G configuration | | | |
|---|---|---|---|
| HBA Function | Test Procedure | Criteria | Result |
| AVAGO 9300-16e HBA Card | Perform AVAGO BIOS utility to verify HDD information. | All hard drives can be detected by AVAGO BIOS utility. | Pass |
| | Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | Pass |

## 5.3 AVAGO 9300-16e with SATA 6G HDD Config

| SATA 6G configuration | | | |
|---|---|---|---|
| HBA Function | Test Procedure | Criteria | Result |
| AVAGO 9300-16e HBA Card | Perform AVAGO BIOS utility to verify HDD information. | All hard drives can be detected by AVAGO BIOS utility. | Pass |
| | Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | Pass |

# 7 Summary

| Item | Descriptions | Result |
|---|---|---|
| Enclosure Function Test | Redundant Power Module | Pass |
| | System Fan | Pass |
| | Expander | Pass |
| | Burn-in Test | Pass |
| | LED Function | Pass |
| | Mute Button | Pass |
| | Firmware Upgrade | Pass |
| | Temperature Sensor | Pass |
| | SES Lighting Signal | Pass |
| | Shake Test | Pass |
| | HDD Hot-swap | Pass |
| | External 8644 Hot-swap | Pass |
| | AC/DC Power cycling | Pass |
| | SAS Zoning | Pass |
| | JBOD Cascade | Pass |
| | Manually PWM | Pass |
| | DD command stress JBOD | Pass |
| | diag_drive_led | Pass |
| | enclosure addr | Pass |
| | Sensor | Pass |
| | serial number and enclosure number | Pass |
| | EDFB ON/OFF | Pass |
| | MPIO | Pass |
| | AT Switch test : by power cord | Pass |
| | AT Switch test : by front power SW | Pass |
| RAID Card Test | AVAGO 9380-4i4e with SAS 12G HDD Config | Pass |
| | AVAGO 9380-4i4e  with SAS 6G HDD Config | Pass |
| | AVAGO 9380-4i4e e with SATA 6G HDD Config | Pass |
| HBA Card Test | AVAGO 9300-16e with SAS 12G HDD Config | Pass |
| | AVAGO 9300-16e with SAS 6G HDD Config | Pass |
| | AVAGO 9300-16e with SATA 6G HDD Config | Pass |