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**[Test Report Title]**

Functionality Test

[Model name/ Number]

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| Date |  | YYYY/MM/DD |
| Doc. Number |  | XXXXXXXXXXX |
| Doc. Version |  | XX |
| Number of Pages |  | XX |
| Test Report Perform By |  | DQA Team |

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| **Revision History** | | | | | | | | | | | | | | | | | | | | |
| REV. | | DESCRIPTION | | | | | | | | | | | | | | DATE | | | Engineer | |
| A0 | | **XXXXXXXXXXX JBOD Functionality DVT test  XXXXXXXXXX All Firmware Version: Expander: BMC->  XXXXXXXXXX** Release Date: XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX **Expander F/W->** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX **MFG->** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX **Backplane: CPLD->** XXXXXXXXXXXXXXXXXXXXXXXXXXXX | | | | | | | | | | | | | | YYYY/MM/DD | | | Name | |
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| 1. DUT Images | | | | | | | | | | | | | | | | | | | |
| 2. Target Device Configuration and Environment | | | | | | | | | | | | | | | | | | | |
| 2.1 Table of Test Configuration | | | | | | | | | | | | | | | | | | | |
| Host Configuration (2 Host to 1 JBOD) | | | | | | | | | | | | | | | | | | | |
| Item | | | | | | Vender / Model | | | | | | Detail | | | | | | | |
| Motherboard | | | | | |  | | | | | | Motherboard of the host | | | | | | | |
| Operation System1 | | | | | | Microsoft Windows | | | | | | Server 2016 Standard | | | | | | | |
| Operation System2 | | | | | | CentOS7.4 x64 | | | | | | 3.10.0-693.11.1.el7.x86\_64 | | | | | | | |
| CPU | | | | | |  | | | | | |  | | | | | | | |
| Memory | | | | | |  | | | | | |  | | | | | | | |
| Hard Disk Drive | | | | | |  | | | | | |  | | | | | | | |
| Web browser | | | | | |  | | | | | |  | | | | | | | |
| RAID/HBA Card Configuration | | | | | | | | | | | | | | | | | | | |
| Card | | | Vender / Model | | | | Firmware ver. | BIOS ver. | | | | | | Driver ver. | | | | GUI ver. | |
| 12G RAID | | |  | | | |  |  | | | | | |  | | | |  | |
| 12G RAID | | |  | | | |  |  | | | | | |  | | | |  | |
| 12G HBA | | |  | | | |  |  | | | | | |  | | | |  | |
| 12G HBA | | |  | | | |  |  | | | | | |  | | | |  | |
| HDD Configuration | | | | | | | | | | | | | | | | | | | |
| Vender / Model | | | | | | | Interface | | | | | | Detail | | | | | | |
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| 2.2 DUT Main Hardware Configuration | | | | | | | | | | | | | | | | | | | |
| Item | | | | Product Number | | | | | | Quantity | | | Detail | | | | | | |
| Backplane board | | | |  | | | | | |  | | |  | | | | | | |
| Expander board | | | |  | | | | | |  | | |  | | | | | | |
| Power Module | | | |  | | | | | |  | | |  | | | | | | |
| **SKU：** | | | | | | | | | | | | | | | | | | | |
| Expander Firmware | | | |  | | | | | | | | | | | | | | | |
| MFG | | | |  | | | | | | | | | | | | | | | |
| BMC | | | |  | | | | | | | | | | | | | | | |
| MCU | | | |  | | | | | | | | | | | | | | | |
| CPLD | | | |  | | | | | | | | | | | | | | | |
| Item | | | | Vender/Product Number | | | | | | | Quantity | | | | Detail | | | | |
| External Expander Board (Hub Expander) | | | |  | | | | | | |  | | | |  | | | | |
| Internal Expander  Board (24bay) (Edge Dual\_Expander) | | | |  | | | | | | |  | | | |  | | | | |
| Internal Expander  Board (30bay) (Edge Dual\_Expander) | | | |  | | | | | | |  | | | |  | | | | |
| Back Plane Board | | | |  | | | | | | |  | | | |  | | | | |
| Bridge Board | | | |  | | | | | | |  | | | |  | | | | |
| MCU Board | | | |  | | | | | | |  | | | |  | | | | |

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| 3. JBOD Functional Test | | |
| 3.1 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. |  |
| Power cord interrupt, check fail led, beeper, and console status that can work properly. |  |
| PSU status under GUI that can work properly. |  |
| PSU status under console that can work properly. |  |
| Mute button of PSU that can work properly. |  |
| 3.2 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. |  |
| Fan status under GUI that can work properly. |  |
| Fan status under console that can work properly. |  |
| For Smart Fan feature, if temperature upgrade, the rotational speed of fan was increased (depend on spec.) that can work properly. |  |
| 3.3 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. |  |
| Up connector is correct with substrate type. |  |
| Down connectors were correct with table type. |  |
| 3.4 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. |  |
| Adjust conf. to 100% write (in Iometer); the function can work properly after burn-in test. |  |
| 3.5 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. |  |
| PSU alarm LED that can display as spec. defined. |  |
| Temperature LED Red, that can display as spec. defined. |  |
| FAN failed LED Red that can display as spec. defined. |  |
| HDD failed LED that can display as spec. defined. |  |
| HDD accessed LED that can display as spec. defined. |  |
| System Fail LED Red, that can display as spec. defined. |  |
| 3.6 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. |  |
| Hot swap the fan module ten times, and warning sound can be stopped by mute button. |  |
| Temperature was detected over default alarm value (over 55 degrees centigrade), and warning sound can be stopped by mute button. |  |
| 3.7 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. |  |
| Upgrade via console port, it can be done successfully. |  |
| Upgrade via in-band, it can be done successfully. |  |
| 3.8 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. |  |
| Temperature detected status under GUI that statuses are showing normally. |  |
| Temperature detected status under HyperTerminal that statuses are showing normally. |  |
| Break through alarm value, then the fail led will light up, that statuses are showing normally. |  |
| Break through alarm value, RPM of fan is the highest, that statuses are showing normally. |  |
| 3.9 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 |  |
| Request RSVD device |  |
| Request hot spare |  |
| Request consistency check |  |
| Request in critical array |  |
| Request in failed array |  |
| Request rebuild/ remap |  |
| Request rebuild/ remap aborted |  |
| Request active |  |
| Request do not remove |  |
| Request device missing indication |  |
| Request insert |  |
| Request removal |  |
| Request identify |  |
| Request fault indication |  |
| Request device off |  |
| Request Canister |  |
| Request Power supply off |  |
| Request PRD fail |  |
| 3.10 JBOD Remote | | |
| Test Procedure | Criteria | Result |
| Execute some commands or packages to operate UUT. | Use sg\_utils to shutdown UUT under Linux that function can work properly. |  |
| Under HyperTerminal, use command to power on JOBD | Remote JBOD power on that function can work properly. |  |
| Under HyperTerminal, use command to power off JOBD | Remote JBOD power off, that function can work properly. |  |
| 3.11 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. |  |
| Shaking cable around the SFF-8644 junction that the PHY status is showing normally. |  |
| 3.12 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. |  |
| Remove HDD that JBOD function can work properly. |  |
| 3.13 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. |  |
| Remove external 8644 that JBOD function can work properly. |  |
| 3.14 Expander hot-swap | | |
| Test Procedure | Criteria | Result |
| Perform expander hot-swap ten times under operating of JBOD. | Plug-in Expander that JBOD function can work properly. |  |
| Remove Expander that JBOD function can work properly. |  |
| 3.15 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. |  |
| Power on/off by power button, that JBOD function can work properly. |  |
| 3.16 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. |  |
| Group1 can detect Group8 and Group9. |  |
| All HDD of Group8 could build RAID and run Iometer properly. |  |
| And all HDD of Group9 could build RAID and run Iometer properly. |  |
| 3.17 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. |  |
| 3.18 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. |  |
| 3.19 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. Enable MPIO feature, dual expander boards were worked properly at the same time. If one of cables was extracted and inserted into another wide port on same expander board, dual expander boards must still work properly. (It needs to wait for few minutes until MPIO was recovered.) |  |
| 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.) |  |
| 3.20 DD command stress JBOD | | |
| Test Procedure | Criteria | Result |
| Under Linux, use DD command to stress HDD | Stress JBOD without any CDB or error. |  |
| 3.21 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. |  |
| 3.22 sas\_standby\_timer | | |
| Test Procedure | Criteria | Result |
| Key in "sas\_standby\_timer" command under console, and wait for a little time, then check current is diminished. | The power saving function can work properly. |  |
| 3.23 Check\_wide\_port on /off /standby | | |
| Test Procedure | Criteria | Result |
| Key in "Check\_wide\_port" command under console, and wait for a little time, then check current is diminished. | The power saving function can work properly. |  |
| 3.24 serial number and enclosure number | | |
| Test Procedure | Criteria | Result |
| Key in "serial\_number xxx-xxxxxxxxxxxxxx xxx-xxxxxxxxxxxxxx" (x is number), and key in "serial\_number" to check function under console. | The function of CLI serial number and enclosure number can work properly. |  |
| 3.25 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. |  |
| 3.26 sensor | | |
| Test Procedure | Criteria | Result |
| Key in "sensor" and check sensor items can be listed | The function of CLI sensor can work properly. |  |
| 3.27 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. |  |
| 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 cannot auto power on. | The function of "power\_setting keep\_off" can work properly. |  |
| 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. |  |
| 3.28 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. |  |
| 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 cannot auto power on. | The function of "power\_setting keep\_off" can work properly. |  |
| 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. |  |

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| 4. RAID Card Test | | | | |
| RAID Card | "RAID Card" | Driver |  | |
| Power Housing |  | | | |
| Power Module |  | | | |
| 4.1 "RAID Card" with SAS 12G HDD Config | | | | |
| **SAS 12G configuration** | | | | |
| RAID Function | Test Procedure | Criteria | | Result |
| "RAID Card" | Create a RAID 0 volume | The RAID function can work properly. | |  |
| Create a RAID 1 volume |  |
| Create a RAID 5 volume |  |
| Create a RAID 6 volume |  |
| Create a RAID 00 volume |  |
| Create a RAID 10 volume |  |
| Create a RAID 50 volume |  |
| Create a RAID 60 volume |  |
| Remove a RAID 0 volume |  |
| Remove a RAID 1 volume |  |
| Remove a RAID 5 volume |  |
| Remove a RAID 6 volume |  |
| Remove a RAID 00 volume |  |
| Remove a RAID 10 volume |  |
| Remove a RAID 50 volume |  |
| Remove a RAID 60 volume |  |
| "RAID Card" | Rebuild a RAID 1 volume | The RAID function can work properly  Check Item: GUI: 1. Fan Status 2. Temp Status  CLI:(read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |
| Rebuild a RAID 5 volume |  |
| Rebuild a RAID 6 volume |  |
| Rebuild a RAID 10 volume |  |
| Rebuild a RAID 50 volume |  |
| Rebuild a RAID 60 volume |  |
| Full initialization a RAID 0 volume |  |
| Full initialization a RAID 1 volume |  |
| Full initialization a RAID 5 volume |  |
| Full initialization a RAID 6 volume |  |
| Full initialization a RAID 00 volume |  |
| Full initialization a RAID 10 volume |  |
| Full initialization a RAID 50 volume |  |
| Full initialization a RAID 60 volume |  |
| "RAID Card" | Failover function (Primary Hub EXP) | Plug in/unplug Cable is working properly | |  |
| Failover function (Secondary Hub EXP) |  |
| "RAID Card" | S.M.A.R.T. status verify | Check SMART error HDD if warning/alarm work properly | |  |
| 4.2 "RAID Card" with SAS 6G HDD Config | | | | |
| **SAS 6G configuration** | | | | |
| RAID Function | Test Procedure | Criteria | | Result |
| "RAID Card" | Create a RAID 0 volume | The RAID function can work properly. | |  |
| Create a RAID 1 volume |  |
| Create a RAID 5 volume |  |
| Create a RAID 6 volume |  |
| Create a RAID 00 volume |  |
| Create a RAID 10 volume |  |
| Create a RAID 50 volume |  |
| Create a RAID 60 volume |  |
| Remove a RAID 0 volume |  |
| Remove a RAID 1 volume |  |
| Remove a RAID 5 volume |  |
| Remove a RAID 6 volume |  |
| Remove a RAID 00 volume |  |
| Remove a RAID 10 volume |  |
| Remove a RAID 50 volume |  |
| Remove a RAID 60 volume |  |
| "RAID Card" | Rebuild a RAID 1 volume | The RAID function can work properly.  Check Item: GUI: 1. Fan Status 2. Temp Status  CLI:(read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |
| Rebuild a RAID 5 volume |  |
| Rebuild a RAID 6 volume |  |
| Rebuild a RAID 10 volume |  |
| Rebuild a RAID 50 volume |  |
| Rebuild a RAID 60 volume |  |
| Full initialization a RAID 0 volume |  |
| Full initialization a RAID 1 volume |  |
| Full initialization a RAID 5 volume |  |
| Full initialization a RAID 6 volume |  |
| Full initialization a RAID 00 volume |  |
| Full initialization a RAID 10 volume |  |
| Full initialization a RAID 50 volume |  |
| Full initialization a RAID 60 volume |  |
| "RAID Card" | Failover function (Primary Hub EXP) | Plug in/unplug Cable is working properly | |  |
| Failover function (Secondary Hub EXP) |  |
| "RAID Card" | S.M.A.R.T. status verify | Check SMART error HDD if warning/alarm work properly | |  |
|
| 4.3 "RAID Card" with SATA 6G HDD Config | | | | |
| **SATA 6G configuration** | | | | |
| RAID Function | Test Procedure | Criteria | | Result |
| "RAID Card" | Create a RAID 0 volume | The RAID function can work properly. | |  |
| Create a RAID 1 volume |  |
| Create a RAID 5 volume |  |
| Create a RAID 6 volume |  |
| Create a RAID 00 volume |  |
| Create a RAID 10 volume |  |
| Create a RAID 50 volume |  |
| Create a RAID 60 volume |  |
| Remove a RAID 0 volume |  |
| Remove a RAID 1 volume |  |
| Remove a RAID 5 volume |  |
| Remove a RAID 6 volume |  |
| Remove a RAID 00 volume |  |
| Remove a RAID 10 volume |  |
| Remove a RAID 50 volume |  |
| Remove a RAID 60 volume |  |
| "RAID Card" | Rebuild a RAID 1 volume | The RAID function can work properly.  Check Item: GUI: 1. Fan Status 2. Temp Status  CLI:(read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |
| Rebuild a RAID 5 volume |  |
| Rebuild a RAID 6 volume |  |
| Rebuild a RAID 10 volume |  |
| Rebuild a RAID 50 volume |  |
| Rebuild a RAID 60 volume |  |
| Full initialization a RAID 0 volume |  |
| Full initialization a RAID 1 volume |  |
| Full initialization a RAID 5 volume |  |
| Full initialization a RAID 6 volume |  |
| Full initialization a RAID 00 volume |  |
| Full initialization a RAID 10 volume |  |
| Full initialization a RAID 50 volume |  |
| Full initialization a RAID 60 volume |  |
| "RAID Card" | Failover function (Primary Hub EXP) | Plug in/unplug Cable is working properly | |  |
| Failover function (Secondary Hub EXP) |  |
| "RAID Card" | S.M.A.R.T. status verify | Check SMART error HDD if warning/alarm work properly | |  |
|

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| 5. HBA Card Test | | | | |
| HBA Card |  | Driver |  | |
| Power Housing |  | | | |
| Power Module |  | | | |
| 5.1 "HBA Card" with SAS 12G HDD Config | | | | |
| **SAS 12G configuration** | | | | |
| HBA Function | Test Procedure | Criteria | | Result |
| "HBA Card" | Perform "HBA Card" BIOS utility to verify HDD information. | All hard drives can be detected by "HBA Card" BIOS utility. | |  |
| Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | |  |
| After stress test verify enclosure information. | Check Item: (CLI read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |
| 5.2 "HBA Card" with SAS 6G HDD Config | | | | |
| **SAS 6G configuration** | | | | |
| HBA Function | Test Procedure | Criteria | | Result |
| "HBA Card" | Perform "HBA Card" BIOS utility to verify HDD information. | All hard drives can be detected by "HBA Card" BIOS utility. | |  |
| Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | |  |
| After stress test verify enclosure information. | Check Item: (CLI read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |
| 5.3 "HBA Card" with SATA 6G HDD Config | | | | |
| **SATA 6G configuration** | | | | |
| HBA Function | Test Procedure | Criteria | | Result |
| "HBA Card" | Perform "HBA Card" BIOS utility to verify HDD information. | All hard drives can be detected by "HBA Card" BIOS utility. | |  |
| Perform Disk management of OS to verify HDD information. | All hard drives can be detected by OS Disk management. | |  |
| After stress test verify enclosure information. | Check Item: (CLI read) 1. sg\_ses --page=0x2 2. sg\_ses --page=0x7 | |  |

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| 6. BMC Function Test | | |
| Item | Vendor / Model | Detail |
| Web Browser |  |  |
|  |  |

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| --- | --- | --- |
| 6.1 Feature (by RR6 code base) | | |
| **NO.** | **Test Items** | **Result** |
| 1 | BMC WEB UI Login function check / mis-operation check |  |
| 2 | Forgot Password function check / mis-operation check |  |
| 3 | Device Information check (FW name/version) |  |
| 4 | Network Information check |  |
| 5 | Basic IOL connection check |  |
| 6 | Basic SOL connection check |  |
| 7 | Check sensors name accuracy |  |
| 8 | Check webpage logo(AIC) |  |
| 10 | FRU data Accuracy check |  |
| 12 | Hard Disk Manager: SAS-12G HDD Config, 30 times power on/off by primary BMC |  |
| 13 | Hard Disk Manager: SAS-12G HDD Config, 30 times power on/off by secondary BMC |  |
| 14 | Hard Disk Manager: SAS - 6G HDD Config, 30 times power on/off by primary BMC |  |
| 15 | Hard Disk Manager: SAS - 6G HDD Config, 30 times power on/off by secondary BMC |  |
| 16 | Hard Disk Manager: SATA-6G HDD Config, 10 times power on/off by primary BMC |  |
| 17 | Hard Disk Manager LED are Green status |  |
| 18 | Hard Disk Manager LED are Gray status |  |
| 19 | Hard Disk Manager LED are red status |  |
| 20 | Hard Disk Manager LED are blue status |  |
| 21 | BMC Card Fail LED be turn on by Fan\_0 |  |
| 22 | BMC Card Fail LED be turn off by Fan\_0 |  |
| 23 | BMC Card Fail LED be turn on by Fan\_1 |  |
| 24 | BMC Card Fail LED be turn off by Fan\_1 |  |
| 25 | BMC Card Fail LED be turn on by Temp0 |  |
| 26 | BMC Card Fail LED be turn off by Temp0 |  |
| 27 | BMC Card Fail LED be turn on by Temp1 |  |
| 28 | BMC Card Fail LED be turn off by Temp1 |  |
| 29 | BMC Card Fail LED be turn on by PSU1temp |  |
| 30 | BMC Card Fail LED be turn off by PSU1temp |  |
| 31 | BMC Card Fail LED be turn on by PSU2temp |  |
| 32 | BMC Card Fail LED be turn on by PSUt2emp |  |
| 33 | Fan\_0 sensor reading / Abnormal check |  |
| 34 | Fan\_1 sensor reading / Abnormal check |  |
| 35 | Temp0 sensor reading / Abnormal check |  |
| 36 | Temp1 sensor reading / Abnormal check |  |
| 37 | PSU1\_status sensor reading / Abnormal check |  |
| 38 | PSU2\_status sensor reading / Abnormal check |  |
| 39 | PS\_Watt sensor reading / Abnormal check |  |
| 40 | PSU1\_temp sensor reading / Abnormal check |  |
| 41 | PSU2\_temp sensor reading / Abnormal check |  |
| 42 | Watchdog1 sensor reading / Abnormal check |  |
| 43 | BMC SEL event log be record by Fan\_0 |  |
| 44 | BMC SEL event log be record by Fan\_1 |  |
| 46 | BMC SEL event log be record by Temp0 |  |
| 46 | BMC SEL event log be record by Temp1 |  |
| 47 | BMC SEL event log be record by PSU1\_status |  |
| 48 | BMC SEL event log be record by PSU2\_status |  |
| 49 | BMC SEL event log be record by PSUtemp1 |  |
| 50 | BMC SEL event log be record by PSUtemp2 |  |
| 51 | PS1\_Fan Fail SDR value |  |
| 52 | PS1\_Un-Present SDR value |  |
| 53 | PS2\_Fan Fail SDR value |  |
| 54 | PS2\_Un-Present SDR value |  |
| 55 | PS1\_Fan event check |  |
| 56 | PS1\_Present event check |  |
| 57 | PS2\_Fan event check |  |
| 58 | PS2\_Present event check |  |
| 59 | PS1\_Fan Power Fault LED(ON) (Red & Buzzer) |  |
| 60 | PS1\_Fan Power Fault LED(OFF) |  |
| 61 | PS2\_Fan Power Fault LED(ON) (Red & Buzzer) |  |
| 62 | PS2\_Fan Power Fault LED(OFF) |  |
| 63 | PS1\_ Present Fault LED(ON) (Red & Buzzer) |  |
| 64 | PS1\_ Present Fault LED(OFF) |  |
| 65 | PS2\_ Present Fault LED(ON) (Red & Buzzer) |  |
| 66 | PS2\_ Present Fault LED(OFF) |  |
| 67 | Fan0 Fail 30 times event check |  |
| 68 | Fan1 Fail 30 times event check |  |
| 69 | Check Temp0 threshold 30 times and event check |  |
| 70 | Check Temp1 threshold 30 times and event check |  |
| 71 | PS1\_Fan Fail 30 times event check |  |
| 72 | PS2\_Fan Fail 30 times event check |  |
| 73 | PS1\_Present Fail 30 times event check |  |
| 74 | PS2\_Present Fail 30 times event check |  |
| 75 | DNS function check |  |
| 76 | BMC Network setting check |  |
| 77 | Network Link check |  |
| 78 | NTP setting check |  |
| 79 | PEF Management function check |  |
| 80 | SMTP setting check |  |
| 81 | Schedule setting check |  |
| 82 | User Add/Remove/Modify setting check |  |
| 83 | Master BMC DC power Cycling and check HDD quantities for 30 times |  |
| 84 | Secondary BMC DC power Cycling and check HDD quantities for 30 times |  |
| 85 | Master BMC Reset Expander and check HDD quantities for 30 times |  |
| 86 | Secondary BMC Reset Expander and check HDD quantities for 30 times |  |
| 87 | Master BMC Power on storage and check HDD quantities for 30 times |  |
| 88 | Secondary BMC Power on storage and check HDD quantities for 30 times |  |
| 89 | Master BMC Power off storage and check HDD quantities for 30 times |  |
| 90 | Secondary BMC Power off storage and check HDD quantities for 30 times |  |
| 91 | JAVA SOL Function check |  |
| 92 | Print function check |  |
| 93 | Logout function check |  |
| 94 | Refresh function check |  |
| 95 | User login name check / Abnormal check |  |
| 96 | Help function check |  |
| 97 | BMC Firmware update function check / Abnormal check |  |
| 98 | Expander Firmware update function check / Abnormal check |  |
| 99 | Protocol Configuration function check |  |
| 100 | Master Hub card hot plug test 30 times |  |
| 101 | Secondary Hub card hot plug test 30 times |  |
| 102 | Remote Control > ZONE Settings function check |  |
| 103 | Expander update foolproof function on web / Abnormal check |  |
| 104 | HDD status page did refresh after the operation |  |
| 105 | Preserve configuration function check / Abnormal check |  |
| 106 | Event log contains of BMC DHCP/Static IPv4 |  |

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| 6.2 Feature (by RR12 code base) | | |
| **NO.** | **Test Items** | **Result** |
| 6.2.1 Login Page function check | | |
| 1 | BMC WEB UI Login function check / mis-operation check |  |
| 2 | Forgot Password function check / mis-operation check |  |
| 3 | Check webpage logo (AIC) |  |
| 6.2.2 Dashboard function check | | |
| 4 | Login US English |  |
| 5 | Login China-中文(简体) |  |
| 6 | Login China-中文(正體) |  |
| 7 | BMC Firmware Information |  |
| 8 | Shrink edge |  |
| 9 | Display the messages received |  |
| 10 | Display the notification received |  |
| 11 | Language |  |
| 12 | Sync |  |
| 13 | Refresh |  |
| 14 | Profile |  |
| 15 | Sign out |  |
| 16 | Help Button |  |
| 14 | Profile |  |
| 15 | Sign out |  |
| 16 | Help Button |  |
| 6.2.3 Sensor function check | | |
| 17 | Critical Sensors |  |
| 18 | Discrete Sensor States |  |
| 19 | Normal Sensors |  |
| 20 | Help Button |  |
| 6.2.4 FRU & PSU info check | | |
| 21 | FRU info check |  |
| 22 | Help Button |  |
| 23 | FRU info check |  |
| 24 | Help Button |  |
| 6.2.5 Logs & Reports function check | | |
| 25 | IPMI Event log |  |
| 26 | Audit log |  |
| 27 | Help Button |  |
| 6.2.6 Setting function check | | |
| 28 | Data & Time |  |
| 29 | Log Setting |  |
| 30 | Network Settings |  |
| 31 | Platform Event Filter |  |
| 32 | Services |  |
| 33 | SMTP Setting |  |
| 34 | System Firewall |  |
| 35 | User Management |  |
| 36 | Power Restore Policy |  |
| 37 | Help Button |  |
| 6.2.8 Remote Control function check | | |
| 38 | Serial Over LAN |  |
| 39 | Help Button |  |
| 6.2.9 Chassis Identify function check | | |
| 40 | Chassis Identify Off |  |
| 41 | Chassis Identify On |  |
| 42 | Help Button |  |
| 6.2.10 HDD Management function check | | |
| 43 | HDD Power On |  |
| 44 | HDD Power Off |  |
| 45 | HDD Status is Normal, Color is Green |  |
| 46 | HDD Status is Abnormal, Color is Red |  |
| 47 | HDD Status is Not support, Color is Orange |  |
| 48 | HDD Status is Absence, Color is Gray |  |
| 49 | HDD Status is Presence/power off, Color is Light Blue |  |
| 50 | HDD Status is Bad HDD, Color is Purple |  |
| 51 | Help Button |  |
| 6.2.11 Power Control function check | | |
| 53 | Power Off |  |
| 54 | Power On |  |
| 55 | Power Cycle |  |
| 56 | Hard Reset |  |
| 57 | Help Button |  |
| 6.2.12 Maintenance function check | | |
| 58 | Backup Configuration |  |
| 59 | Firmware Image Location |  |
| 60 | BMC Firmware Information |  |
| 61 | BMC Firmware Update |  |
| 62 | Preserve Configuration |  |
| 63 | Restore Configuration |  |
| 64 | Restore Factory Defaults |  |
| 65 | System Administrator |  |
| 66 | Expander Update |  |
| 67 | CPLD Firmware Update |  |
| 68 | BMC Reset |  |
| 69 | Sign Out |  |
| 70 | Help Button |  |
| 6.2.13 Expander BMC Console | | |
| 71 | BMC Console function check |  |

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| 6.3 Redfish | | | | |
| Item | | Vender / Model | Detail | |
| RESTful interface | | Postman | v8.6.1 | |
| **NO.** | **Test Items** | | | **Result** |
| **NO.** | | **Test Items** | **Result** | |
| 6.3.1 AccountService | | | | |
| 1 | [PATCH] Change Password | | |  |
| 2 | [GET] Account 1 instance | | |  |
| 6.3.2 Chassis | | | | |
| 3 | [GET] Chassis collection | | |  |
| 4 | [GET] Chassis self | | |  |
| 5 | [GET] Sensor Reading | | |  |
| 6 | [GET] Sensor Power | | |  |
| 7 | [POST] Chassis Power On | | |  |
| 8 | [PATCH] Blink ID LED | | |  |
| 6.3.3 Chassis/Expander | | | | |
| 9 | [GET] Expander Instance | | |  |
| 10 | [POST] HDD Control | | |  |
| 11 | [GET] HDD Control ActionInfo | | |  |
| 6.3.4 Systems | | | | |
| 12 | [GET] System Self | | |  |
| 13 | [POST] System Power On | | |  |
| 14 | [POST] System Power Off | | |  |
| 15 | [PATCH] Blink ID LED | | |  |
| 16 | [PATCH] Power restore policy | | |  |
| 6.3.5 Managers | | | | |
| 17 | [GET] Managers Self | | |  |
| 18 | [GET] Managers LogServices | | |  |
| 19 | [GET] LogServices SEL | | |  |
| 20 | [GET] SEL Entries | | |  |
| 21 | [GET] Managers Serial Interfaces | | |  |
| 22 | [GET] Managers Network Protocol | | |  |
| 23 | [GET] Managers Ethernet Interfaces | | |  |
| 6.3.6 JsonSchemas | | | | |
| 24 | [GET] Json Schema | | |  |
| 6.3.7 UpdateService | | | | |
| 25 | [POST] Simple Update BMC Fw via HTTP | | |  |
| 26 | [POST] Upload BMC Firmware | | |  |
| 27 | [POST] BMC Fw Update with Full type | | |  |
| 28 | [GET] BMC Fw Update ActionInfo | | |  |

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| 7. Power Consumption Measurement | | |
| Power Housing |  | |
| Power Module |  | |
| AC Input (V/f/A) | 100-127V, 50/60HZ, 10.0A | |
| DC Output (V/A) | +12.0V---66.7A  +12Vsb---3.0A | |
| Total Output Power (max.) |  | |
| Test Equipment | DC Source | |
| Stress Tools | IOMeter Configurations:   * Random Read/Write: * Test Time: xx minute * Transfer Request Size(Bytes): * Outstanding I/O: | |
| 7.1 JBOD Power Consumption Measure for SAS HDD | | |
| Test Mode | PSU Module of Q'ty | W (Watt) |
| Boot Up Mode (Max.) | Module\*2 | 961.4 |
| Module\*1(L) | 954.8 |
| Module\*1(R) | 873.4 |
| Idle Mode | Module\*2 | 776.6 |
| Module\*1(L) | 770 |
| Module\*1(R) | 772.2 |
| Full Loading Mode:  Iometer(Read 100%) | Module\*2 | 941.6 |
| Module\*1(L) | 946 |
| Module\*1(R) | 948.2 |
| Full Loading Mode:  Iometer(Write 100%) | Module\*2 | 858 |
| Module\*1(L) | 858 |
| Module\*1(R) | 855.8 |
| Without HDD/SSD Devices | Module\*2 | 281.6 |
| Module\*1(L) | 275 |
| Module\*1(R) | 275 |

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| 8. Summary | | |
| **Item** | **Descriptions** | **Result** |
| Redundant Power Module | Hot-swap PSU under 'power on' state, check fail LED, beeper, and console status that can work properly. |  |
| Power cord interrupt, check fail led, beeper, and console status that can work properly. |  |
| PSU status under GUI that can work properly. |  |
| PSU status under console that can work properly. |  |
| System Fan | Remove the fan ten times, check fail led, GUI, and console status that can work properly. |  |
| Fan status under GUI that can work properly. |  |
| Fan status under console that can work properly. |  |
| For Smart Fan feature, if temperature upgrade, the rotational speed of fan was increased (depend on spec.) that can work properly. |  |
| Expander | Check PHY state and negotiated link speed; confirm the PHY contents with actual HDD configuration are correct. |  |
| Up connector is correct with substrate type. |  |
| Down connectors were correct with table type. |  |
| Burn-in Test | Adjust conf. to 100% read (in Iometer); the function can work properly after burn-in test. |  |
| Adjust conf. to 100% write (in Iometer); the function can work properly after burn-in test. |  |
| LED Function | Power LED blue, support enclosure ID that can display as spec. defined. |  |
| PSU alarm LED that can display as spec. defined. |  |
| Temperature LED Red, that can display as spec. defined. |  |
| FAN failed LED Red that can display as spec. defined. |  |
| HDD failed LED that can display as spec. defined. |  |
| HDD accessed LED that can display as spec. defined. |  |
| System Fail LED Red, that can display as spec. defined. |  |
| Mute Button | Hot swap the power module ten times (Redundant) and warning sound can be stopped by mute button. |  |
| Hot swap the fan module ten times, and warning sound can be stopped by mute button. |  |
| Temperature was detected over default alarm value (over 55 degrees centigrade), and warning sound can be stopped by mute button. |  |
| Firmware Upgrade | Upgrade via debug port, it can be done successfully. |  |
| Upgrade via console port, it can be done successfully. |  |
| Temperature Sensor | T1, T2, warning, Alarm value configuration setting, that statuses are showing normally. |  |
| Temperature detected status under GUI that statuses are showing normally. |  |
| Temperature detected status under HyperTerminal that statuses are showing normally. |  |
| Break through alarm value, then the fail led will light up, that statuses are showing normally. |  |
| Break through alarm value, RPM of fan is the highest, that statuses are showing normally. |  |
| SES Lighting Signal | Request OK |  |
| Request RSVD device |  |
| Request hot spare |  |
| Request consistency check |  |
| Request in critical array |  |
| Request in failed array |  |
| Request rebuild/ remap |  |
| Request rebuild/ remap aborted |  |
| Request active |  |
| Request do not remove |  |
| Request device missing indication |  |
| Request insert |  |
| Request removal |  |
| Request identify |  |
| Request fault indication |  |
| Request device off |  |
| Request Canister |  |
| Request Power supply off |  |
| Request PRD fail |  |
| JBOD Remote | Use sg\_utils to shutdown UUT under Linux that function can work properly. |  |
| Remote JBOD power on that function can work properly. |  |
| Remote JBOD power off, that function can work properly. |  |
| Shake Test | Bend the SFF-8644 cable that the PHY status is showing normally. |  |
| Shaking cable around the SFF-8644 junction that the PHY status is showing normally. |  |
| HDD Hot-swap | Plug-in HDD that JBOD function can work properly. |  |
| Remove HDD that JBOD function can work properly. |  |
| External 8644 Hot-swap | Plug-in external 8644 that JBOD function can work properly. |  |
| Remove external 8644 that JBOD function can work properly. |  |
| Expander hot-swap | Plug-in Expander that JBOD function can work properly. |  |
| Remove Expander that JBOD function can work properly. |  |
| AC/DC Power cycling | Power on/off by AC power core (plug-in/removed), that JBOD function can work properly. |  |
| Power on/off by power button, that JBOD function can work properly. |  |
| SAS Zoning | Group8 and Group9 were run independently. |  |
| Group1 can detect Group8 and Group9. |  |
| All HDD of Group8 could build RAID and run Iometer properly. |  |
| And all HDD of Group9 could build RAID and run Iometer properly. |  |
| JBOD Cascade | Check substrate table and Diameter for 12 hrs. without error. |  |
| Manually PWM | Check PWM % can be changed and FAN rpm will speed up or low down by manual setting that can work properly. |  |
| MPIO | Single HBA Card |  |
| Dual HBA Card |  |
| DD command stress JBOD | Stress JBOD without any CDB or error. |  |
| diag\_drive\_led | The "diag\_drive\_led" function can work properly. |  |
| sas\_standby\_timer | The power saving function can work properly. |  |
| Check\_wide\_port on /off /standby | The power saving function can work properly. |  |
| serial number and enclosure number | The function of CLI serial number and enclosure number can work properly. |  |
| enclosure addr | The function of CLI enclosure addr function can work properly. |  |
| sensor | The function of CLI sensor can work properly. |  |
| AT Switch test : by power cord | The function of "power\_setting keep\_on" can work properly. |  |
| The function of "power\_setting keep\_off" can work properly. |  |
| The function of "power\_setting keep\_last\_state" can work properly. |  |
| AT Switch test : by front power SW | The function of "power\_setting keep\_on" can work properly. |  |
| The function of "power\_setting keep\_off" can work properly. |  |
| The function of "power\_setting keep\_last\_state" can work properly. |  |
| RAID Card Test | "RAID Card" with SAS 12G HDD Config |  |
| "RAID Card" with SAS 6G HDD Config |  |
| "RAID Card" with SATA 6G HDD Config |  |
| HBA Card Test | "HBA Card" with SAS 12G HDD Config |  |
| "HBA Card" with SAS 6G HDD Config |  |
| "HBA Card" with SATA 6G HDD Config |  |
| BMC Feature (by RR6 code base) | BMC WEB UI Login function check / mis-operation check |  |
| Forgot Password function check / mis-operation check |  |
| Device Information check (FW name/version) |  |
| Network Information check |  |
| Basic IOL connection check |  |
| Basic SOL connection check |  |
| Check sensors name accuracy |  |
| Check webpage logo(AIC) |  |
| FRU data Accuracy check |  |
| Hard Disk Manager: |  |
| SAS-12G HDD Config, 30 times power on/off by primary BMC |  |
| Hard Disk Manager: |  |
| SAS-12G HDD Config, 30 times power on/off by secondary BMC |  |
| Hard Disk Manager: |  |
| SAS - 6G HDD Config, 30 times power on/off by primary BMC |  |
| Hard Disk Manager: |  |
| SAS - 6G HDD Config, 30 times power on/off by secondary BMC |  |
| Hard Disk Manager: |  |
| SATA-6G HDD Config, 10 times power on/off by primary BMC |  |
| Hard Disk Manager LED are Green status |  |
| Hard Disk Manager LED are Gray status |  |
| Hard Disk Manager LED are red status |  |
| Hard Disk Manager LED are blue status |  |
| BMC Card Fail LED be turn on by Fan\_0 |  |
| BMC Card Fail LED be turn off by Fan\_0 |  |
| BMC Card Fail LED be turn on by Fan\_1 |  |
| BMC Card Fail LED be turn off by Fan\_1 |  |
| BMC Card Fail LED be turn on by Temp0 |  |
| BMC Card Fail LED be turn off by Temp0 |  |
| BMC Card Fail LED be turn on by Temp1 |  |
| BMC Card Fail LED be turn off by Temp1 |  |
| BMC Card Fail LED be turn on by PSU1temp |  |
| BMC Card Fail LED be turn off by PSU1temp |  |
| BMC Card Fail LED be turn on by PSU2temp |  |
| BMC Card Fail LED be turn on by PSUt2emp |  |
| Fan\_0 sensor reading / Abnormal check |  |
| Fan\_1 sensor reading / Abnormal check |  |
| Temp0 sensor reading / Abnormal check |  |
| Temp1 sensor reading / Abnormal check |  |
| PSU1\_status sensor reading / Abnormal check |  |
| PSU2\_status sensor reading / Abnormal check |  |
| PS\_Watt sensor reading / Abnormal check |  |
| PSU1\_temp sensor reading / Abnormal check |  |
| PSU2\_temp sensor reading / Abnormal check |  |
| Watchdog1 sensor reading / Abnormal check |  |
| BMC SEL event log be record by Fan\_0 |  |
| BMC SEL event log be record by Fan\_1 |  |
| BMC SEL event log be record by Temp0 |  |
| BMC SEL event log be record by Temp1 |  |
| BMC SEL event log be record by PSU1\_status |  |
| BMC SEL event log be record by PSU2\_status |  |
| BMC SEL event log be record by PSUtemp1 |  |
| BMC SEL event log be record by PSUtemp2 |  |
| PS1\_Fan Fail SDR value |  |
| PS1\_Un-Present SDR value |  |
| PS2\_Fan Fail SDR value |  |
| PS2\_Un-Present SDR value |  |
| PS1\_Fan event check |  |
| PS1\_Present event check |  |
| PS2\_Fan event check |  |
| PS2\_Present event check |  |
| PS1\_Fan Power Fault LED(ON) (Red & Buzzer) |  |
| PS1\_Fan Power Fault LED(OFF) |  |
| PS2\_Fan Power Fault LED(ON) (Red & Buzzer) |  |
| PS2\_Fan Power Fault LED(OFF) |  |
| PS1\_ Present Fault LED(ON) (Red & Buzzer) |  |
| PS1\_ Present Fault LED(OFF) |  |
| PS2\_ Present Fault LED(ON) (Red & Buzzer) |  |
| PS2\_ Present Fault LED(OFF) |  |
| Fan0 Fail 30 times event check |  |
| Fan1 Fail 30 times event check |  |
| Check Temp0 threshold 30 times and event check |  |
| Check Temp1 threshold 30 times and event check |  |
| PS1\_Fan Fail 30 times event check |  |
| PS2\_Fan Fail 30 times event check |  |
| PS1\_Present Fail 30 times event check |  |
| PS2\_Present Fail 30 times event check |  |
| DNS function check |  |
| BMC Network setting check |  |
| Network Link check |  |
| NTP setting check |  |
| PEF Management function check |  |
| SMTP setting check |  |
| Schedule setting check |  |
| User Add/Remove/Modify setting check |  |
| Master BMC DC power Cycling and check HDD quantities for 30 times |  |
| Secondary BMC DC power Cycling and check HDD quantities for 30 times |  |
| Master BMC Reset Expander and check HDD quantities for 30 times |  |
| Secondary BMC Reset Expander and check HDD quantities for 30 times |  |
| Master BMC Power on storage and check HDD quantities for 30 times |  |
| Secondary BMC Power on storage and check HDD quantities for 30 times |  |
| Master BMC Power off storage and check HDD quantities for 30 times |  |
| Secondary BMC Power off storage and check HDD quantities for 30 times |  |
| JAVA SOL Function check |  |
| Print function check |  |
| Logout function check |  |
| Refresh function check |  |
| User login name check / Abnormal check |  |
| Help function check |  |
| BMC Firmware update function check / Abnormal check |  |
| Expander Firmware update function check / Abnormal check |  |
| Protocol Configuration function check |  |
| Master Hub card hot plug test 30 times |  |
| Secondary Hub card hot plug test 30 times |  |
| Remote Control > ZONE Settings function check |  |
| Expander update foolproof function on web / Abnormal check |  |
| HDD status page did refresh after the operation |  |
| Preserve configuration function check / Abnormal check |  |
| Event log contains of BMC DHCP/Static IPv4 |  |
| BMC WEB UI Login function check / mis-operation check |  |
| BMC Feature (by RR12 code base) | **Login Page function check** | |
| BMC WEB UI Login function check / mis-operation check |  |
| Forgot Password function check / mis-operation check |  |
| Check webpage logo (AIC) |  |
| **Dashboard function check** | |
| Login US English |  |
| Login China-中文(简体) |  |
| Login China-中文(正體) |  |
| BMC Firmware Information |  |
| Shrink edge |  |
| Display the messages received |  |
| Display the notification received |  |
| Language |  |
| Sync |  |
| Refresh |  |
| Profile |  |
| Sign out |  |
| Help Button |  |
| **Sensor function check** | |
| Critical Sensors |  |
| Discrete Sensor States |  |
| Normal Sensors |  |
| Help Button |  |
| **FRU & PSU info check** | |
| FRU info check |  |
| Help Button |  |
| FRU info check |  |
| Help Button |  |
| **Logs & Reports function check** | |
| IPMI Event log |  |
| Audit log |  |
| Help Button |  |
| **Setting function check** | |
| Data & Time |  |
| Log Setting |  |
| Network Settings |  |
| Platform Event Filter |  |
| Services |  |
| SMTP Setting |  |
| System Firewall |  |
| User Management |  |
| Power Restore Policy |  |
| Help Button |  |
| **Remote Control function check** | |
| Serial Over LAN |  |
| Help Button |  |
| **Chassis Identify function check** | |
| Chassis Identify Off |  |
| Chassis Identify On |  |
| Help Button |  |
| **HDD Management function check** | |
| HDD Power On |  |
| HDD Power Off |  |
| HDD Status is Normal, Color is Green |  |
| HDD Status is Abnormal, Color is Red |  |
| HDD Status is Not support, Color is Orange |  |
| HDD Status is Absence, Color is Gray |  |
| HDD Status is Presence/power off, Color is Light Blue |  |
| HDD Status is Bad HDD, Color is Purple |  |
| Help Button |  |
| **Power Control function check** | |
| Power Off |  |
| Power On |  |
| Power Cycle |  |
| Hard Reset |  |
| Help Button |  |
| **Maintenance function check** | |
| Backup Configuration |  |
| Firmware Image Location |  |
| BMC Firmware Information |  |
| BMC Firmware Update |  |
| Preserve Configuration |  |
| Restore Configuration |  |
| Restore Factory Defaults |  |
| System Administrator |  |
| Expander Update |  |
| CPLD Firmware Update |  |
| BMC Reset |  |
| Sign Out |  |
| Help Button |  |
| **Expander BMC Console** | |
| BMC Console function check |  |
| BMC Feature (by Redfish code base) | **AccountService** | |
| [PATCH] Change Password |  |
| [GET] Account 1 instance |  |
| **Chassis** | |
| [GET] Chassis collection |  |
| [GET] Chassis self |  |
| [GET] Sensor Reading |  |
| [GET] Sensor Power |  |
| [POST] Chassis Power On |  |
| [PATCH] Blink ID LED |  |
| **Chassis/Expander** | |
| [GET] Expander Instance |  |
| [POST] HDD Control |  |
| [GET] HDD Control ActionInfo |  |
| **Systems** | |
| [GET] System Self |  |
| [POST] System Power On |  |
| [POST] System Power Off |  |
| [PATCH] Blink ID LED |  |
| [PATCH] Power restore policy |  |
| **Managers** | |
| [GET] Managers Self |  |
| [GET] Managers LogServices |  |
| [GET] LogServices SEL |  |
| [GET] SEL Entries |  |
| [GET] Managers Serial Interfaces |  |
| [GET] Managers Network Protocol |  |
| [GET] Managers Ethernet Interfaces |  |
| **JsonSchemas** | |
| [GET] Json Schema |  |
| **UpdateService** | |
| [POST] Simple Update BMC Fw via HTTP |  |
| [POST] Upload BMC Firmware |  |
| [POST] BMC Fw Update with Full type |  |
| [GET] BMC Fw Update ActionInfo |  |
| Power Consumption | Refer to “Power Consumption Measurement” section | -- |