

ReleaseOrderPkg ID: SCGCQ01556631

Headline: GCA MR 7.4 - Full flash images for all Quanta boards (Package 50.4.0-1036)

Package_Type: Ventura MR FW Package Broadcom - Quanta

Package_Version: 50.4.0-1036

Date Generated: Jan 09, 2018

- SCGCQ01509548 (ReleaseOrder) - GCA: MR_FW_SAS3.5_7.4_FC - 5.040.00-1123 Firmware
- SCGCQ01422329 (ReleaseOrder) - MR PL/SCS Libs: SASFW_Ventura - 04.250.08.00 Firmware
- SCGCQ01358548 (ReleaseOrder) - Ventura Boot Block - 7.02.00.00-0017
- SCGCQ01145903 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
- SCGCQ01108283 (ReleaseOrder) - MegaRaid Ventura CPLDs
- SCGCQ01498712 (ReleaseOrderPkg) - MR 7.4 Ventura BIOS Package 7.04.04.0_4.17.08.00_0x07040600_07.04.09.00 - ONLY x64 (Contains SIGNED UEFI Driver and SIGNED HEFU HII)
 - SCGCQ01498688 (ReleaseOrder) - x64 - MR 7.4 Ventura UEFI Driver 0x07040600 (SIGNED)
 - SCGCQ01498687 (ReleaseOrder) - x64 - MR 7.4 HEFU HII For Ventura v07.04.09.00 (SIGNED)
 - SCGCQ01454067 (ReleaseOrder) - MR 7.4 BIOS for Ventura 7.04.04.0 (supports Ext Flash Header)
 - SCGCQ01145903 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
 - SCGCQ01106013 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - BinToRom v1.01
 - SCGCQ00791254 (ReleaseOrder) - Fcode 4.17.08.00
- SCGCQ01553579 (ReleaseOrderPkg) - MR [7.4] Ventura SBR Package 5.0400.09-0332 - Quanta
 - SCGCQ01504006 (ReleaseOrder) - Beta Release: MR_RMC_SAS3.5_7.4 - 331 SBR_RMC
 - SCGCQ01421108 (ReleaseOrder) - PCE Settings v1.11 Update
 - SCGCQ01415846 (ReleaseOrder) - HW Settings v1.10 - Add HW_SET changes needed for ISSI SPI Flash Parts (IS25WP128 and IS25WP256D) support
 - SCGCQ01173982 (ReleaseOrder) - SPICO v1.06
 - SCGCQ01145903 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
 - SCGCQ01106013 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - BinToRom v1.01
 - SCGCQ01064344 (ReleaseOrder) - SBR Package Tools v1.01
- SCGCQ01553572 (ReleaseOrderPkg) - MR 7.4 NVData (5.0400.09-0001) for Quanta boards
 - SCGCQ01473239 (ReleaseOrder) - MR7.4 NVDATA XSD Release (5.040.00-1034)
 - SCGCQ01186894 (ReleaseOrder) - Alpha Release: MR_FW_BLD_TOOLS - 1.02 BinToRom
 - SCGCQ01145903 (ReleaseOrder) - Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
 - SCGCQ00873966 (ReleaseOrder) - Sas2parser Revision 10.02.00.00
 - SCGCQ01491247 (HWBoardImageConfig) - MR 7.3 Quanta_152D_8B01 QS3516B-240PD-R0156
 - SCGCQ01491246 (HWBoardImageConfig) - MR 7.3 Quanta_152D_8B00 QS3516B-32PD-R0156
- Custom Image Table

GCA Release (SCGCQ01509548) - Firmware - 5.040.00-1123

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ReleaseOrderID: SCGCQ01509548

Headline: GCA: MR_FW_SAS3.5_7.4_FC - 5.040.00-1123 Firmware

Release Version: 5.040.00-1123

Product Org: DCSG

Product Gen: SAS3.5

Product Family: MR_FW

UCM Project: MR_FW_SAS3.5_7.4_FC

Release Type: GCA

UCM Stream: MR_FW_SAS3.5_7.4_FC2_Rel

Owner: buildsvc

Release Baseline: MR_FW_SAS3.5_7.4_FC-2017-11-15-5.040.00-1123_REL_1510794636@
\\MegaRAID

Release Date / Time: 30-NOV-17

Release Type: GCA

Firmware Defects Fixed (3):

Defect ID: SCGCQ01488410

Headline: 30% to 35% JetstressDB Average Write Latency regression found in R5, MR 7.4 Beta

Description Of Change: Fix: Do not flush aggressively for fast arrays

Issue Description: Root cause: Flusher was flushing aggressively for fast arrays as well as slow arrays.

Steps To Reproduce: Run Jetstress

Defect ID: SCGCQ01482937

Headline: MPI SEP request to Slots with invalid SES Page 0A element index may not complete

Description Of Change: Changed FW to fail SEP request if no element index is available with SES page 0Ah mapping is complete.

Issue Description: PL Enclosure management module creates a map of SES page 0Ah element index to device slot numbers on a MPI request and if the slot does not have a valid element index (eg. VSES slot), then page 0Ah is read again and this goes on, not completing the SEP request.

Steps To Reproduce: Send a MPI SEP request to VSES/SEP slot and observe the request not completing.

Defect ID: SCGCQ01489030

Headline: Global HDD LED may not indicate IO activity for NVMe or SAS drives

Description Of Change: Changed FW to setup correct LED control MUX to select appropriate PHYs activity signal based on the device type discovered.

Issue Description: LED connected to global HDD activity header or using vendor specific connection on SAS3508/3408 based HBAs may not blink during IOs to NVMe HDD/SAS HDD. The FW enables LED control MUX by selecting the appropriate PHY activity signal based on the device type detected and this is setup incorrectly for 8-PHYs controller, not mapping the correct activity signal to the global activity LED to blink.

Steps To Reproduce: Connect a LED to global HDD activity header or using vendor specific connection on SAS3508/3408 based HBA, run IOs to NVMe HDD/SAS HDD and observe no LED activity.

Firmware Enhancements Implemented (1):

Beta Release (SCGCQ01422329) - MR PL-SCS Libs - 04.250.08.00

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ReleaseOrderID: SCGCQ01422329

Headline: MR PL/SCS Libs: SASFW_Ventura - 04.250.08.00 Firmware
Release Version: 04.250.08.00
Product Org: SCS
Product Gen: SAS3.5
Product Family: SAS3.5_Controller_FW
UCM Project: SASFW_Ventura_Phase_5.0
Release Type: Beta
UCM Stream: SASFW_Ventura_Rel
Owner: buildsvc
Release Baseline: SASFW_Ventura-2017-08-16-04.250.08.00_REL_1502899330@
\\SAS_CTRL_FW
Release Date / Time: 18-AUG-17
Release Type: Beta

MR PL-SCS Libs Defects Fixed (6):

Defect ID: SCGCQ01376222
Headline: pl: backend PCIe: EC56 fault
Description Of Change: Before handling PCIe errors, ensure that detected errors have propagated throughout the root port.
Issue Description: If a malformed TLP is received by the root port at approximately the same time as another PCIe error is detected, an EC56 fault may occur.
Steps To Reproduce: Perform link break testing with various NVMe devices.

Defect ID: SCGCQ01404209
Headline: NVMe drive discovery fails after pull/push on customer specific NVMe supported backplane
Description Of Change: After the NVMe drive removal or insertion back to the customer specific back plane, the PERST# signal should be updated accordingly to the back plane device register through the I2C command. After the drive presence or removal detection the state machine moves to update the PERST# signal as well.
Issue Description: The NVMe drive was not getting discovered after the pull/push operation on a customer specific backplane
Steps To Reproduce: Ventura controller connected to the customer specific NVMe supported back plane. Do pull/push operation on NVMe drive connected to the back plane after initial discovery. The drive will not get discovered after inserted back again.

Defect ID: SCGCQ01416380
Headline: Ventura vSES: Protocol ID of additional element status page (0x0A) for empty phys was set as invalid
Description Of Change: Set the protocol ID for all the descriptors in additional element status page to SAS.
Issue Description: For the phys that do not have any device connected and configured as external the protocol ID field in additional element status descriptor for additional element status page (pagecode 0x0A) is set to 0xF (invalid). Windows OS does not enumerate the enclosure if for any element the protocol ID is set as anything other than SAS.
Steps To Reproduce: Attach a controller in a Windows system with some phys configured as external without any drives connected to the controller and check get-storageenclosure command in Windows powershell, the virtual SES enclosure will not get listed.

Defect ID: SCGCQ01418183
Headline: pl: NVMe: 6001 fault
Description Of Change: Fixed an issue that caused TM to fail to abort a non-PL initiated encapsulated admin request.
Issue Description: If an MPI NVMe encapsulated request containing an NVMe admin command and appropriate flags is sent to an NVMe device, and a task management request that causes a device reset is then sent to the device, a 6001 fault will occur.
Steps To Reproduce: Issue an NVMe encapsulated request containing an admin command and appropriate flags to an NVMe device. Then, send a target reset task management request to the device.

Defect ID: SCGCQ01420695
Headline: SPI Lib: SPI flash sector erase is taking to long.
Description Of Change: Reduced timeout when spinning to check and see if flash part has completed a sector erase.
Issue Description: When erasing a SPI flash sector, it can take >1.5 seconds to complete. This causes timeouts and other problems in application software.
Steps To Reproduce: Perform a SPI flash sector erase
Observe the time to complete the operation.

Defect ID: SCGCQ01414932
Headline: PL: Change nvdata bits for avoid duplicate mid feature to Mfg 17 Flags bits 12:11
Description Of Change: Changed the code to use bits 12:11.
Issue Description: It was discovered that the nvdata bits originally used to configure the reset type for the avoid duplicate mid feature, bits 10:9 of the Mfg 17 Flags field, are already in use on another product.
Steps To Reproduce: N/A

MR PL-SCS Libs Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01417738
Headline: SPILib: Prevent firmware downgrade if older version does not support SPI flash being used.
Description Of Change: Support for the ISSI 32MB SPI flash (IS25WP256-RHLE) was recently added to the SPI Library. If boards are using this flash, we should prevent them from downgrading their firmware to a version that does not contain support for this part.

GCA Release (SCGCQ01358548) - BootBlock - 7.02.00.00-0017

ReleaseOrderID: SCGCQ01358548
Headline: Ventura Boot Block - 7.02.00.00-0017
Release Version: 7.02.00.00-0017
Product Org: MegaRAID
Product Gen: SAS3.5
Product Family: MR_FW
UCM Project: MR_BOOTBLOCK_Ventura
Release Type: GCA
UCM Stream: MR_BOOTBLOCK_Ventura_Rel
Owner: st887734
Release Baseline: MR_BOOTBLOCK_Ventura_Rel_2017-06-01@
\\MegaRAID
Release Date / Time: 07-JUL-17
Release Type: GCA

BootBlock Defects Fixed (1):

Defect ID: SCGCQ01357917
Headline: Boot Block Accesses PCI_LINK_CONFIG while PCE Core is Reset
Description Of Change: In Boot Block, ensure the PCE core is out of reset before accessing PCI_LINK_CONFIG. This is done by making sure CCR_MODSPCRST0_PCE_SERDES_RST and CCR_MODSPCRST0_PCE_HARD_RST are cleared in ModuleSpecificResets0.
Issue Description: In the Boot Block, it is possible for it to access PCI_LINK_CONFIG while the RMC still has the PCE core in reset. Therefore, the Boot Block needs to ensure the PCE core is out of reset before accessing PCI_LINK_CONFIG.
Steps To Reproduce: Refer to SCGCQ01349657.

Flash Darlington DVT3 Board with SCGCQ01342886 firmware - ROP504 on an Asus motherboard.
Motherboard: Asus e3c222d4u
Asus z170 pro gaming
Asrock: e3c226d2i

On a cold boot up, no post and UART occurs.

GCA Release (SCGCQ01145903) - ROMENV - 1.12



ReleaseOrderID: SCGCQ01145903
Headline: Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
Release Version: 1.12
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: GCA
UCM Stream: MR_FW_BLD_TOOLS_Dev
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-07-27-1.12_REL_1469655797@\\MegaRAID
Release Date / Time: 27-JUL-16
Release Type: GCA

ROMENV Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01145093
Headline: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present
Description Of Change: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present

GCA Release (SCGCQ01108283) - SBR_CPLD - 5



ReleaseOrderID: SCGCQ01108283
Headline: MegaRaid Ventura CPLDs
Release Version: 5
Product Org: MegaRAID
Product Gen: SASx
Product Family: MR_FW
UCM Project: SBR_Bld_Tools
Release Type: GCA
UCM Stream: SBR_Bld_Tools_MR7_Dev
Owner: douarens
Release Baseline: SBR_Bld_Tools_MR7_Dev_2016-03-18_CPLD@\\MegaRAID
Release Date / Time: 07-JUL-17
Release Type: GCA

ReleaseOrderPkg ID: SCGCQ01498712
Headline: MR 7.4 Ventura BIOS Package 7.04.04.0_4.17.08.00_0x07040600_07.04.09.00 - ONLY x64 (Contains SIGNED UEFI Driver and SIGNED HEFU HII)
Package_Type: MR 3516 Ventura BIOS Package
Package_Version: 7.04.04.0_4.17.08.00_0x07040600_07.04.09.00
Date Generated: Jan 09, 2018

GCA Release (SCGCQ01498688) - UEFI_Driver - 0x07040600



ReleaseOrderID: SCGCQ01498688
Headline: x64 - MR 7.4 Ventura UEFI Driver 0x07040600 (SIGNED)
Release Version: 0x07040600
Product Org: MegaRAID
Product Gen: SAS3.5
Product Family: MR_BIOS
UCM Project: MR_UEFI_Drv_7.4
Release Type: GCA
UCM Stream: MR_UEFI_Drv_7.4_Rel
Owner: sramach
Release Baseline: MR_UEFI_Drv_7.4_Rel_2017-11-03_v0x07040600Signed@\\MegaRAID
Release Date / Time: 03-NOV-17
Release Type: GCA

GCA Release (SCGCQ01498687) - Hii - 07.04.09.00



ReleaseOrderID: SCGCQ01498687
Headline: x64 - MR 7.4 HEFU HII For Ventura v07.04.09.00 (SIGNED)
Release Version: 07.04.09.00
Product Org: MegaRAID
Product Gen: SAS3.5
Product Family: MR_BIOS
UCM Project: MR_SAS_HEFU_HII_7.4
Release Type: GCA
UCM Stream: MR_SAS_HEFU_HII_7.4_Rel
Owner: sramach
Release Baseline: MR_SAS_HEFU_HII_7.4_Rel_2017-11-03_v07.04.09.00Signed@\\MegaRAID
Release Date / Time: 03-NOV-17
Release Type: GCA

GCA Release (SCGCQ01454067) - BIOS - 7.04.04.0



ReleaseOrderID: SCGCQ01454067
Headline: MR 7.4 BIOS for Ventura 7.04.04.0 (supports Ext Flash Header)
Release Version: 7.04.04.0
Product Org: MegaRAID
Product Gen: SAS3.5
Product Family: MR_BIOS
UCM Project: MR_SAS_BIOS_7.4
Release Type: GCA
UCM Stream: MR_SAS_BIOS_7.4_Rel
Owner: dk020286

Release Baseline: MR_SAS_BIOS_7.4_Rel_2017-09-20_v7.04.04.0@MegaRAID
Release Date / Time: 20-SEP-17
Release Type: GCA

GCA Release (SCGCQ01145903) - ROMENV - 1.12



ReleaseOrderID: SCGCQ01145903
Headline: Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
Release Version: 1.12
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: GCA
UCM Stream: MR_FW_BLD_TOOLS_Dev
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-07-27-1.12_REL_1469655797@
MegaRAID
Release Date / Time: 27-JUL-16
Release Type: GCA

ROMENV Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01145093
Headline: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present
Description Of Change: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present

Point Release (SCGCQ01106013) - MR_FW_BLD_TOOLS - 1.01



ReleaseOrderID: SCGCQ01106013
Headline: Point Release: MR_FW_BLD_TOOLS - BinToRom v1.01
Release Version: 1.01
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: Point
UCM Stream: MR_FW_BLD_TOOLS_Dev
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-06-01-1.01_REL_1464821096@
MegaRAID
Release Date / Time: 01-JUN-16
Release Type: Point

MR_FW_BLD_TOOLS Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01105905
Headline: Add Support for Environmental Offset
Description Of Change: Add Support for Environmental Offset

GCA Release (SCGCQ00791254) - FCODE - 4.17.08.00



ReleaseOrderID: SCGCQ00791254
Headline: Fcode 4.17.08.00
Release Version: 4.17.08.00
Product Org: MegaRAID
Product Gen: SAS3
Product Family: MR_BIOS
UCM Project: MR_FCODE
Release Type: GCA
UCM Stream: MR_FCODE_Rel
Owner: sramach
Release Baseline: MR_FCODE_Rel_2014-11-07_v4.17.08.00@
MegaRAID
Release Date / Time: 07-NOV-14
Release Type: GCA

ReleaseOrderPkg ID: SCGCQ01553579
Headline: MR [7.4] Ventura SBR Package 5.0400.09-0332 - Quanta
Package_Type: Ventura MR SBR Package - Quanta
Package_Version: 5.0400.09-0332
Date Generated: Jan 09, 2018

Beta Release (SCGCQ01504006) - SBR_RMC - 331



ReleaseOrderID: SCGCQ01504006
Headline: Beta Release: MR_RMC_SAS3.5_7.4 - 331 SBR_RMC
Release Version: 331
Product Org: MegaRAID
Product Gen: SAS3.5
Product Family: MR_RMC_FW
UCM Project: MR_RMC_SAS3.5_7.4
Release Type: Beta
UCM Stream: MR_RMC_SAS3.5_7.4_Int
Owner: buildsvc
Release Baseline: MR_RMC_SAS3.5_7.4-2017-11-08-331_REL_1510148805@
MegaRAID
Release Date / Time:
Release Type: Beta

SBR_RMC Defects Fixed (2):

Defect ID: SCGCQ01445075
Headline: SCLOCK goes low immediately after reset

Description Of Change: The fix is to re-initialize GPIO mux control registers to 0 in syslite/chip reset assertion steps. This change will allow SClock to stay high until SGPIO is initialized by A15 during start of day

Issue Description: SCLOCK goes low immediately after reset

Steps To Reproduce: initiate OCR/syslite reset
SGPIO CLOCK goes low after reset is deasserted

Defect ID: SCGCQ01484273

Headline: "ERROR: Dirty disk cache data has been lost" during 48hr COL test

Description Of Change: Skip MSS Reset if Offload is in Progress and Syslite is asserted.Refer Attached COLfailuredebugEmailCommuncation.pdf for details.This document provides more detailed debugging and root cause info.

Issue Description: During a 48hr COL test, a single instance of "ERROR: Dirty disk cache data has been lost" was seen. This results in an unsuccessful restore and data loss.

The test is a single power pull with random off times before power is restored. The off times ranged from 1 - 55 seconds.

The error occurred with a glitch scenario where power was restored before the offload completed. You can see in the log that the controller waited for the offload to complete and the BIOS reset message was given and the system rebooted. On the next reboot is where the ERROR: Dirty disk cache data has been lost message is seen.

This occurs on line 565379 of the log. This was about 60% through the 48hr test when it occurred.

Steps To Reproduce: 1. Created R0, R1, R5, R6, R50 and R60 with WB / CIO / RA properties. Ran full init on all VDs
2. Configured IOMonkey to run at startup on all VDs
3. Started APC script to power off and power back on at random times between 1 and 55 seconds for 48 hours. [1, 2, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 52, 55]

SBR_RMC Enhancements Implemented (2):

EnhancementRequest ID: SCGCQ01459451

Headline: Clean up unused code to free up space for new code.

Description Of Change: Remove certain memory dumps to reduce RMC image size

EnhancementRequest ID: SCGCQ01429856

Headline: RMC: Add new event to move to reset idle state

Description Of Change: Add new event to move to reset idle state in response to a doorbell from A15 when it wants to enter fault state

Point Release (SCGCQ01421108) - SBR_PCE - 1.11

ReleaseOrderID: SCGCQ01421108

Headline: PCE Settings v1.11 Update

Release Version: 1.11

Product Org: MegaRAID

Product Gen: SASx

Product Family: MR_FW

UCM Project: SBR_Bld_Tools

Release Type: Point

UCM Stream: SBR_Bld_Tools_MR7_Dev

Owner: wyen

Release Baseline: SBR_Bld_Tools_MR7_Dev_2017-06-01@\\MegaRAID

Release Date / Time: 21-AUG-17

Release Type: Point

Point Release (SCGCQ01415846) - SBR_HW - 1.10

ReleaseOrderID: SCGCQ01415846

Headline: HW Settings v1.10 - Add HW_SET changes needed for ISSI SPI Flash Parts (IS25WP128 and IS25WP256D) support

Release Version: 1.10

Product Org: MegaRAID

Product Gen: SASx

Product Family: MR_FW

UCM Project: SBR_Bld_Tools

Release Type: Point

UCM Stream: SBR_Bld_Tools_MR7_Dev

Owner: wyen

Release Baseline: SBR_Bld_Tools_MR7_Dev_2016-03-11_HW_SET.862@\\MegaRAID

Release Date / Time:

Release Type: Point

Alpha Release (SCGCQ01173982) - SBR_SPICO - 1.06

ReleaseOrderID: SCGCQ01173982

Headline: SPICO v1.06

Release Version: 1.06

Product Org: MegaRAID

Product Gen: SASx

Product Family: MR_FW

UCM Project: SBR_Bld_Tools

Release Type: Alpha

UCM Stream: SBR_Bld_Tools_MR7_Dev

Owner: jgrivich

Release Baseline: SBR_Bld_Tools_MR7_Dev_2016-09-01@\\MegaRAID

Release Date / Time: 01-SEP-16

Release Type: Alpha

GCA Release (SCGCQ01145903) - ROMENV - 1.12

ReleaseOrderID: SCGCQ01145903

Headline: Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV

Release Version: 1.12

Product Org: MegaRAID

Product Gen: SAS2.5

Product Family: MR_FW

UCM Project: MR_FW_BLD_TOOLS

Release Type: GCA

UCM Stream: MR_FW_BLD_TOOLS_Dev

Owner: buildsvc

Release Baseline: MR_FW_BLD_TOOLS-2016-07-27-1.12_REL_1469655797@\\MegaRAID

Release Date / Time: 27-JUL-16

Release Type: GCA

ROMENV Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01145093
Headline: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present
Description Of Change: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present

Point Release (SCGCQ01106013) - MR_FW_BLD_TOOLS - 1.01

ReleaseOrderID: SCGCQ01106013
Headline: Point Release: MR_FW_BLD_TOOLS - BinToRom v1.01
Release Version: 1.01
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: Point
UCM Stream: MR_FW_BLD_TOOLS_Dev
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-06-01-1.01_REL_1464821096@MegaRAID
Release Date / Time: 01-JUN-16
Release Type: Point

MR_FW_BLD_TOOLS Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01105905
Headline: Add Support for Environmental Offset
Description Of Change: Add Support for Environmental Offset

GCA Release (SCGCQ01064344) - SBR_TOOLS - 1.01

ReleaseOrderID: SCGCQ01064344
Headline: SBR Package Tools v1.01
Release Version: 1.01
Product Org: MegaRAID
Product Gen: SASx
Product Family: MR_FW
UCM Project: SBR_Bld_Tools
Release Type: GCA
UCM Stream: SBR_Bld_Tools_MR7_Dev
Owner: jgrivich
Release Baseline: SBR_Bld_Tools_MR7_Dev_2016-03-11_PACKAGE_TOOLS@MegaRAID
Release Date / Time: 12-APR-16
Release Type: GCA

SBR_TOOLS Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01064293
Headline: Add Support for DeviceID and Subsystem Insertion into PCI SET file
Description Of Change: Ability to update the base PCI_SET.bin file with Device ID, Vendor ID, Subsystem ID, and Subsystem Vendor ID

ReleaseOrderPkg ID: SCGCQ01553572
Headline: MR 7.4 NVData (5.0400.09-0001) for Quanta boards
Package_Type: Ventura MR NVDATA Package
Package_Version: 5.0400.09-0001
Date Generated: Jan 09, 2018

Beta Release (SCGCQ01473239) - Firmware - 5.040.00-1034

ReleaseOrderID: SCGCQ01473239
Headline: MR7.4 NVDATA XSD Release (5.040.00-1034)
Release Version: 5.040.00-1034
Product Org: DCSG
Product Gen: SAS3.5
Product Family: MR_FW
UCM Project: MR_FW_SAS3.5_7.4_FC
Release Type: Beta
UCM Stream: MR_FW_SAS3.5_7.4_FC2_Rel
Owner: buildsvc
Release Baseline: MR_FW_SAS3.5_7.4_FC-2017-10-11-5.040.00-1034_REL_1507767630@MegaRAID
Release Date / Time: 01-NOV-17
Release Type: Beta

Firmware Enhancements Implemented (3):

EnhancementRequest ID: SCGCQ01460789
Headline: Added MPI2_MR_PARAMS_PAGE_0.OOBMaxPacketSize
Description Of Change: Added MPI2_MR_PARAMS_PAGE_0.OOBMaxPacketSize

EnhancementRequest ID: SCGCQ01463522
Headline: New feature to disable JBOD through NVDATA change if requested by customer
Description Of Change: Broadcom field engineers can use NVDATA to selectively disable JBOD personality for customers, if requested to do so

EnhancementRequest ID: SCGCQ01464952
Headline: Support for disabling personality modes

Description Of Change: Add MPI2_MR_PROFILE_INFO.personalityDisableMask as a bitmap of personalities that are not available.

Alpha Release (SCGCQ01186894) - MR_FW_BLD_TOOLS - 1.02

ReleaseOrderID: SCGCQ01186894
Headline: Alpha Release: MR_FW_BLD_TOOLS - 1.02 BinToRom
Release Version: 1.02
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: Alpha
UCM Stream: MR_FW_BLD_TOOLS_Int
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-09-21-1.02_REL_1474468013@
MegaRAID
Release Date / Time: 21-SEP-16
Release Type: Alpha

MR_FW_BLD_TOOLS Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01186072
Headline: Added support for compression
Description Of Change: Add support for the -z option

GCA Release (SCGCQ01145903) - ROMENV - 1.12

ReleaseOrderID: SCGCQ01145903
Headline: Point Release: MR_FW_BLD_TOOLS - 1.12 ROMENV
Release Version: 1.12
Product Org: MegaRAID
Product Gen: SAS2.5
Product Family: MR_FW
UCM Project: MR_FW_BLD_TOOLS
Release Type: GCA
UCM Stream: MR_FW_BLD_TOOLS_Dev
Owner: buildsvc
Release Baseline: MR_FW_BLD_TOOLS-2016-07-27-1.12_REL_1469655797@
MegaRAID
Release Date / Time: 27-JUL-16
Release Type: GCA

ROMENV Enhancements Implemented (1):

EnhancementRequest ID: SCGCQ01145093
Headline: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present
Description Of Change: Modify RomEnv to use Flash Header CRC instead of EOF CRC when extended header keyword is present

GCA Release (SCGCQ00873966) - SAS2PARSER - 10.02.00.00

ReleaseOrderID: SCGCQ00873966
Headline: Sas2parser Revision 10.02.00.00
Release Version: 10.02.00.00
Product Org: SCS
Product Gen: SAS2
Product Family: SAS2_Applications
UCM Project: SAS2PARSER
Release Type: GCA
UCM Stream: SAS2PARSER_Rel
Owner: rclegg
Release Baseline: SAS2PARSER_Rel_06_16_2015_v10.02.00.00_REL@
SAS2
Release Date / Time: 16-JUN-15
Release Type: GCA

SAS2PARSER Defects Fixed (1):

Defect ID: SCGCQ00873354
Headline: sas2parser 10.01.00.00 doesn't recognize old XSLT files
Description Of Change: Modified parameter string to match external library expectations
Issue Description: With tip code XML files 10.01.00.00 issues the warning
Warning: This XSLT file contains features that are compatible with SAS2Parser version 00.13.00.00 or greater.
Steps To Reproduce: Build firmware using 10.01.00.00

HWBoardImageConfig: (SCGCQ01491247) - MR 7.3 Quanta_152D_8B01 QS3516B-240PD-R0156

hwBoardImgCfgId: SCGCQ01491247
Config Name: MR 7.3 Quanta_152D_8B01 QS3516B-240PD-R0156
Board Number: QS-3516B-R6-PD240
PCB Internal Name: Talladega
Customer Account: Quanta
Vendor ID: 1000
Device Id: 0014
Sub-System Vendor Id: 152D
Sub-System Device Id: 8B01
FW Image Type: MR
HW Chip Name / Rev: LSISAS3516 B0
NVDATA ProductId: MRROMB
NVDATA Minor Version: 5011
NVDATA XSD Name: LSISAS3516.xsd

HWBoardImageConfig: (SCGCQ01491246) - MR 7.3 Quanta_152D_8B00 QS3516B-32PD-R0156

hwBoardImgCfgId: SCGCQ01491246
Config Name: MR 7.3 Quanta_152D_8B00 QS3516B-32PD-R0156
Board Number: QS-3516B-R5-PD32
PCB Internal Name: Talladega
Customer Account: Quanta
Vendor ID: 1000
Device Id: 0014
Sub-System Vendor Id: 152D
Sub-System Device Id: 8B00
FW Image Type: MR
HW Chip Name / Rev: LSISAS3516 B0
NVDATA ProductId: MRROMB
NVDATA Minor Version: 5011
NVDATA XSD Name: LSISAS3516.xsd

Custom Images:



Full Flash Images:				
File Path:	Check Sum 8-Bit:	Check Sum 16-Bit:	MD5 CheckSum:	Size (bytes):
customImages\8B00-16i\8B00-16i_NOPAD\8B00-16i_nopad.rom	2C67 2102	6325 9186	9262AB761F535A3038238A9C5978D811	6,553,600
customImages\8B01-16i\8B01-16i_NOPAD\8B01-16i_nopad.rom	2C67 22A4	6325 CBEF	46D7662E9D6819A6FB84864F08DD667D	6,553,600
customImages\8B01-16i\8B01-16i_32MB\8B01-16i_32MB.rom	C6CB 21AB	6256 E5DC	0B79263957C77916979D749A0D8F6DAD	33,554,432
customImages\8B01-16i\8B01-16i_16MB\8B01-16i_16MB.rom	C7CB 2179	62D6 8F01	91DB5840662E72D7EB5054C06258E969	16,777,216
customImages\8B00-16i\8B00-16i_32MB\8B00-16i_32MB.rom	C6CB 21CD	6257 994A	968452CA61E9D2782D559243C3362B16	33,554,432
customImages\8B00-16i\8B00-16i_16MB\8B00-16i_16MB.rom	C7CB 2183	62D8 2870	E3CF1AD30D2AB95F0FE890BE06383CD2	16,777,216