(SCGCQ00400282) - Phase16 GCA Release Version 07.23.01.00 - UEFI_BSD_HII_SAS2_Phase16.0

(SCGCQ00394769) - Phase16 Beta Release Version 07.23.00.04 - UEFI_BSD_HII_SAS2_Phase16.0

(SCGCQ00390181) - Phase16 Beta Release Version 7.23.00.03 - UEFI_BSD_HII_SAS2_Phase16.0

(SCGCQ00377787) - Phase16 Beta Release Version 7.23.00.02 - UEFI_BSD_HII_SAS2_Phase16.0

(SCGCQ00370096) - Phase16 Alpha Release Version 7.23.00.01 - UEFI_BSD_HII_SAS2_Phase16.0

(SCGCQ00367654) - Phase16 Pre-Alpha Release Version 7.23.00.00 - UEFI_BSD_HII_SAS2_Phase16.0

Defects=0, Enhancements=0 (Version Change Only)

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Change Summary (Defects=1)

SCGCQ00382993 (DFCT) - Provide proper Help strings when the user traverse through each of the PHY in "Manage PHY Settings" form

Total Defects Resolved (1)

(SCGCQ00382993)	*Defect 1/1*
HEADLINE:	Provide proper Help strings when the user traverse through each of the PHY in "Manage PHY Settings" form
DESC OF CHANGE:	Added appropriate help message for the PHY configuration.
TO REPRODUCE:	1. Enter into the "Manage PHY Settings" form. 2. Traverse through each of the PHYs. 3. Notice that when a PHY is highlighted no Help information is displayed in the Help Area.
ISSUE DESC:	When the user traverses through each of the PHY in the "Manage PHY Settings" form, nothing is displayed in the Help Area. This needs to be rectified by providing proper "Help" information based on the current PHY status.

Change Summary (Defects=4)

SCGCQ00369456 (DFCT) - After changing the re-build rate, the status message is not displayed

SCGCQ00371533 (DFCT) - Gen2 Phase 16 UEFI HII : "Create Configuration" option enabled for "1 SAS+1 SATA" drive combination.

SCGCQ00377303 (DFCT) - Keep the "Change Controller Properties" form screen behaviour consistent

SCGCQ00344786 (DFCT) - UEFI HII: Create RAID1 option available when there is ONLY one SAS and one SATA drive present in the configuration

Total Defects Resolved (4)

(SCGCQ00369456)	*Defect 1/4*
HEADLINE:	After changing the re-build rate, the status message is not displayed
DESC OF CHANGE:	This is effect of changes went in the latest UEFI driver to support a change in a IBV's browser behavior, Due to the change the status message is cleared after it is printed. This is fixed by setting proper From Form and To Form for the Apply Changes actions in the driver's internal data structure.
TO REPRODUCE:	1. Go to Controller Management -> Change controller properties. 2. Change the "rebuild rate" 3. Change it to any value, then "apply" the changes. Once the changes are applied the status message is not displayed.
ISSUE DESC:	After changing the rebuild rate a status message is displayed in earlier versions of the UEFI driver. That is not displayed now in the latest versions of the UEFI driver.

(SCGCQ00371533)	*Defect 2/4*
HEADLINE:	Gen2 Phase 16 UEFI HII : "Create Configuration" option enabled for "1 SAS+1 SATA" drive combination.
DESC OF CHANGE:	The scenario of 1 SATA + 1 SAS is fixed and also additional scenario is taken care.
TO REPRODUCE:	1. Flash the controller with the latest Ph16 firmware, bios and uefi driver. 2. Connect 1 SAS + 1 SATA drive to the controller. 3. Go to ""Controller Management" screen and verify that the "Create Configuration" tab is enabled or not.
ISSUE DESC:	When 1 SAS and 1 SATA drive is connected to the falcon, the "Create Configuration" option is enabled. Actual Result: "Create Configuration" option enabled for "1 SAS+1 SATA" drive combination. Expected Result: "Create Configuration" option should not be enabled unless it meet the valid drive combination for raid creation.

(SCGCQ00377303)	*Defect 3/4*
HEADLINE:	Keep the "Change Controller Properties" form screen behaviour consistent
DESC OF CHANGE:	Vfr file has been updated to include the goto primitive for manage controller phy settings within the grayoutif condition which will be true after the change controller properties "Apply Changes" has been invoked.
TO REPRODUCE:	1) Go to the "Change Controller Properties" screen and make sure the "Manage Controller Phy Settings" link and the rebuild rate change options are enabled. 2) Change the rebuild rate to some value. 3) Select Apply changes. 4) Observe Status message is displayed and only the "rebuild rate" option is grayed out.
ISSUE DESC:	"Change Controller Properties" form supports changing the rebuild rate and managing the Phy settings (for specific OEM). Once the rebuild rate is changed and changes are applied, "manage phy settings" link is not grayed out. To keep the behaviour consistent with the previous releases "Manage Phy settings" link needs to be grayed out after rebuild rate is changed.

(SCGCQ00344786)	*Defect 4/4*
HEADLINE:	UEFI HII: Create RAID1 option available when there is ONLY one SAS and one SATA drive present in the configuration
DESC OF CHANGE:	The scenario of 1 SATA + 1 SAS is fixed.
TO REPRODUCE:	Step1: Flash the controller with Fw: 14.250.01.00 BIOS:07.28.02.00 UEFI: 07.22.00.02 and connect a SAS and SATA drive to the controller Step2: Enter into UEFI HII Create Configuration HII Form
ISSUE DESC:	In UEFI HII, When there are two different drive types (1 SAS and 1 SATA) connected to the controller, and on entering into create configuration HII form the option to create RAID1 volume is present eventhough there is only one compatible drive of each drive type. Even the check-box for the drive is shown enabled, but the toggling of check-box is disabled

Change Summary (Enhancements=4)

SCGCQ00295268 (ENHREQ) - Driver Health Protocol addition.

SCGCQ00354306 (ENHREQ) - Support Enabling or Disabling of a controller PHY.

SCGCQ00354692 (ENHREQ) - The Create Configuration should consider compatible drives for RAID level options

SCGCQ00364126 (CSET) - Implement Configuration Summary and Simple Volume Creation Support for a Customer Configuration Management Tool

Total Enhancements Implemented (4)

(SCGCQ00295268)	*Enhancement 1/4*
HEADLINE:	Driver Health Protocol addition.
NEW FUNCTIONALITY:	The Driver health protocol is implemented as defined in the uefi 2.31 specification and this support is enabled only for a specific customer. The GethealthStatus returns either Failed or Healthy. The Repair interface is not supported.

(SCGCQ00354306)	*Enhancement 2/4*
HEADLINE:	Support Enabling or Disabling of a controller PHY.
NEW FUNCTIONALITY:	Added new form "Manage PHY Settings" which can be navigated from "Change Controller Properties" form. "Manage PHY Setting" form will display all the PHYs of the controller with the description of the Phy Device information and the current status of the PHY. Current status of the PHY is described through an one of option box. The default option shows the current status of PHY (Enabled/Disabled). User can change the PHY status by changing the option box. Once the user changes the options for a specific PHY, "Apply Changes" link of "Manage PHY Settings"form will be enabled. When the user selects the "Apply Changes", changes submitted by the user will be committed to the controller.

(SCGCQ00354692)	*Enhancement 3/4*
HEADLINE:	The Create Configuration should consider compatible drives for RAID level options
NEW FUNCTIONALITY:	Showing of Create configuration should be based on 1. Bare drive count should be greater than 0 2. Bare drive count should not be less than the minDrives required for RAID0 (IocPage6 MinDrivesRAID0) 3. Active Volume count should be less than the IOC Page6 MaxVolume Limit 4. PhysDisk count should be less that IOC Page 6 MaxPhysDisk Limit 5. The drive types, interface type, protection type have to be considered based on mixup flag enabled/disabled before considering available drives for volume creation While entering the configuration the RAID levels shown should be decided based on applicable minimal number of compatible bare drives. The drive types, interface type, protection type have to be considered based on mixup flag enabled/disabled and minimum drive count from IOC Page has to be used.

(SCGCQ00364126 - Port of SCGCQ00360873)	*Enhancement 4/4*
HEADLINE:	Implement Configuration Summary and Simple Volume Creation Support for a Customer Configuration Management Tool
NEW FUNCTIONALITY:	The UEFI BSD HII driver is enhanced to provide required infrastructure in terms of two additional forms "Configuration Summary" and "Simple Virtual Disk Creation" for a Customers Configuration Management tool. Support for querying basic configuration details about the controller and support for a option to create a single simple virtual disk (with an option to clear pre-existing configuration if any) for RAID level 0 and 1 within a mixed SAS, SATA, SSD & HDD topology of maximum three disks is provided. This feature is enabled only for the specific customer who requested it.

Change Summary (Enhancements=2)

SCGCQ00356786 (ENHREQ) - Modify HII to handle updated IBV browser behavior
SCGCQ00364110 (CSET) - UEFI BSD should wait for controller to become ready after reset

Total Enhancements Implemented (2)

(SCGCQ00356786)	*Enhancement 1/2*
HEADLINE:	Modify HII to handle updated IBV browser behavior
NEW FUNCTIONALITY:	An IBV updated it's system firmware to be more compliant with latest UEFI specification. As a result of that, when the system firmware executes our HII config utility's browser call back handlers with action value of EFI_BROWSER_ACTION_CHANGING, the value changed by the user in the browser for the particular question ID is not updated in the browser data. Once we return success from the callback handler for the CHANGING Action the changed values will be updated in the browser data. In our HII config utility, we refer the browser data to get the user modified value and we support only the CHANGING Action. Due to the change in browser when we couldnt get the updated data in the CHANGING Callback, we fail to enable certain functionalities which are based on the updated value. The HII tool is modified to do all the processing in EFI_BROWSER_ACTION_CHANGED as the browser data is updated before calling the EFI_BROWSER_ACTION_CHANGED, thus our HII tool should be able to refer the updated values.

(SCGCQ00364110 - Port of SCGCQ00318736)	*Enhancement 2/2*
HEADLINE:	UEFI BSD should wait for controller to become ready after reset
NEW FUNCTIONALITY:	The LSI IT/IR UEFI Boot Service Driver's exit boot services callback routine is modified to wait for a maximum of 4 seconds for the controller to become ready after issuing a reset. The BSD polls for the ready state in 10ms interval within the maximum 4 seconds. Once the controller is found to be in ready state or once the timeout of 4 seconds is reached then the BSD returns the execution control to the System Firmware. The BSD does not print any error message for the failure of controller to become ready after reset.