AMD RAID controller Driver distribution list
   Revision: 9.02.00.120
   Built date: 05/14/2019
   Platform : Summit SP3, Summit-AM4, Raven ridge-AM4, Pinnacle-ridge, Bristol-AM4, Threadripper, Colfax, Picasso-AM4
   OS: Windows10 x64

Driver package
   W10\x64\RAID_NVMe   -   Windows10 x64(19H1, RS5)
   W10\x64\RAID_SATA   -   Windows10 x64(19H1, RS5)

AMD-RAID binary file name:
   - rcraid.cat, rcraid.inf, rcraid.sys
   - rccfg.cat, rccfg.inf, rccfg.sys
   - rcbottom.cat, rcbottom.inf, rcbottom.sys

Here are the valid configurations:

SATA on SOC (M.2 & Standard SATA)	SATA on Promontory (Standard SATA)	NvMe RAID Mode (M.2 & PCIe Add-in card)	SATA RAID Support	NVMe RAID Support
RAID	RAID	Enabled	Yes	Yes

Maximum Supported Controllers:
   • 8 NVMe   + 2 SoC + 1 PT
   • 10 NVMe + PT   when   Soc Diasbled

Known issues
   • License Level 10 with no disable bits at this time.
   • We do not support 2 ODDs on the same port of 2 different controllers.
   • With 11 PCIe NVMe SSD's system boot to OS may fail

Revision History

9.2.0.0120
   - Fixed queueing issue to increased performance
   - Fix flush code lock that caused BSoD
   - Added more checks to detect MDL corruption
   - Clear a flag to re set up DMA
   - Fixed Timing hole with periodic timer and issuing ACHI commands

9.2.0.0105
   - Fixed IOCTL causing 19H1 to not to be able to install
   - Fix the duplicate Device Connected AEN and the Controller index in the Device Connected AENs

- Fix the Windows install hang caused by the removal of the duplicate test unit ready
- Changed NCQ port type in rcadm
- PCI filter fix
- Performance enhancements
- Fix the BSOD when more than 16 drives are connected

9.2.0.0087
- Fix hang/bsod 0x9F during shutdown when the boot VD is not the first VD in the system
- Fixed Secure Erase Lockup on a Multidisk Volume
- NVMe performance fixes
- RS5 install fix
- Fix performance issues with 1MB Iosize
- Additional performance tweaks
- Fixed the Controller structure before adding new Controllers

9.2.0.0070
- Fix the System Lockup during the end of the transform
- Interrupts aren't being generated for Port1 on the Raven SoC when MSI mode is enabled
- Block set disk cache commands for NVMe in rcadm
- Fix the AENS to match the current behaviour of write error handling
- Fix Logical Disk go offline due to Write error causes
- Fix for Check if the spinlock is taken before releasing it
- Fix issue with not properly propogating error status in 4K path, Propogate the error to the original Ioc in the 4K path
- Pass the NVMe Firmware as part of the DisKStatusNotify structure since the SCSI Inquiry can only hold the first 4 characters of the FW Rev.
- Fix interrupt creation for non-MSI, that was broken when fixing multiple MSI
- Fix Array Scan BSOD.
- Mark NVMe as initialized if the initial reset fails

9.2.0.0041
- Fix System hang after reboot when you added a new NVMe controller
- Fix for Non-Paged Memory Pool Incrementing and not released when using IOmonkey for data generation.
- IOMonkey test producing IO retries on Whitehaven causing system hang
- Fix issues with booting from 4K NVMe devices.
- Fix for data corruptions reported by iomonkey
- NVMe deallocate(trim equivalent) didn't account for 4K sector size.
- Fix system Hang when a BusChangeDetected call when an ATAPI is connected to the BUS.
- Fix ClearMetadata command to match the UEFI behaviour.

9.2.0.0023

- Fix System hang after reboot when you added a new NVMe controller

9.2.0.0019
- Code Move rcbottomPeriodic
- driver notify checks for NVMe initilization
- Fix to set the PNP_DEVICE_NOT_DISABLEABLE for rcbottom and rcraid devices

9.2.0.0009
- SWDEV-141128: Check for non-zero Vendor and Device ID before adding the controllers to the Core
- Add 7905 Device id for Bristol support
- Unified RAID support for ZP family platforms
- Fix rccfg.inf format.
- Update Copyright year to 2018
- Remove annyoing assert, added for mult-cts debug, that is invalid during a transform

9.2.0.0005
- Add 7916 Device id for white haven support
- Unified RAID support for ZP family platforms
- SWDEV-138269: Fix Shutdown lockup during resume
- SWDEV-140434: Merge to RC-920. Fix BSOD 0xAO during hibernation/shutdown with legacy NVMe boot VD
- Remove empty eventview popup for Event 1171 (a new unknown device insertion or legacy PD insertion event)

9.1.0.0018
- None

9.1.0.0014
- RAID | 9.1.0-07 | Native NVMe Install- PT & NVME raid mode: intermitent I/O errors during S4 cycles
- Fix rccfg.inf format. Convert LF to CRLF
- Partial Fix/work around for the shutdown lockup issue with Boot VD using HDD and 64CTS

9.1.0.0009
- Set CacheTagSize to 64K.
- Upgrade support form 8.2

9.1.0.0007
- Format takes a long time with 4(8) disk RAID0
- Resolve issue with legacy NVMe devices showing up multiple times due to reboots

9.1.0.0003
- Beta build for 9.1 branch support
- acquire interrupt lock in nvmPreShutdown
- Fix issue with nvmAbort

- Remove isrDpcSpinLock, and instead use isrDpcSpinLocks[0] and it may help resolve some hibernate BSOD.
- Fix SATA reporting as SSD

9.0.0.00088
- Fix the BSOD 0xD1 or System hang during Flush Test

9.0.0.00084
- Fix for HLK Flush test for Device certification

9.0.0.00082
- enhancement : increase number of controllers to 16 in apps and 11 in rcraid driver
- Fix for transform progress Status HII reports the status as ""CapExpand"", change too ""Transform"" to be consistent with the other applications
- Fix 0xD1 BSOD during hibernation
- Fix for issue BSOD results if trimming while deleting a logical device
- Fix S3/S4 hang on Resume. When a Rescan starts a   in the middle of Flush Command/SRB , then the system hangs

9.0.0.00076
- Fix issue for NVMe cards supporting 128K IOs
- Fix Remove forced write double buffering for Raid1
- Fix system hangduring reboot when Task pause of array.

9.0.0.00071
- fix for Paused task resume causing hang or BSOD
- Fix Nvme call backs for multiple hibernation cycles

9.0.0.00065
- code clean up for UEFI issues

9.0.0.00063
- Beta Test release for Summit SP3

9.0.0.00023
- Beta Test release for Summit SP3

9.0.0.00015
- Beta Test release for Summit SP3