FW release ver 3.1.56

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FW release bundle for Aquantia NICs (AQC107, AQC108, AQC111, AQC112)

Revision history

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**3.1.56**

Fixes for:

- FW doesn’t report 5G capability to the driver when Autonegis set on both parties

- “Boot to PXE” option doesn’t work on systems with double PERST.

- No link in PXE after image loading was interrupted in PXE with “Ctrl+Alt+Del”

Features:

* Improved transition of PHY to/from low power mode (do not allow other operations while it is in progress)

[AQC111/112] Fixes:

* Disabled PCIe lane auto-disable feature because it cannot work correctly due to switched PCIe lanes in AQC111/112 chip and caused system hang on startup on particular HW

[PCIROM]

* Fixed BSoD due to memory corruption on system start up caused by active datapath: when booting from PXE/UEFI to OS, datapath in the chip remained active and could write to memory while system is booting up. This fix is important for all platforms with enabled OptionROM
* Fixed long start up in PXE when media is not connected (this was caused by attempts to get DHCP address)

**3.1.44**

Fixes:

- Fixed issue with no link during loopback test

- Fix for pause frame handling in PHY FW

- PHY goes to thermal shutdown at 80 degrees

Features:

* Interface for controlling LEDs from the driver [requested for DPDK]
* Reduced link up time (important for automotive designs)
* Preparations for Host Boot: MAC FW reads BDP from the host after loading

[AQC100] Fixes:

* Fix for long link up at 1G for fiber
* Added SFP+ SMBUS malfunction detector for Felicity board.
* Added SMBus access for the driver [requested for DPDK]

[AQC111/112] Fixes:

* Power optimizations

**3.1.32**

Fixes:

* Fix for Tx traffic stuck: Force 100M/1G to use XFI/USX for driver mode and use SGMII for sleep proxy mode PTP/AVB: Merged TPO2 feature from 2.x (TPO2 must be enabled from the driver)
* Fix for "Firmware did not check TCP sequence number range in TCP Keepalive"
* Changed the truncation boundary for FW echo responder to 64 bytes (it is a typical echo request size)
* Firmware now ignores packets with bad checksum
* [Bermuda B0] Fix for "Nic is not enumerated with fw when pluged in some PCIe slots"
* [Felicity] Added functionality to disable PFC for AQC100

Features:

* New OptionRom with fixes in PXE
* New PHY Firmware