

7.2.5.4_fw_7.2.5.2 Release notes:

April 4th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.5.4 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.5.2

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.5.3_fw_7.2.5.2):

- Fixed the issue of DHCP reservation causing kernel crash.
- Fixed the issue of repeater failed to reconnect back after upstream AP multiple reboot.



7.2.5.3_fw_7.2.5.2 Release notes:

Mar 27th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.5.3 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.5.2

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.5.2_fw_7.2.5.2):

• Fixed the issue of STA rebooting after AP changing encryption mode which is introduced by 7.2.5.2.

7.2.5.2_fw_7.2.5.2 Release notes:

Mar 27th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.5.2 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.5.2

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.5.1_fw_7.2.5.1):

- Fixed the issue that STA failed to get DHCP ipaddress from upstream AP under WPA/WPA2 mixed mode with Mamba hostapd.
- Fixed the issue that toggling GA access causing beacon lost.
- Fixed the issue of ASSERTION which triggers the reboot.

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7.2.5.1_fw_7.2.5.1 Release notes:

Mar 21st, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.5.1 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.5.1

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.5.0_fw_7.2.5.0):

- Fixed the issue that STA failed to get DHCP ipaddress from upstream AP under WPA/WPA2 mixed mode
- Fixed the issue that STA bridge crashed upon CSA pkt.

7.2.5.0_fw_7.2.5.0 Release notes:

Mar 17th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.5.0 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.5.0

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.4.4_fw_7.2.4.2):

- Fixed 2.4G/5G STA->AP(DUT) low tput issue found in production line.
- Added support for STA auto reconnection once disconnected from upstream AP under repeater mode.
- Fixed the issue that repeater mode STA fails to get DHCP address from upstream AP under WPA2.

Note: sta0 to have this to work as expected, sta0 shall have a different MAC from ap0

- e.g. iwpriv wdev0sta0 macclone "0 <stamac>" #where <stamac> shall be different from wdev0ap0 mac address.
- Added support for STA fast reconnection.
 e.g. iwpriv wdev0sta0 setcmd "fastreconnect 1"



7.2.4.4_fw_7.2.4.2 Release notes:

Mar 4th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.4.4 Linux Kernel version: 3.2.40 Firmware version: 7.2.4.2

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.9 fw 7.2.4.1):

- Fixed the issue of STA mode 2.4G autoBW ping delay and low tput issue
- Fixed the issue that sometimes LED stays on when the interface is disabled.
- Fixed the issue of 2.4G ht40 or autoBW 3ss mcs8 & 9 were unintentionally used the 11ac mcs8/9 power cap
- Fixed the issue of STA mode with macclone disabled and BF enabled, it could make AP keeps sending deauth reason 7 to a non associated client.
- Fixed the issue of STA mode 5Ghz low throughput issue introduced with drv_7.2.4.2.
- Fixed the issue of auto channel scan returning partial result in client mode. Broken in driver 7.2.4.1/2
- Fixed the issue of STA will be disconnected by AP In WPA2 mode when running TP test
- When STA under WPA/WPA2 mode, getlinkstatus will return 1 only after wpa2 4-way handshaking passed.
- Fixed the issue of STA under AN mode connects to AP as AC mode but operate in 40Mhz bandwidth. Now when STA configured AN mode (opmode=12), STA will connect as N STA other than AC STA.

Note: When STA configured as repeater mode (wdev0sta0 and wdev0ap0 both working at the same time), the wdev0ap0 shall be brought up after wdev0sta0 connects to upstream AP when "iwpriv wdev0sta0 getlinkstatus" returns 1. And wdev0ap0 will follow the channel as wdev0sta0 finalized. Once wdev0sta0 disconnected from upstream AP for any reason (AP reconfigured, STA reconfigured, etc), the correct steps to reconnect it back to upstream AP is the following:

ifconfig wdev0ap0 down
ifconfig wdev0sta0 down
#reconfigure wdev0sta0 if needed
ifconfig wdev0sta0 up
#once wdev0sta0 connects to upstream AP and has "iwpriv wdev0sta0 getlinkstatus"=1
ifconfig wdev0ap0 up



7.2.3.9_fw_7.2.4.1 Release notes:

Feb 22nd, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.9 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.4.1

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.8_fw_7.2.3.8):

- Fix the issue that STA mode MIC error with WPA2 mode which could causing group key exchanging failure and disconnect from AP.
- Fix the issue of beacon lost during configuring AP with different modes through web UI.

7.2.3.8 Release notes:

Feb 13th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.8 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.8

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.7_fw_7.2.3.7):

- Enable the LDPC bit in HT capability for STA mode assocreq. This could improve STA mode range results.
- In 2.4G mode, now allows enabling of amsdu-over-ampdu (by default enabled). It was disabled in 2.4G mode before due to MacbookAir 2x2 11ac having UDP RX issue (~30mbps). The issue has been resolved in MacbookAir new IOS/SW version, hence it is safe to reenable it now.
- Added ht80 mcs3 2ss to 3SS rate drop table to improve far range throughput



7.2.3.7 Release notes:

Jan 27th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.7 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.7

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.6_fw_7.2.3.6):

- Enabled RTS for 11ac and 11n rates. (This can be disabled by iwconfig rts)
- Fixed incorrect BW setting for HT80 ACK rateinfo

7.2.3.6 Release notes:

Jan 14th, 2014

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.6 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.6

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.5_fw_7.2.3.5):

- Fixed system stack stack overflow with issuing " iwpriv wdev0 setcmd 'qstas txrate_histogrm' " command on some customer platform.
- Updated calibration code to improve 5GHz RX Sensitivity on some modules
- Modified 3ss ratedrop table as per testhouse results and system team's suggestion



7.2.3.5 Release notes:

Dec 20th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.5 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.5

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.3_fw_7.2.3.4):

- Improve 2.4Ghz mid range RvR.
- Auto channel selection enhancement.

[Changes]

- Added command to take user input list, then user can put the favorite channels at the front to give over the channels at end (need to set autochannel to 2 to work).
- o e.g. iwpriv wdev0 setcmd 'scanchannels 1 6 11'
- o iwpriv wdev0 autochannel 2
- Added logic to choose higer power channels over lower power channels (work on original autochannel 1 and new 2).

7.2.3.3_fw_7.2.3.4 Release notes: Dec 6th, 2013

This release contains new fw 7.2.3.4 only.

Features Added/bug fixed (since fw_7.2.3.3):

Improve the performance at Loc-D for 3SS device.



7.2.3.3 Release notes:

Nov 26th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.3 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.3

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.2):

- Fixed the issue that AP Configured 11N only mode, while 11ac capable STA associated but AP still tx with 11ac rate
- Fixed for console sluggish by up/down interface with Power Save stations connected
- Improved AMPDU reorder logics so that it will not hold on to pkts too long for clients with skipped seqnum at range
- Fixed AID leakage issue when running multi-interfaces up/down.
- Misc Far Range RvR improvement for 88W8864 to 88W8864.

7.2.3.2 Release notes:

Nov 18st, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.2 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.3.2

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.3.0):

- PHY registers improvement
- RateAdapt change to improve far range performance
- Fixed HT rates no LDPC problem
- Fixed Veriwave muliclients UDP ampdu stream failed issue



7.2.3.0 Release notes:

Oct 31st, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.3.0 Linux Kernel version: 3.2.40 Firmware version: 7.2.3.0

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.5):

- Fix the issue of STA mode low Rx TP with BF turned on.
- Fix low TP issue with MotoX.

7.2.2.5 Release notes:

Oct 25nd, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.5 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.2.6

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.5):

• This release only include fw change, it is 7.2.2.6 now, it has throughput improvement with 2x2 11AC station with loc-D. The wlan driver keeps the same.



7.2.2.5 Release notes:

Oct 22nd, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.5 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.2.5

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.4):

- Fixed issue with potential lockup during group key distribution under certain case.
- Some OTA range enhancement included.

7.2.2.4 Release notes:

Oct 18th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.4 Linux Kernel version: 3.2.40 Firmware version: 7.2.2.4

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.2):

- Fixed issue with interim boards that had dummy LO Annex caldata
- Fixed some vulnerabilities which might lead to crash with STA mode.
- Added support for LED on/off CLI, as per Mamba's request
 - o iwpriv wdevX setcmd "led on" --- enable LED
 - o iwpriv wdevX setcmd "led off" --- turn LED off
- Added support to enable IBF for 11ac devices. Set default BF mode to Auto
- Fixed 11ac 1x1 rate drop table.



• 7.2.2.2 Release notes:

Oct 14th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.2 Linux Kernel version: 3.2.40 Firmware version: 7.2.2.2

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.0):

- Update RX IQ on 5Ghz band
- Fix the issue of wlan clients fail to receive mDNS message once mcastproxy turned on
- Fix the issue of kernel panic after changing wifi channel etc.

7.2.2.1 Release notes:

Oct 10th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.1 Linux Kernel version: 3.2.40 Firmware version: 7.2.2.1

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.2.0):

- Enhanced 2.4G 20/40 Coex to reduce HT20 fallback
- Disable TxBF on STA mode to avoid low downlink tput
- Further reduce reorder flush time to 50ms as an attempt to improve TCP
- Fixed bug: ieBuf got overflow, caused bcAddr1 overwritten. Modified ieBuf size to maximum possible size.
- Fixed bug STA mode scanning sometimes returns undesired scan results
- Fixed bug: STA scan potential crasher
- Fixed 2.4G RXIQ programming sequence mistake



7.2.2.0 Release notes:

Oct 3rd, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.2.0 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.1.7

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

• SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.1.9):

- Enhanced TCP upstream Loc-C performance with Macbook Air and possibly others
- Fixed the issue that when autochannel set, after scanning, 5Ghz back to channel 0 which makes the AP non-functional. Also, 2.4Ghz back to channel 1 which is not desired either.

7.2.1.9 Release notes:

Sep 27th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.1.9 Linux Kernel version: 3.2.40 Firmware version: 7.2.1.7

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.1.5):

- Changed to advertise MCS32 Duplicate in RX (WiFi 11n 4.2.36)
- Fixed Mamba reported STA mode SCAN crasher issue, and increase the scan buffer to hold up to 128 AP list.
- Changed LED blinking rate to 28ms dutycycle (per Belkin's request, for Mamba board). Prior to this LED blinks per TXPE toggling
 - -Solid off: no clients connected
 - -Solid on: at least one client connected, no activity
 - -Blinking: at least one client connected and data is being transferred
- · Fixed for MFGFW BF cal test
- Fixed Mamba reported STA mode issue. This issue causes Mamba HW2.1 failed to work in STA mode when macclone disabled with changed bssid.
 - For STA, please use "iwpriv wdevxsta0 macclone '0 001122334455" to change the bssid. Please note, this is different from using iwpriv wdevxap0 bssid 001122334455 to change the bssid for AP. Here 001122334455 is just an example of mac address, you shall replace with your desired mac address.
- · Misc enhancement to PHY registers
- Enhancement of tx power for legacy duplicate control frames

7.2.1.5 Release notes:

Sep 19th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.1.5 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.1.5

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- · Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.1.1):

- Fixed intermittent FW downloading issue with some wlan cards
- Fixed iperf-stack low throughput issue due to TSO
- Change txfaillimit to be 500 (used to be 10 with mcastproxy=1, this low number might lead to STAs disconnected frequently in noisy environment, specially 2.4Ghz)
- Increased driver default AgingTime from 3 minutes to 2 hours. This is to resolve issue that WUMC710 ProxySTA frequently disconnect due to its parent interface in IDLE even when child intf are passing traffic
- Fixed the issue with console hanging during extensively Rx from wifi with Mamba SW/Services. To take advantage of dual cores with host cpu, please add the following commands during the Mamba board init...

#!/bin/sh

INTNUM=`cat /proc/interrupts | grep wdev1 | red -e "s/:.*\$//" -e "s/[]*//"` echo 2 > /proc/irq/\$INTNUM/smp_affinity

The above scripts basically gets the interrupt number from /proc/interrupts for wdev1, then directs # the interrupts for wdev1 to cpu1. So this scripts shall be added after loading the wireless driver, and

before configuring wlan devices

- Changed to disallow amsdutx in 2.4G due to IOT with MB-Air
- Fixed bug reported by Mamba: 11AC IEs are always sent out regardless the opmode setting
- Allowed LED blinking for all TX/RX activities, not just upon 11ac rx. This is a last minute change of requirement from Mamba
- Fixed the problem that the high power table cause some RD-AXP host to crash when operate in 2.4G band



7.2.1.1 Release notes:

Sep 6th, 2013

This release contains driver for the Kernel 3.2.40

Driver version: 7.2.1.1 **Linux Kernel version:** 3.2.40 **Firmware version:** 7.2.1.1

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.1.0):

- Added optional 11ac STBC TX support
- Fixed Bug: EWB (macclone=0) mode, PC failed to get IP address from associated AP
- Fixed Bug: Low "WDS" thpt after bssid/macaddr change on wdev0, when it does not match wdev0ap0 macaddr
- Added support for CE v1.8.1 tests for regioncode=ETSI (Verified pass with Ref Module. Customer platform may need tuning on reg 0x5F, 0x60)
- Added support for JP region DFS tuning
- Enhancement to improve 11ac WMM test case with 1x1 testkit clients
- Cosmetic changes from UINT32 cap member to VHT Capability structure in IEEEtypes_VhtCap_t for easier reading

7.2.1.0 Release notes:

Aug 19th, 2013

This release contains driver for the Kernel 3.0.6

Driver version: 7.2.1.0 **Linux Kernel version:** 3.0.6 **Firmware version:** 7.2.1.0

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.2.0.6):

- Commented out previous support of band-dependent hw strap checks, because customer's HW 1.1 has opposite strap. This is to be enabled only for their HW2 due 9/5/13
- Fixed bug that video streaming via mcast proxy fail after bssid change, when wdev0 and wdev0ap0 bssid
 is different after iwpriv bssid config
- Fixed TCP pkts dropped within firmware causing Intel6300 2.4G low tput issue with newer Intel driver 5.7.0.3
- Fixed misc compilation warnings
- Fixed client mode handling channel width field in peer info, causing client mode to send in 20Mhz in VHT
- Fixed issue that 3Nss for Tx & Rx in IE191 not being set until reboot
- Changed VHT cap Beamformee STS cap to 3 (from 4)
- Improved Beamforming categorization rules
- Optimised PHY register values to pass 11ac cert pretest for OBSS test case



7.2.0.6 Release notes:

July 31st, 2013

This release contains driver for the Kernel 3.0.6

Driver version: 7.2.0.6 **Linux Kernel version:** 3.0.6 **Firmware version:** 7.2.0.5

Host Platform:

• A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed (since 7.1.4.2):

- Added support for Op Mode feature requirement for 11ac cert
- Added support for EID 195/196 CSW and TPE for 11ac cert
- Fixed WiFi 11ac certification test cases 4.2.30, 4.2.53, 4.2.54, 4.2.55, 4.2.49, 4.2.26, 4.2.16
- Fixed EID in ascending order for Beacon and Probe Resp
- Added support for 8864 rev B0
- Added support for I2C
- Misc changes to improve PHY Optimised Registers for 8864 rev B0
- Misc changes to improve TX performance
- Improved WiFi RX Path for SMP platform
- Fixed issue that 2.4GHz TRSW OR was not optimised
- Fixed issue that client mode failed to associate in 2.4GHz HT40
- Added VHT 20/40MHz rate display in getratetable CLI

7.1.4.2 Release notes:

June 30th, 2013

This release contains driver for the Kernel 3.0.6

Driver version: 7.1.4.2 Linux Kernel version: 3.0.6 Firmware version: 7.1.4.2

Host Platform:

A370 (3.0.6 Linux kernel), AXP

Tested HW:

SOC chipset: 88W8864

Feature supported:

- Basic wireless configuration
- 802.11a/b/g/n/ac-draft
- 4x4 MIMO
- Beamforming
- Security features : WPA2-PSK(CCMP)
- AMPDU Tx/Rx
- AMSDU Tx/Rx

Features Added/bug fixed:

- Added support for 5GHz High Power PA for all rates
- Range optimisation with misc PHY related registers optimization
- Cleaned up various compiler warnings that complains about stack size > 1024 issue
- Fixed issue that GF accidentally always enabled for 2.4G issue
- Enable WLAN LED blinking when 11ac rates are received. [note: RD-A370 will need two minicards connected for LED to work]
- Fixed AXP amsdu crasher issue
- Fixed A370 crasher with skb_over_panic while running amsdu traffic
- Fixed A370 kernel panic during video streaming
- Fixed kernel panic after stress test due to skb_put
- Fixed tx stall issue when unplug video streaming client
- Updated ACS algorithm
- Updated NAPI as its interface has been changed since Linux kernel 2.6.28
- Added command to cap max Tx MCS rate for experimental use



Release Note

- Added/clean up counters for wifi interface
- Enabled ZERO_COPY_RX and reduce the cpu consumption on RX
- Fixed client mode out of bound memory access when Element ID attrib is not found
- Fixed client mode not to send Probe Req during active traffic. This caused TCP chariot dip/disconnection
- Fixed client mode bandwidth selection in reassociation. If BW is set wrongly, thpt will be lower if client mode reassociates.
- Improved mcast proxy to avoid unwanted incoming mcast pkts go to txq

Known issue:

N/A