Linux SoftAP Driver Release History MT7602E/MT7612E

Version: 1.3

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Document Revision History

Revision	Date	Author	Description
0.1	2013-05-27	Pan Liu	Add v3.0.2.0 Beta5 release
0.2	2013-07-15	Pan Liu	Add v3.0.2.1 Beta release
0.3	2013-08-21	Pan Liu	Add v3.0.2.2 Beta release
0.4	2013-09-09	Pan Liu	Add v3.0.2.4 iPA release
0.5	2013-09-18	Pan Lu	Add v3.0.2.5 ePA release
0.6	2013-09-27	Pan Liu	Add v3.0.2.5 iPA release
0.7	2013-10-04	Pan Liu	Add v3.0.2.6 ePA release
0.8	2013-11-18	Pan Liu	Add v3.0.2.7 iPA release
0.9	2013-12-10	Pan Liu	Add v3.0.2.8 iPA release
1.0	2014-01-06	Pan Liu	Add v3.0.2.9 iPA, ePA release
1.1	2014-01-29	Pan Liu	Add v3.0.3.0 ePA release
1.2	2014-04-18	Hughes Kang	Add v3.0.3.1 iPA/ePA release
1.3	2014-07-09	Hughes Kang	Add v3.0.3.2 iPA/ePA release

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[V3.0.3.2]

1. Notice: The driver only supports MT7612e/MT7602e iPA/ePA hardware design
2. Update FW to the latest version (v1.5)
3. Fixed key and wdev.PortSecured wasn't set correctly sometimes
4. Update xtal trim mechanism
5. Update radar check for new FCC regulation
6. Fix 20/40 coexistence issue
7. Update channel-switching programming sequence to do IBI
8. Fix "no Tx" problem after AP site survey when 802.11H is enabled
9. [VHT AP Client] VHT IE is not correctly carried in the probe request
10. For dynamic VGA, reduce an IO read.
11. Fix AP sending QoS null frames issue.

[V3.0.3.1]

1. Notice: The driver only supports MT7612e/MT7602e iPA/ePA hardware design.
2. Update FW to the latest version (v1.4)
3. Support TGn, WSC v2 and TGac sigma test, and add command to enable apcli WMM
4. It should support mcs 0 ~ 8 while configuring to vht20 in vht operation element
5. Fix support vht bw 80 in channel#165, it should support vht bw 20 only
6. Support TDLS function
7. Remove vht-related of phy capability for mt7632
8. Default use 2 streams to transmit hw auto-generated packets for mt7602 and dual-band device with 5GHz external PA
9. Add single sku in 76x2 ATE
10. Enable HT/VHT LDPC as default
11. Add RA dynamic switch mechanism for HW fall back.
12. Correct card index to meet the case of mt7602+mt7612
13. Patch to ignore DSSS modulation info. while sanity check in a-band
14. Patch to enable ED CCA by scenarios
15. Update temperature information in statistics
16. Use ePA/eLNA without TC as default settings in ram
17. Update Kconfig to support PA/LNA/co-clock selections of menuconfig
18. Change to do nothing while coherent happens in interrupt
19. Update XTAL trim offset compensation
20. Fixed APSOC-QA tool cannot set IPG
21. Patch to load default EEPROM bin file according to chip id and the settings of menuconfig

[V3.0.3.0 –ePA]

1. Notice: The driver only supports MT7612e/MT7602e ePA hardware design
2. Update FW to the latest version (20131211)
3. Modify TxBf ATE control flow
4. Add fast mcs rate with aggressive RSSI mapping table
5. For rate train-up method, adopt comparison between "up rate successive packet number" and "last success packet number" (likely PER)

6. For dynamic VGA, change to read RSSI information from BBP 0x2350 to RXWI
7. Support eTxBF

[V3.0.2.9 –ePA]
1. Notice: The driver only support MT7612e/MT7602e ePA hardware design
2. Update FW to the latest version (20131211)
3. Fix throughput drop because of lookup table is disabled during BA establishment
4. Update channel smoothing control
5. Fix no short GI of VHT20/40 MCS9 while using 256QAM in g-band
6. Add WSC+NFC optional items
7. Add WSC_NFC_SUPPORT
8. Update ATE to support TX_PWR_EVAL and FIXED_PAYLOAD
9. Add LED control support
10. Add Single SKU function
11. Update the EEPROM default bin file for ePA/eLNA TC off

[V3.0.2.9 –iPA]
1. Notice: The driver only support MT7612e/MT7602e iPA hardware design
2. Update FW to the latest version (20131211)
3. Fix throughput drop because of lookup table is disabled during BA establishment
4. Update channel smoothing control
5. Fix no short GI of VHT20/40 MCS9 while using 256QAM in g-band
6. Add WSC+NFC optional items
7. Add WSC_NFC_SUPPORT
8. Update ATE to support TX_PWR_EVAL and FIXED_PAYLOAD
9. Add LED control support

[V3.0.2.8 -iPA]
1. Notice: The driver only support MT7612e/MT7602e iPA Hardware design
2. Update FW to the latest version (20131127)
3. Update auto-channel selection to not pick up channel#165 during current bandwidth is 40MHz or 80MHz
4. Update MAC CR to optimize the max AMPDU length for each MCS
5. Update PID/VID for MT7602E
6. Fix AP client auto connect cannot work
7. Fix ATE issues and support ATETXPOWEVAL
8. Fix HT/VHT1SS MCS2 and MCS3 wrong rate power
9. Update dynamic VGA to support iLNA and eLNA both
10. Add 2.4G 256QAM proprietary feature
11. Add delayed TCP ack feature

[V3.0.2.7 -iPA]
1. Notice: The driver only support MT7612e iPA Hardware design.
2. Update FW to the latest version v1.1
3. Add Rx gain offset compensation
4. Fix the incorrect rate while showing sta information
5 Update MAC CR of PCI-e PHY for ASPM
6. Fix ATE cannot transmit in low rates

7. Add percentage delta power function
8. Change VHT/HT HWFB to MCS0/1SS and legacy to enhance long distance performance
9. Fix LUT and PEER_DELBA problem

[V3.0.2.6 -ePA]
1. Notice: The driver only support MT7612e ePA HW design
2. Update FW to the latest version (2013/9/27)
3. Support TxBF
4. Update temperature Tx ALC mechanism
5. Fix ATE TXCONT
6. Fix ATE Rx2 sensitivity issue
7. Fix LUT will be off while LDPC is enabled
8. Change ATE DPD and TSSI calibration flow
9. Add Rx gain offset compensation
10. Add ePA RF DAC control range by different country setting

[V3.0.2.5 -iPA]
1. Notice: The driver only support MT7612e iPA HW design
2. Update FW to the latest version
3. Support TXBF
4. Update temperature Tx ALC mechanism
5 Update HW NAT hook function
6. Fix no beacon issue while IEEE802.11H is enabled
7. Fix MC/BC packets cannot transmit
8. Fix ATE TXCONT
9. Fix ATE RX2 sensitivity issue
10. Fix LUT will be off when LDPC on

[V3.0.2.5 -ePA]
1. Notice: The driver only support MT7612e ePA HW design
2. Update FW to the latest version
3. Update temperature Tx ALC mechanism
4. Fix ATE and QA-tool issues
5. Update the calibration flow
6. Fix failed items for TGac certification
7. Fix no beacon issue while IEEE802.11H is enabled
8. Fix MC/BC packets cannot transmit
9. Update HW NAT hook function
10. Fix WPS 4-digits PIN code failed when the number starts with zero
11. Fix PMF failed items
12. Enable microwave function

[V3.0.2.4 -iPA]
1. The driver only support MT7612e iPA HW design
2. Update FW to the latest version.
3. Enable microwave function
4. Add temperature Tx ALC mechanism
5. Fix ATE and QA-tool issues

6. Update the calibration flow

7. Support calibration free IC

8. Fix issues for TGac certification

9. Add MC/BC packet isolation commands

10. Fix PMF failed items

11. Fix WPS 4-digits PIN code failed when the number starts with zero

[V3.0.2.2-beta]

1. Fix ATE Issue

2. Fix APCLI_AUTO_CONNECT Function not work Issue

3. Fix the BC/MC packet rate doesn't chose by MCS_LUT Issue

4. Fix the Radio on/off Issue

5. Fix CONFIG_RT_SECOND_CARD define error.

6. Add the DisallowTKIP policy in ApClient

7. Change the maximum client number from 48 to 100

8. Enable the VHT LDPC Feature

9. Fine tune the Calibration Flow

10. Fine tune the Throughput value for each Channel Model

11. Add STA connected stay time in "iwpriv rai0 show stainfo"

12. Add "iwpriv rai0 show txinfo" for showing TxRetry & TxFail count

13. Add DFS Related Log

[V3.0.2.1-beta]

1. Add hotspot(Passpoint-R1) function
2. Add PMF function
3. Add DFS changes for JAP regulation.
4. Add radar JAP W56 function
5. Add EDCCA function
6. Add the TxPwrAdj (Per-Packet Power) function
8. Fix ApClient function in VHT Mode
9. Fix incorrect Bit Rate (VHT Mode) on iwconfig
10. Fix APSOC QA-tool & ATE bug.

[V3.0.2.0-beta5]

1. Initial MT7612E Beta release.