REALTEK

Product: RTL8188EUS Software Package - Linux Driver
Version: v5.7.6.1_35670.20191106

Release History:

v4.1.0_4023.20120511	1. First Released
v4.1.1_4235.20120606	1. Fix some problems for LPS Mode. 2. Fix some bugs of SoftAP Mode. 3. Add LED function for 8188EUS.
v4.1.2_4787.20120803	1. Fix channel plan error. 2. Fix some bugs for RTL8189ES SoftAP. 3. Support non-ascii ssid by default. 4. Add PMK Cache for cfg80211. 5. Set wps ie for probe req for WPS 2.0 6. Support hostapd's ignore_broadcast_ssid setting (need patch of hostapd). 7. Add MP Tools.
v4.1.3_5938.20121130	1. STA+P2P concurrent for Android 4.1 2. WOW feature 3. Miracast API for Android 4. Fix ODM bug 5. Incorporate MP function into normal driver
v4.1.4_6773.20130222	1. Pass Wi-Fi pre-test (11n, WPS2, P2P) 2. Support Android 4.2 3. Support P2P service discovery with nl80211 4. Improve P2P connection experience 5. Support 8188ETV 6. Fix 8188EU AP mode problem on USB 1.1 7. Fix 88E IQK bugs 8. Correct RX statistics error 9. Add IOL mechanism for 88E series 10. Improve expiration mechanism
v4.1.5_7309.20130425	1. Correct tx power setting. 2. Support Android4.2's PKTCNT_POLL command. 3. Support kernel 3.8. 4. Fix racing problem of SoftAP mode. 5. Fix racing problem of roaming and disconnect ioctl. 6. Fix racing problem of early_suspend and ioctl. 7. Improve connection process, avoid receiving multicast frames before group key is installed.
v4.1.6_7546.20130521	1. Fix NULL pointer crash issues in concurrent mode 2. Fix USB bulk-in error handling 3. Fix bug of registering early suspend twice 4. Fix 88E IQK bug 5. Fix deadlock caused by USB resume error handling 6. Fix concurrent LPS bug 7. Fix WEP connection crash in 64bit OS 8. P2P: Trigger no common channel status when channel list is limited by buddy adapter 9. Modify RX signal statistics for concurrent mode

v4.1.7_9024.20130916	1. Support Linux Kernel to 3.9.
	2. Support ETSI Adaptivity test (closed by default).
	3. Fix racing problem of insmod/rmmod and ioctl.
	4. Fix AP selection problem.
	5. Handle suspend/resume for concurrent mode.
	6. Fix management TX frame/buffer leak problem.
	7. P2P: Inprove connection experience.
	8. Fix problem of ad hoc for wext.
v4.1.8_9499.20131104	1. Support Android JB 4.3
	2. Refine STA mode connection process on JB 4.3
	3. Disable CONFIG_USE_VMALLOC by default
	4. Fix polling FW ready bit failed in resume process
	5. Fix issue of sending prob_req to DFS channel
	6. Fix GC scan result selected registra missing on JB 4.1
	7. Fix GO sends beacon with 1Mbps rate
	8. Fix problems caused by large amount of logs
v4.3.0_10600.20140220	1. Support Android KK 4.4
	2. Support Linux kernel 3.10
	3. Fix 88E RA bug
	4. Fix P2P logo test item 6.1.2 fail
	5. Enable CONFIG_USE_VMALLOC by default
	6. Refine memory allocation policy
	7. Improve CFG80211 STA mode connection process
	8. Improve CFG80211 P2P connection process
v4.3.0.1_10770.20140317	1. Fix MP mode TX problem
v4.3.0.2_10792.20140318	1. Fix MP mode start issue and RX query function
v4.3.0.3_10997.20140327	1. Fix MP functions for COB
v4.3.0.4_11485.20140519	1. Fix CFG80211 STA mode memory leak problem
	2. Fix IOT issue with some AP's RA mechanism
	3. Fix IOT issue with some AP's security mechanism
	4. Fix no bulk-in problem after skb allocation failure of RX IO
	5. Fix AP mode TX with wrong bandwidth
	6. Fix AP mode TX OQT overflow problem
	7. Fix AP mode problem when TX large amount of broadcast frames
	8. Fix problems caused by large amount of logs
	9. Using HW encryption/decryption for broadcast/multicast frame and WEP frame when concurrent mode is enabled
v4.3.0.5_12017.20140807	1. Fix AP mode TXDMA status error
	2. Fix 11n logo test item 5.2.16 fail
	3. Fix IOT issue with some AP's RA mechanism
	4. Fix bug when 2 continual "p2p_listen" command is given
	5. Fix kernel call trace caused by un-initialized spinlock
	6. Fix STA packet loss when P2P scan
	7. Fix compile warning
v4.3.0.6_12167.20140828	1. Fix AP mode TX stuck bug related to STA's PS operations
	2. Fix TX stuck bug related to unsuitable OS queue control
	3. Fix unexpected DM operation after SRESET
v4.3.0.7_12758.20141114	1. Support kernel 3.16
	2. Prevent from disconnect problem caused by STA mode's connecting request with invalid channel

	3. Fix unexpected scan timeout problem
	4. Fix TX to unexpected channel when buddy adapter is under scan
	5. Refine HW TX resource allocation
	6. CONFIG_FIND_BEST_CHANNEL counts data frame also
v4.3.0.8_13968.20150417	1. Fix deadlock problem of sta_hash and xmitpriv
	2. Fix STA mode disconnect problem caused by not checking TA of DEAUTH and DISASSOC frame
	3. Fix 88E IQK bug
	4. Fix Ad-hoc mode bug
	5. Fix IOT issue with some AP's RA mechanism
	6. Add CONFIG_FIX_NR_BULKIN_BUFFER option, which is enabled by default
	7. Add error handling for same MAC address as ours
	8. Add custom RX signal statistics
	9. Adaptivity 8.5.1
	10. Update Spur Calibration
	11. Support Android L 5.0
	12. Support kernel 3.19.3
	13. Support Monitor mode
v4.3.0.9_15178.20150907	1. Fix adaptivity bug
v4.3.24_16705.20160509	1. Fix that sta cannot receive packet when enabling concurrent sta+softap by specific flows
	2. Fix adaptivity bug with less overhead
	3. Fix connectivity issue in long distance
	4. Add debug proc entries: drv_cfg, trx_info, hal_spec, tx_power_limit, tx_power_by_rate_base
	5. Add rtw_usb_catc_trigger_cmd to read register to trigger catc
	6. Support Android L 5.X
	7. Support Android M 6.X
	8. Support kernel 4.4.3
v5.2.2_19960.20161226	1. Support high power(external PA/LNA)
	2. Refine TX power in MP mode
	3. Refine mp_start_test flow
	4. Support new way of loading external PHY parameter file.
	5. Fix scan bug when AP mode has client connected
	6. Fix some eFuse r/w bugs.
	7. Update eFuse mask
	8. Support Android 7.0
v5.2.2.2_22644.20170615	1. Support adaptivity for CE_RED 2G: ETSI v2.1.1
	2. Update firmware
	3. Fix GTK rekey fail issue
	4. Update eFuse mask
	5. Fix incorrect WOW wake up reason issue
	6. Bug fix. Softap with client entering power save mode may not able to broadcast/multicast
	7. Change default usb rx aggregation mode for better throughput
v5.2.2.3_24783.20171030	1. Fixed WPA2 vulnerability - key reinstallation attacks(KRACKs).

	2. Fix bugs of tx hang when system reboot without power on/off wifi module
	3. Fix calltrace of cfg80211 scan in kernel 4.7 and above
v5.2.2.4_25483.20171222	1. Fix WOW bugs
	2. Fix signal strength display bugs with wpa_supplicant 8.x
	3. Fix KRACKs issues on big endian platform
v5.3.9_28540.20180627	1. Support 802.11s mesh.
	2. Fix Signal leakage when testing MKK.
	3. Fix external LNA CCK RSSI bug.
v5.7.6_33076.20190419	1. Support Android P 9.0
	2. Fix reading EFUSE value issues.
	3. Fix MP mode TX bugs on CCK rate.
v5.7.6.1_35670.20191106	1. Hotfix P2P NoA buffer potentially overflow
	2. Support kernel to 5.0
	3. Support WPA3-SAE(Personal)

Description:

- This software package could be adopted for Realtek RTL8188EUS WLAN series hardware on Linux based platforms.

Software Package Feature:

- IEEE 802.11 b/g/n WiFi compliant
- 802.1x, WEP, WPA TKIP and WPA2 AES/Mixed mode for PSK and TLS (Radius)
- WPA3-SAE Personal
- WPS - PIN and PBC Methods
- IEEE 802.11b/g/n Client mode
  - Support wireless security for WEP, WPA TKIP and WPA2 AES PSK
  - Support WPA/WPA2 TLS client
  - Support power saving mode
- Soft AP mode
- WiFi-Direct
- Miracast
- MESH

Hardware Supported:

- RTL8188EUS
- RTL8188ETV

Platform Supported:

- Linux (kernel 2.6.18 ~ 5.0)
  Android 1.6 ~ 2.3, 4.0 ~ 9.0