ESP8266_AT_V1.5.1_17_11_06 Release Notes

- 1. Fixed the WPA2 KRACK issue.
- 2. Fixed the issue of wrong messages being displayed after upgrading the firmware.

Github:

ESP8266 NonOS SDK and AT Bin on Github

History Info.

ESP8266_NONOS_SDK_V2.1.0_17_05_05 Release Notes

System

- 1. Fix and update the license;
- 2. Add definitions of ROM functions:
- 3. Add efuse mac crc, save efuse mac into the system parameter area of flash, as a backup mac;
- 4. Implement uart_div_modify, which can support a 32-bit DivLatchValue in the SDK instead of the ROM one, and also remove uart*div*modify from the ld file;
- 5. Reduce iRAM usage by transferring some functions to flash;
 - add weak function void user_spi_flash_dio_to_qio_pre_init(void). If the dio to qio flash mode is
 not used, users can add an empty user_spi_flash_dio_to_qio_pre_init on the application side to
 reduce iRAM usage;
- 6. Fix WDT in system restart;
- 7. Fix Write & Read issue in SPI overlap mode;
- 8. Support 8MB & 16MB spi flash;
- 9. Update boot v1.7;
- Support 8MB & 16MB spi flash;
- 11. Try boot the first bin for 3 times. If it fails, then boot the backup bin;
- 12. Fix http packet error, BBP301;
- 13. Support long periods of deep sleep;
- 14. Fix NMI handle crash on unaligned memory access, BBP309;

Lwip

- 1. Add set and get dns server APIs:
 - espconn_dns_setserver

- espconn_dns_getserver
- Fix 2038 overflow bug in sntp_get_current_timestamp;
- 3. Fix MTU negotiate bug;

AT

- Add new commands, AT+UART? and AT+UART_DEF?;
- 2. Add new command, AT+SYSRAM?;
- 3. Add new commands, AT+SYSIO series;
- 4. Add new command, AT+CWHOSTNAME;
- Add new command, AT+SYSADC?;
- 6. Add new commands, AT+CIPSNTPCFG and AT+CIPSNTPTIME;
- 7. Add new commands, AT+CIPDNS_CUR and AT+CIPDNS_DEF;
- 8. Support a maximum of 8 stations;
- 9. Modify keepalive count to 3 times;
- 10. Fix scan hidden ssid issue in AT+CWLAP;
- 11. Fix the issue of the UART stop bit being 0 when queried for the first time;
- 12. Fix MAC addr conflict in AP+STA mode:
- 13. Add new commands, AT+RFAUTOTRACE;

WiFi

- 1. Optimize the RF frequency calibration workflow, having the frequency trace disabled by default;
 - users can call system_phy_freq_trace_enable in user_rf_pre_init to enable it;
- 2. Update libphy.a to version 1134_0;
- 3. Allow sending a broadcast ESP-NOW packet, but make sure that the packet is unencrypted;
- 4. Fix soft queue error;
- 5. Fix EVENT STAMODE AUTHMODE CHANGE event mode info;
- 6. Fix Imac assert;
- 7. Fix bug in sniffer mode;
- 8. Fix arp loss continously issue;
- 9. Fix bug in WiFi event;
 - auth mode changed event cannot be throw when station is in the process of scanning;
 - error old auth mode and new auth mode;
 - op mode change process cannot be blocked, so add an event to notify the caller that op mode is changed;
- 10. Fix the bug in mic failure handler;
- 11. Fix the bug which causes failure of connection to an AP with shared WEP;
- 12. Fix the bug which causes failure of connection to an AP with hidden ssid;
- 13. Fix softAP deauth:

- 14. Fix reconnect policy when trying to connect to an AP that does not exist;
- 15. Fix scan issue;
- 16. Fix extra bytes in UDP broadcast packet, BBP310;

ESP8266_NONOS_SDK_V2.0.0_16_08_10 Release Notes

Optimization:

- Changed the license of some source files to espressif MIT.
- 2. Updated libphy.a to 1055, fixed an issue of large current in Light-sleep.
- 3. Updated AT+ to 1.3.0:
 - Added Light-sleep wakeup command, AT+WAKEUPGPIO;
 - Fixed abnormal AT+CWDHCPS IP allocation;
 - Added at_sdio demo under example directory.
- 4. Fixed probable system default when calling cur and def interfaces.
- 5. Fixed the issue of high current in Deep-sleep mode without disabling SPI first.
- 6. Fixed an issue where the SDK would crash when switching from AP to Station mode by calling wifi_set_phy_mode.
- 7. Updated secondary boot loader to v1.6:
 - Supports AT + based on SDIO;
 - Supports entering testing mode through GPIO.
- 8. Added support for MXIC Flash QIO mode.
- 9. Fixed exception caused during TCP handshake and retransmission.
- 10. Fixed issues in ESP-NOW.
- 11. Added ESP-PAIR (Simple-Pair) feature, for APIs please refer to ESP8266 SDK API Guide.
- 12. wpa2-enterprise time function derivation and time check disable can be set by users.
- 13. Support for PEAP/TTLS in wpa2-enterprise, for APIs please refer to ESP8266 SDK API Guide.
- 14. Added mgtt demos under examples directory.
- 15. Other issue fixes.
- 16. Resolved an issue that RF_Init_data sector may be broken in stress test. Provided a function user_rf_cal_sector_set which has to be added in application by software developer. More details about user_rf_cal_sector_set refer to documentation "2C-ESP8266_SDK_API Guide". (Resolved in ESP8266_NONOS_SDK_V1.5.4.1)
- 17. Fix a potential risk that will cause rf not work after external reset. (Resolved in ESP8266_NONOS_SDK_V1.5.4.1)
- 18. Add SDIO AT support. (Resolved in ESP8266_NONOS_SDK_V1.5.4.1)
- 19. Fix a potential bug in espconn. (Resolved in ESP8266 NONOS SDK V1.5.4.1)

Notes:

esp_init_data.bin has to be downloaded into flash at least once. Download blank.bin to initialize the sector stored RF_CAL parameter (set by user_rf_cal_sector_set), and download esp_init_data.bin into flash, when the system needs to be initialized, or RF needs to be calibrated again.