

v3.4.0.0 Release Notes

v3.4.0.0 is released for ESP32 and ESP32-S2. The changes since the previous version are as follows.

- [ESP32-AT](#)
- [ESP32S2-AT](#)

ESP32-AT

Documentation for Release v3.4.0.0 is available at <https://docs.espressif.com/projects/esp-at/en/release-v3.4.0.0/esp32/index.html>. ESP32-AT v3.4.0.0 is a major update for ESP32-AT [v3.2.0.0](#).

The firmwares:

- [ESP32-WROOM-32-AT-V3.4.0.0.zip](#)
- [ESP32-SOLO-AT-V3.4.0.0.zip](#)
- [ESP32-PICO-D4-AT-V3.4.0.0.zip](#)
- [ESP32-MINI-1-AT-V3.4.0.0.zip](#)

This is the list of changes since release [v3.2.0.0](#):

Breaking Changes

- [esp-idf](#) version updated to [v5.0.6](#)
- **RF power**: Fixed the issue that the actual wifi transmit power didn't match the settings. The default configuration of wifi transmit power is 19.5 dBm, but the actual wifi transmit power may be slightly lower than the settings. This is because the wifi transmit power is limited by your country code according to [phy_multiple_init_data.bin](#) configuration. In the current version, esp-at disabled multiple phy init data bin to improve the wifi transmit power (rf power is no longer limited by your country code).

1. Feature

1.1 TCP/IP

- Added the [AT+CIPRECVMODE](#) command to set recv mode for each connection
- [AT+CIPRECLEN](#) query command can return the real data length now

1.2 Application Layer

- [AT+MQTTCONNCFG](#): Enlarged lwt msg length to 128 bytes
- Added the [AT+MQTTSENI](#) command to set MQTT server name indication

2. Bugfix

2.1 Wi-Fi

- **AT+CWLAP**: Fixed an issue where executing **AT+CWLAP** may return an ERROR when the **AT+CWRECONNCFG** command is sent immediately after the Wi-Fi disconnection

2.2 TCP/IP

- **AT+PING**: Fixed an issue that cannot ping a linklocal ipv6 address
- Fixed an ssl issue where "CLOSED" was output before reading all data in passive mode
- Fixed a potential ssl crash caused when mbedtls dynamic buffer feature is used and an ssl renegotiation occurs
- Fixed an issue where esp-tls is unable to parse ECC keys

2.3 System

- Fixed the issue that AT could not work immediately after restart and prompt ready
- Fixed an **AT+SYSFLASH** crash issue if a large amount of data is read
- Fixed a potential GPIO voltage fluctuation issue during light-sleep

2.4 Bluetooth

- Fixed BLE don't print ble connection params update fail issue
- Fixed BLE memory leak issue

3. Optimization

- Optimized sntp startup delay and receive timeout to speed up sntp time acquisition
- Re-organized the gitlab ci
- Re-organized the main directory of the esp-at repository
- Added some debug options to allow different kinds of esp-at debug output

ESP32S2-AT

Documentation for Release v3.4.0.0 is available at <https://docs.espressif.com/projects/esp-at/en/release-v3.4.0.0/esp32s2/index.html>. ESP32S2-AT v3.4.0.0 is a major update for ESP32S2-AT [v2.1.0.0](#).

The firmware:

- [ESP32-S2-MINI-AT-V3.4.0.0.zip](#)

This is the list of changes since release [v2.1.0.0](#):

Breaking Changes

- **esp-idf** version updated to [v5.0.6](#)

1. Feature

1.1 Basic

Added more Basic AT commands:

- **AT+CMD**: List all AT commands and types supported in the current firmware.

- AT+TRANSINTVL: Set the data transmission interval in the Passthrough Mode.
- AT+SYSMSGFILTER: Enable or disable the system message filter.
- AT+SYSMSGFILTERCFG: Query/Set the system message filters.
- AT+SYSMFG: Query/Set manufacturing nvs User Partitions.
- AT+SYSREG: Read/write the register.

1.2 Wi-Fi

Added more Wi-Fi AT commands:

- AT+CWINIT: Initialize/Deinitialize Wi-Fi driver.
- AT+CWSTATE: Query the Wi-Fi state and Wi-Fi information.
- AT+CWRECONNCFG: Query/Set the Wi-Fi reconnecting configuration.

1.3 TCP/IP

Added more TCP/IP AT Commands:

- AT+CIPV6: Enable/disable the network of Internet Protocol Version 6 (IPv6).
- AT+CIPSTATE: Obtain the TCP/UDP/SSL connection information.
- AT+CIPSENDL: Send long data in parallel in the normal transmission mode.
- AT+CIPSENDLCFG: Set the configuration for the command AT+CIPSENDL.
- AT+CIPSNTPTINTV: Query/Set the SNTP time synchronization interval.
- AT+CIPFWVER: Query the existing AT firmware version on the server.
- AT+CIPSSLCCN: Query/Set the Common Name of the SSL client.
- AT+CIPSSLCSNI: Query/Set SSL client Server Name Indication (SNI).
- AT+CIPSSLCALPN: Query/Set SSL client Application Layer Protocol Negotiation (ALPN).
- AT+CIPSSLCPSK: Query/Set SSL client Pre-shared Key (PSK) in string format.
- AT+CIPSSLCPSKHEX: Query/Set SSL client Pre-shared Key (PSK) in hexadecimal format.
- AT+CIPRECVTYPE: Query/Set socket receiving mode.

1.4 MQTT

Added more MQTT AT Commands:

- AT+MQTTLONGCLIENTID: Set MQTT client ID
- AT+MQTTLONGUSERNAME: Set MQTT username
- AT+MQTTLONGPASSWORD: Set MQTT password
- AT+MQTTALPN: Set MQTT Application Layer Protocol Negotiation (ALPN)
- AT+MQTTTSSI: Set MQTT Server Name Indication (SNI)

1.5 HTTP

Added more HTTP AT Commands:

- AT+HTTPCGET: Get HTTP Resource
- AT+HTTPCPOST: Post HTTP data of specified length
- AT+HTTPCPUT: Put HTTP data of specified length
- AT+HTTPURLCFG: Set/Get long HTTP URL

- AT+HTTPHEAD: Set/Query HTTP request headers

1.6 User

Added new User AT Commands:

- AT+USERRAM: Operate user's free RAM.
- AT+USEROTA: Upgrade the firmware according to the specified URL.
- AT+USERWKMUCCFG: Configure how AT wakes up MCU.
- AT+USERMCUSLEEP: MCU indicates its sleep state.
- AT+USERDOCS: Query the ESP-AT user guide for the current firmware.

2. Attention

Due to the long time without a new firmware release for ESP32-S2, this release has significant changes. If you want to know more information, please refer to some ESP32 release notes:

- [v3.2.0.0](#)
- [v2.4.0.0](#)
- [v2.2.0.0](#)