

This document contains error codes that originate from the mobile app, and also WiFi error codes from the WiFi chip in the Classic WiFi Hub and the new Standard WiFi Hub.

Application Error Codes

app error codes are provided in a "123-45" format accordingly...

Error Code	Description
321	API error saving location
322	Error saving location to local database
323	API error saving hub to location
324	API error saving device
325	Error saving device to local database
326	Set WiFi timed out

Extension	Device Platform
07	iOS
08	Android
89	Web

Classic WiFi Hub Error Codes



Error Number	Error Type	Description
0	Success	
2	Timeout	Internal HUB error. Reboot and try again.
4	Error	Could not get IP Address, DHCP issue. Unplug other access points, and move the hub closer to the main access point.
5	Bad Argument	Some kind of internal failure. May need a new Hub.
67	Failed to get IP address	DHCP issue
1004	Invalid key	Wrong password
1006	Not authenticated	Wrong password, blacklisted, or range issue.
1007	Not keyed	Wrong password
1008	IOCTL fail	Internal HUB error. Reboot and try again.

1009	Buffer unavailable temporarily	Internal HUB error. Try again.
1010	Buffer unavailable permanently	Internal HUB error. Reboot and try again.
1012	Connection lost	Connection lost during join. Move hub closer to access point.
1013	Cannot add extra event handler	Internal HUB error. Reboot and try again.
1014	Error manipulating a semaphore	Internal HUB error. Reboot and try again.
1015	Packet retrieval cancelled due to flow control	Internal HUB error. Reboot and try again.
1016	Packet retrieval cancelled due to lack of bus credits	Internal HUB error. Reboot and try again.
1017	Packet retrieval cancelled due to no pending packets	Internal HUB error. Reboot and try again.
1018	Core disabled due to no clock	Internal HUB error. Reboot and try again.
1019	Core disabled - in reset	Internal HUB error. Reboot and try again.
1020	Unsupported function	Internal HUB error. Reboot and try again.
1021	Error writing to WLAN register	Internal HUB error. Reboot and try again.
1022	SDIO bus failed to come up	Internal HUB error. Reboot and try again.
1023	Join not finished yet	Internal HUB error. Try again.
1024	Specified network was not found	Could not find access point. Check SSID and or move closer to access point.
1025	Join status error	Join process failed. Try again.

1027	Error during SDIO receive	Internal HUB error. Reboot and try again.
1028	Hardware tag header corrupt	Internal HUB error. Reboot and try again.
1029	Failed to allocate a buffer to receive into	Internal HUB error. Reboot and try again.
1030	Error reading a bus hardware register	Internal HUB error. Reboot and try again.
1031	Failed to create a new thread	Internal HUB error. Reboot and try again.
1032	Error manipulating a queue	Internal HUB error. Reboot and try again.
1033	Error moving the current pointer of a packet buffer	Internal HUB error. Reboot and try again.
1034	Error setting size of packet buffer	Internal HUB error. Reboot and try again.
1035	Null stack pointer passed when non null was required	Internal HUB error. Reboot and try again.
1036	Error deleting a thread	Internal HUB error. Reboot and try again.
1037	Error sleeping a thread	Internal HUB error. Reboot and try again.
1038	Failed to allocate a packet buffer	Internal HUB error. Reboot and try again.
1039	No Packets waiting to be received	Internal HUB error. Reboot and try again.
1040	Requested interface is not active	Internal HUB error. Reboot and try again.
1041	Requested delay is too long	Internal HUB error. Reboot and try again.
1042	Duty cycle is outside limit 0 to 100	Internal HUB error. Reboot and try again.

1043	Returned pmk was the wrong length	Internal HUB error. Reboot and try again.
1044	AP security type was unknown	Unknown access point configuration. Try again and contact support if message continues.
1045	AP not allowed to use WEP - it is not secure - use Open instead	Wrong password.
1046	WPA / WPA2 key length must be between 8 & 64 bytes	Wrong password.
1047	Specified filter id not found	Internal HUB error. Reboot and try again.
1048	Failed to read 0xfeedbead SPI id from chip	Internal HUB error. Reboot and try again.
1049	Mismatch in sizes between SPI header and SDPCM header	Internal HUB error. Reboot and try again.
1050	Attempt to register a multicast address twice	Internal HUB error. Reboot and try again.
1051	SDIO transfer failed too many times.	Internal HUB error. Reboot and try again.
1052	Null Pointer argument passed to function.	Internal HUB error. Reboot and try again.
1053	Error deleting a thread	Internal HUB error. Reboot and try again.
1054	Semaphore/mutex wait has been aborted	Internal HUB error. Reboot and try again.
1055	Failed to set block ack window	Internal HUB error. Reboot and try again.
1056	Requested delay is too short	Internal HUB error. Reboot and try again.
1057	Invalid interface provided	Internal HUB error. Reboot and try again.

1058	WEP / WEP_SHARED key length must be 5 or 13 bytes	Wrong password.
1059	EAPOL handler already registered	Internal HUB error. Reboot and try again.
1060	Soft AP or P2P group owner already up	Internal HUB error. Reboot and try again.
1061	Timeout occurred while waiting for EAPOL packet M1 from AP	Internal HUB error. Try again.
1062	Timeout occurred while waiting for EAPOL packet M3 from AP, which may indicate incorrect WPA2/WPA passphrase	Possible Incorrect password, low wifi signal, or wifi interference/busy.
1063	Timeout occurred while waiting for EAPOL packet G1 from AP	Internal HUB error. Try again.
1064	Unknown failure occurred during the EAPOL key handshake	Internal HUB error. Try again.
1065	Memory allocation failure	Internal HUB error. Reboot and try again.
1066	Access point not found	Could not find access point. Check SSID and or move closer to access point.

Standard WiFi Hub Error Codes



Reason code	Value	Description
UNSPECIFIED	1	Generally, it means an internal failure, e.g., the memory runs out, the internal TX fails, or the reason is received from the remote side.
AUTH_EXPIRE	2	<p>The previous authentication is no longer valid.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none">• auth is timed out.• the reason is received from the AP.

		<p>For the ESP AP, this reason is reported when:</p> <ul style="list-style-type: none"> the AP has not received any packets from the station in the past five minutes. the AP is stopped by calling <code>esp_wifi_stop()</code>. the station is de-authed by calling <code>esp_wifi_deauth_sta()</code>.
AUTH_LEAVE	3	<p>De-authenticated, because the sending station is leaving (or has left). For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.
ASSOC_EXPIRE	4	<p>Disassociated due to inactivity.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP. <p>For the ESP AP, this reason is reported when:</p>

		<ul style="list-style-type: none">• the AP has not received any packets from the station in the past five minutes.• the AP is stopped by calling <code>esp_wifi_stop()</code>.• the station is de-authed by calling <code>esp_wifi_deauth_sta()</code>.
ASSOC_TOOMANY	5	<p>Disassociated, because the AP is unable to handle all currently associated STAs at the same time.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none">• it is received from the AP. <p>For the ESP AP, this reason is reported when:</p> <ul style="list-style-type: none">• the stations associated with the AP reach the maximum number that the AP can support.

NOT_AUTHED	6	<p>Class-2 frame received from a non-authenticated STA.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none">• it is received from the AP. <p>For the ESP AP, this reason is reported when:</p> <ul style="list-style-type: none">• the AP receives a packet with data from a non-authenticated station.
NOT_ASSOCED	7	<p>Class-3 frame received from a non-associated STA.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none">• it is received from the AP. <p>For the ESP AP, this reason is reported when:</p>

		<ul style="list-style-type: none"> the AP receives a packet with data from a non-associated station.
ASSOC_LEAVE	8	<p>Disassociated, because the sending station is leaving (or has left) BSS.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP. the station is disconnected by <code>esp_wifi_disconnect()</code> and other APIs.
ASSOC_NOT_AUTHED	9	<p>station requesting (re)association is not authenticated by the responding STA.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP. <p>For the ESP AP, this reason is reported when:</p>

		<ul style="list-style-type: none"> the AP receives packets with data from an associated, yet not authenticated, station.
DISASSOC_PWRCAP_BAD	10	<p>Disassociated, because the information in the Power Capability element is unacceptable.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.
DISASSOC_SUPCHAN_BAD	11	<p>Disassociated, because the information in the Supported Channels element is unacceptable.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.
BSS_TRANSITION_DISASSOC	12	<p>AP wants us to move to another AP, sent as a part of BTM procedure. Please note that when station is sending BTM request and moving to another AP, ROAMING reason code will be reported instead of this.</p>

		<p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP.
IE_INVALID	13	<p>Invalid element, i.e., an element whose content does not meet the specifications of the Standard in frame formats clause.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP. <p>For the ESP AP, this reason is reported when:</p> <ul style="list-style-type: none"> • the AP parses a wrong WPA or RSN IE.
MIC_FAILURE	14	<p>Message integrity code (MIC) failure.</p> <p>For the ESP station, this reason is reported when:</p>

		<ul style="list-style-type: none"> it is received from the AP.
4WAY_HANDSHAKE_TIMEOUT	15	<p>Four-way handshake times out. For legacy reasons, in ESP this reason code is replaced with <code>WIFI_REASON_HANDSHAKE_TIMEOUT</code>.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> the handshake times out. it is received from the AP.
GROUP_KEY_UPDATE_TIMEOUT	16	<p>Group-Key Handshake times out.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.

IE_IN_4WAY_DIFFERS	17	<p>The element in the four-way handshake is different from the (Re-)Association Request/Probe and Response/Beacon frame.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP. • the station finds that the four-way handshake IE differs from the IE in the (Re-)Association Request/Probe and Response/Beacon frame.
GROUP_CIPHER_INVALID	18	<p>Invalid group cipher.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP.
PAIRWISE_CIPHER_INVALID	19	<p>Invalid pairwise cipher.</p> <p>For the ESP station, this reason is reported when:</p>

		<ul style="list-style-type: none"> it is received from the AP.
AKMP_INVALID	20	<p>Invalid AKMP.</p> <p>For the ESP station, this reason is reported when: - it is received from the AP.</p>
UNSUPP_RSN_IE_VERSION	21	<p>Unsupported RSNE version.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.
INVALID_RSN_IE_CAP	22	<p>Invalid RSNE capabilities.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> it is received from the AP.

802_1X_AUTH_FAILED	23	<p>IEEE 802.1X. authentication failed.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP. <p>For the ESP AP, this reason is reported when:</p> <ul style="list-style-type: none"> • IEEE 802.1X. authentication fails.
CIPHER_SUITE_REJECTED	24	<p>Cipher suite rejected due to security policies.</p> <p>For the ESP station, this reason is reported when:</p> <ul style="list-style-type: none"> • it is received from the AP.
TDLS_PEER_UNREACHABLE	25	<p>TDLS direct-link teardown due to TDLS peer STA unreachable via the TDLS direct link.</p>

TDLS_UNSPECIFIED	26	TDLS direct-link teardown for unspecified reason.
SSP_REQUESTED_DISSASSOC	27	Disassociated because session terminated by SSP request.
NO_SSP_ROAMING_AGREEMENT	28	Disassociated because of lack of SSP roaming agreement.
BAD_CIPHER_OR_AKM	29	Requested service rejected because of SSP cipher suite or AKM requirement.
NOT_AUTHORIZED_HERE	30	Requested service not authorized in this location.
SERVICE_CHANGE_PRECLUDES_TS	31	TS deleted because QoS AP lacks sufficient bandwidth for this QoS STA due to a change in BSS service characteristics or operational mode (e.g., an HT BSS change from 40 MHz channel to 20 MHz channel).
UNSPECIFIED_QOS	32	Disassociated for unspecified, QoS-related reason.
NOT_ENOUGH_BANDWIDTH	33	Disassociated because QoS AP lacks sufficient bandwidth for this QoS STA.

MISSING_ACKS	34	Disassociated because excessive number of frames need to be acknowledged, but are not acknowledged due to AP transmissions and/or poor channel conditions.
EXCEEDED_TXOP	35	Disassociated because STA is transmitting outside the limits of its TXOPs.
STA_LEAVING	36	Requesting STA is leaving the BSS (or resetting).
END_BA	37	Requesting STA is no longer using the stream or session.
UNKNOWN_BA	38	Requesting STA received frames using a mechanism for which a setup has not been completed.
TIMEOUT	39	Requested from peer STA due to timeout
Reserved	40 ~ 45	Reserved as per IEEE80211-2020 specifications.
PEER_INITIATED	46	In a Disassociation frame: Disassociated because authorized access limit reached.

AP_INITIATED	47	In a Disassociation frame: Disassociated due to external service requirements.
INVALID_FT_ACTION_FRAME_COUNT	48	Invalid FT Action frame count.
INVALID_PMKID	49	Invalid pairwise master key identifier (PMKID).
INVALID_MDE	50	Invalid MDE.
INVALID_FTE	51	Invalid FTE
TX_LINK_EST_FAILED	67	TRANSMISSION_LINK_ESTABLISHMENT_FAILED will be reported when Transmission link establishment in alternative channel failed.
ALTERNATIVE_CHANNEL_OCCUPIED	68	The alternative channel is occupied.
BEACON_TIMEOUT	200	Espressif-specific Wi-Fi reason code: when the station loses N beacons continuously, it will disrupt the connection and report this reason.

NO_AP_FOUND	201	Espressif-specific Wi-Fi reason code: when the station fails to scan the target AP, this reason code will be reported. In case of security mismatch or station's configuration mismatch, new reason codes NO_AP_FOUND_XXX will be reported.
AUTH_FAIL	202	Espressif-specific Wi-Fi reason code: the authentication fails, but not because of a timeout.
ASSOC_FAIL	203	Espressif-specific Wi-Fi reason code: the association fails, but not because of ASSOC_EXPIRE or ASSOC_TOOMANY.
HANDSHAKE_TIMEOUT	204	Espressif-specific Wi-Fi reason code: the handshake fails for the same reason as that in WIFI_REASON_4WAY_HANDSHAKE_TIMEOUT.
CONNECTION_FAIL	205	Espressif-specific Wi-Fi reason code: the connection to the AP has failed.
AP_TSF_RESET	206	Espressif-specific Wi-Fi reason code: the disconnection happened due to AP's TSF reset.
ROAMING	207	Espressif-specific Wi-Fi reason code: the station is roaming to another AP, this reason code is just for info, station will automatically move to another AP.

ASSOC_COMEBACK_TIME_TOO_LONG	208	Espressif-specific Wi-Fi reason code: This reason code will be reported when Assoc comeback time in association response is too high.
SA_QUERY_TIMEOUT	209	Espressif-specific Wi-Fi reason code: This reason code will be reported when AP did not reply of SA query sent by ESP station.

NO_AP_FOUND_SECURITY

210

Espressif-specific Wi-Fi reason code:
NO_AP_FOUND_W_COMPATIBLE_SECURITY will be reported if an AP that fits identifying criteria (e.g. ssid) is found but the connection is rejected due to incompatible security configuration. These situations could be:

- The Access Point is offering WEP security, but our station's password is not WEP-compliant.
- The station is configured in Open mode; however, the Access Point is broadcasting in secure mode.
- The Access Point uses Enterprise security, but we haven't set up the corresponding enterprise configuration, and vice versa.
- SAE-PK is configured in the station configuration, but the Access Point does not support SAE-PK.
- SAE-H2E is configured in the station configuration; however, the AP only supports WPA3-PSK or WPA3-WPA2-PSK.
- The station is configured in secure mode (Password or Enterprise mode); however, an Open AP is found during the scan.
- SAE HnP is configured in the station configuration; however, the AP supports H2E only.
- H2E is disabled in the station configuration; however, the AP is WPA3-EXT-PSK, which requires H2E support.
- The Access Point requires PMF, but the station is not configured for PMF capable/required.
- The station configuration requires PMF, but the AP is not configured for PMF capable/required.

		<ul style="list-style-type: none"> • The Access Point is using unsupported group management/pairwise ciphers. • OWE is not enabled in the station configuration, but the discovered AP is using OWE only mode. • The Access Point is broadcasting an invalid RSNXE in its beacons. • The Access Point is in Independent BSS mode.
NO_AP_FOUND_AUTH MODE	211	Espressif-specific Wi-Fi reason code: NO_AP_FOUND_IN_AUTHMODE_THRESHOLD will be reported if an AP that fit identifying criteria (e.g. ssid) is found but the authmode threhsold set in the wifi_config_t is not met.
NO_AP_FOUND_RSSI	212	Espressif-specific Wi-Fi reason code: NO_AP_FOUND_IN_RSSI_THRESHOLD will be reported if an AP that fits identifying criteria (e.g. ssid) is found but the RSSI threhsold set in the wifi_config_t is not met.

Wi-Fi Reason code related to wrong password

The table below shows the Wi-Fi reason-code may related to wrong password.

Reason code	Value	Description
4WAY_HANDSHAKE_TIMEOUT	15	Four-way handshake times out. Setting wrong password when STA connecting to an encrypted AP.
NO_AP_FOUND	201	This may related to wrong password in the two scenarios: <ul style="list-style-type: none">• Setting password when STA connecting to an unencrypted AP.• Does not set password when STA connecting to an encrypted AP.
HANDSHAKE_TIMEOUT	204	Four-way handshake fails.

Wi-Fi Reason code related to low RSSI

The table below shows the Wi-Fi reason-code may related to low RSSI.

Reason code	Value	Description
NO_AP_FOUND_IN_RSSI_THRESHOLD	212	The station fails to scan the target AP due to low RSSI
HANDSHAKE_TIMEOUT	204	Four-way handshake fails.