

# Bug Advisory

Title	Bug Advisory Concerning Some Android Phones Being Unable to Scan the Advertising PDUs Sent by ESP32 Bluetooth LE
Issue Date	2024/02/07
Advisory Number	AR2024-001
Serial Number	NA
Version	V1.0

## Issue Summary

For ESP32 in the Wi-Fi and Bluetooth coexistence mode, when Wi-Fi is operated in the HT40 mode, it affects the configuration of Bluetooth LE, preventing some Android phones receiving the SCAN\_RSP PDU sent by Bluetooth LE. As Android phones report advertising PDUs and SCAN\_RSP PDU together, only receiving the advertising PDUs would lead to the packet to be discarded directly. Therefore, the mentioned issue can result in some Android phone applications being unable to scan the advertising PDUs sent by ESP32 Bluetooth LE.

## Impact Analysis

The occurrence of this issue requires the simultaneous fulfillment of the following two conditions:

1. In Wi-Fi and Bluetooth coexistence mode
2. Wi-Fi is configured in HT40 mode, or in HT20/HT40 automatic mode and connected to an AP in HT40 mode.

## ESP-IDF Affected Versions:

ESP-IDF Branch	Affected Commit IDs	Affected ESP-IDF Versions
master	<a href="#">12fcc66</a> - <a href="#">b02c669</a> (excluded)	NA

release/v5.2	<a href="#">12fcc66</a> - <a href="#">c4d3d74</a> (excluded)	v5.2-beta1 ~ v5.2-beta2
release/v5.1	<a href="#">d4e0de8</a> - <a href="#">17752f9</a> (excluded)	v5.1.1 ~ v5.1.2
release/v5.0	<a href="#">49f02b3</a> - <a href="#">36c57c0</a> (excluded)	v5.0.4 ~ v5.0.5
release/v4.4	<a href="#">4b2972c</a> - <a href="#">54ba0f8</a> (excluded)	v4.4.6
release/v4.3	<a href="#">7e817bb</a> - <a href="#">c8144ba</a> (excluded)	v4.3.6

## ESP-IDF Patched Versions:

ESP-IDF Branch	Fixed Commit ID	Fixed ESP-IDF Version
master	<a href="#">b02c669</a>	NA
release/v5.2	<a href="#">c4d3d74</a>	Expected in v5.2-rc1
release/v5.1	<a href="#">17752f9</a>	Expected in v5.1.3
release/v5.0	<a href="#">36c57c0</a>	Expected in v5.0.6
release/v4.4	<a href="#">54ba0f8</a>	Expected in v4.4.7
release/v4.3 <sup>1</sup>	<a href="#">c8144ba</a>	v4.3.7

<sup>1</sup> ESP-IDF v4.3 has officially reached the end of maintenance. Espressif will no longer provide support for adding new features, fixing bugs, or addressing security issues in this version.

## Recommendations for Application Developers

If there is a coexistence of Wi-Fi and Bluetooth in the application, and the ESP-IDF version used is among the affected versions, it is recommended to use fixed ESP-IDF versions mentioned above or versions after the fixed commit. If you encounter problems during the upgrade process, please provide the IDF version or Commit ID to [Espressif](#). We will confirm and handle related matters as soon as possible.