Infineon Linux Wi-Fi driver (FMAC) release notes

Version 2026_0108

About this document

Scope and purpose

This document provides an overview and updates for Infineon's AIROC™ Wi-Fi – Bluetooth® combo devices for the Infineon Linux Wi-Fi driver (FMAC) (v2026_0108 release).

Intended audience

This document is intended for users configuring AIROC™ Wi-Fi – Bluetooth® combo device over a Linux-based environment.

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1 Overview

1.1 Release content

The Infineon Linux Wi-Fi driver (FMAC) release (v2026_0108) includes the following:

- FMAC Wi-Fi driver
  - ifx-backports GitHub page
- Firmware and Clm blob
  - ifx-Linux-firmware GitHub page
- Supplicant and hostapd
  - ifx-hostap GitHub page

All the above files are also available on the Infineon Developer community.

This release also includes patch updates for the following platforms for Wi-Fi with FMAC bring-up:

- EA iMX8 Nano host for kernel v6.6.23 and kernel v6.12.3
- Fedora/Vanilla kernel v6.12.15

Download the patches from the Infineon Developer community.

This document is intended to provide information on the following in the Infineon Linux Wi-Fi driver (FMAC) release (v2026_0108):

- FMAC driver changes
- Hostapd/supplicant changes
- Firmware changes for Infineon's AIROC™ Wi-Fi – Bluetooth® combo devices
  - New features
  - WFA certification support and fixes
  - Bug fixes
  - Regulatory and NVRAM updates

1.2 Device firmware revision details

Note: *Contact the local Infineon distribution channel (FAE or local sales representative) to get the latest hardware, NVRAM, and software files.*

Note: *Devices with firmware updated in this release are highlighted in bold.*

Table 1 Firmware revision details

Device		**Wi-Fi firmware version**
CYW4373	PCIe	13.35.205.100
	SDIO	13.10.246.356
	Industrial	
	USB	
CYW43439	SDIO	7.95.98
CYW43455	SDIO	7.45.286
CYW43012	**SDIO**	**13.10.271.370**
CYW43022	**SDIO**	**13.34.107.154**
CYW55571 **CYW55572** **CYW55573**	**PCIe**	**18.53.546.29**
	SDIO	
CYW54591	PCIe	13.35.369
	SDIO	
CYW55511 **CYW55512** **CYW55513**	**SDIO**	**28.10.590.3**

2 Enhancement

This section explains the updated features, enhancements, and fixes, along with known issues that may impact various devices.

2.1 Key FMAC driver updates

- Supports backport 6.1.145
- Added support to store RAM dump in the persistent file system
- Supports Linux kernel v6.12
- Fix for suspend/resume in SDIO in-band interrupt
- Roaming reason codes documentation changes for better readability
- Fix for configured MAC address restore after reset
- Fix for compilation error when Bluetooth®-share SDIO is disabled
- Enhancements for P2P and DPP
- Fix for CYW55513 firmware load issue
- SDIO recovery fixes
- Fix for connection failure to GO using persistent p2p_invite request
- KSO logging improvement
- Fix for crash issue after SDIO bus reset
- Fix for channel issues caused by the iw reg command
- Fix for NULL pointer check in `brcmf_txfinalize()`

2.2 Hostapd/supplicant features

- Fix for twt_offset incorrect value issue
- Updated hostapd source HEAD from commit 13837a031a78 to commit a8655be0b18

2.3 Firmware updates

2.3.1 CYW43022

New features

- Added bus interface and **fabid** information in **wl revinfo** WL tool command

Table 2 WFA certification

Chipset	Quick track CID	WFA program supported
CYW43022	WFA133143	11n, 11ac, WPA3, PMF, vulnerability, and forward compatibililty

Table 3 WFA certification support fixes

Test plan	Supported test case	Description
N/A	N/A	N/A

Bug fixes

- Fix for DLTRO
- Memory optimisations for firmware size reduction
- Fix for deauthentication with 4-way handshake timeout reason code while using GTKOE with PEAP protocol in WPA2-enterprise

Regulatory updates

N/A

NVRAM updates

N/A

Known issues

N/A

2.3.2 CYW43012

New features

- Added enhanced SW antenna diversity
- Added VSDB support
- Added bus interface and **fabid** information in **wl revinfo** WL tool command
- Added multi-channel support for P2PGO + STA mode
- Added ICMP echo offload support

Table 4 WFA certification

Chipset	Quick track CID	WFA program supported
CYW43012	WFA127567	11n, 11ac, WPA3, PMF, vulnerability, and forward compatibility

Table 5 WFA certification support fixes

Test plan	Supported test case	Description
WPA3	5.9.1	STAUT Group Key Handshake Key Rotation Test Fix: GTKOE skip while WPA3-SAE in use

Bug fixes

- Fix for deauthentication with 4-way handshake timeout reason code while using GTKOE with PEAP protocol in WPA2-enterprise

Regulatory updates

N/A

NVRAM updates

N/A

Known issues

N/A

2.3.3 CYW55571/CYW55572/CYW55573

- CYW55570 – Dual band 2.4/5 GHz 1x1
- CYW55571 – Tri band 2.4/5/6 GHz 1x1
- CYW55572 – Dual band 2.4/5 GHz 2x2
- CYW55573 – Tri band 2.4/5/6 GHz 2x2

New features

- Added Bluetooth® Coex in the VSDB implementation
- Added bus interface and **fabid** information in **wl revinfo** WL tool command

Table 6 WFA certification

Chipset	Quick track CID	WFA program supported
CYW55572	WFA131807	11ax – R2, 6E MBO, OCE, OWE WPA3 (192 bits, TLS 1.3, PSK, SCV) 11n, 11ac, PMF, P2P, and vulnerability Forward compatibility
CYW55573	WFA136170	

Table 7 WFA certification support fixes

Test plan	Supported test case	Description
N/A	N/A	N/A

Bug fixes

- Fix for the crash observed in APSTA configuration with three client devices
- Fix for neighbour report request TX when AP does not support 802.11k RRM capabilities
- PHY improvements for low TX power at -40°C temperature
- Fix for deauthentication with 4-way handshake timeout reason code while using GTKOE with PEAP protocol in WPA2-enterprise
- Fix for the parse algorithm to set the proper bandwidth of the peer STA
- APSTA: memory improvements
- Fix for COEX throughput and zero stall issues in SoftAP mode
- Fix for GTKOE rekey failure and timeout issue after roaming in FT mode

Regulatory updates

- DFS flag update to EU for country code DE

NVRAM updates

- Low TX power update and other enhancements for 25°C temperature

Known issues

- [SDIO] [Intermittent] Notice low RX throughput during WLAN and ACL traffic coex senarios

Note: *Contact the module vendor or local Infineon distribution channel (FAE or local sales representative) for NVRAM updates and throughput optimisations.*

2.3.4 CYW55511/CYW55512/CYW55513

- CYW55511 – Single band 2.4 GHz
- CYW55512 – Dual band 2.4/5 GHz
- CYW55513 – Tri band 2.4/5/6 GHz

New features

- Added Bluetooth® COEX in VSDB implementation
- Added support for antenna diversity through GPIO control
- Added support for HE ER SU format
- Added bus interface information in 'wl revinfo' WL Tool command
- Added beacon loss mitigation support
- Added ER PPDU support
- Added long guard Interval support

Table 8 WFA certification

Chipset	WFA program supported
CYW55513	11ax – R2, 6E MBO, OCE, OWE WPA3 (192 bits, TLS 1.3, PSK, SCV) 11n, 11ac, PMF, P2P, and vulnerability Forward compatibility

Table 9 WFA certification support fixes

Test plan	Supported test case	Description
N/A	N/A	N/A

Bug fix

- Fix for invalid long sleep duration during COEX
- Fix for ePA/eLNA transmit power control
- Fix for ICMP echo reply for incorrect IPv4 address
- Fixes for eLNA mode
- Enhancements for antenna diversity
- Fix for driver crash during 106-tone RU HE ER transmission
- Fix for adjacent channel beacon detection
- Fix for reconnection in the same DFS channel
- Fix for deauthentication with 4-way handshake timeout reason code while using GTKOE with PEAP protocol in WPA2-enterprise
- uCode: Fixes related to bcn_li_dtim
- Fix for valid return of 2.4G/5G chanspec for shared channels between 2.4/5 GHz and 6 GHz bands when FW is set to 6G band
- Improvements in ARP requests with broadcast ARP requests
- Fix for missing 5 GHz channel flags during scan

Enhancement

- PHY Changes to support ePA/eLNA in 2.4G band and iPA/iLNA in 5G band
- Fix for GTKOE rekey failure and timeout issue after roaming in FT mode

Regulatory updates

N/A

NVRAM updates

N/A

Known issues

- Combo COEX - notice UDP low throughput during BLE CIS and Wi-Fi co-ex scenario
- Third-party COEX - low Zigbee performance noticed in Wi-Fi RX throughput scenario

Note: *Contact the module vendor or local Infineon distribution channel (FAE or local sales representative) for NVRAM updates.*

3 Documentation

For more details on features and integration, see the following documents:

- **Wi-Fi software user guide**

  This document offers a comprehensive overview of the fundamental components that constitute the Linux 802.11 ecosystem to use Infineon's AIROC™ Wi-Fi – Bluetooth® combo solutions conveniently with a host of your choice and configure it based on your application.
- **Getting started with Wi-Fi & Bluetooth® combo chip on iMX8 Nano Developer's Kit V3 in Linux**

  This guide provides step-by-step instructions to configure the AIROC™ CYW5557x Wi-Fi & Bluetooth® combo chip on the host, to load the FMAC driver, and to establish a Wi-Fi connection between an AP/SoftAP and STA.

Glossary

Abbreviation	Extended Form
APSTA	Access Point and Station
ACL	Access Control List
BLE	Bluetooth Low-Energy
CLM	Country Locale Matrix
DFS	Dynamic Frequency Selection
DLTRO	DHCP Lease Time Request Offload
DPP	Device Provisioning Protocol
eLNA	External Low-Noise Amplifier
ePA	External Power Amplifier
ER	Extended Range
FT	Fast Transition (802.11r)
GO	Group Owner
HE	High Efficiency
ICMP	Internal Control Message Protocol
iLPO	Internal Low Power Oscillator
MBO	Multi-band Operation
OCE	Optimized Connectivity Experience
OWE	Opportunistice Wireless Encryption
P2P	Peer-to-Peer
P2PGO	Peer-to-Peer Group Owner
PMF	Protected Management Frame
PSK	Pre-Shared Key
RU	Resource Unit
SCV	Server Certificate Validation
SU	Single User
TLS	Transport-Layer Security
VSDB	Virtual Simultaneous Dual-Band
WFA	Wi-Fi Alliance

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Email:

erratum@infineon.com

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