EVIA USB DVK Product Brief

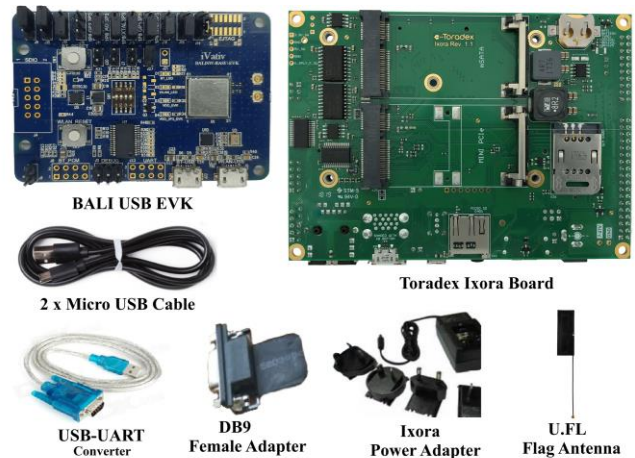## Wi-Fi 802.11ac (1x1) Module

Description

This development kit comes with everything needed for verification of EVIA USB module and application development using included host platform. EVIA is a high performance certified wireless module supporting dual-band 1-stream (1T1R) Wi-Fi 802.11a/b/g/n/ac this small form-factor module delivers high performance WiFi for superior user experience.

EVIA USB EVK board connects to host processor with USB 2.0. It comes with drivers for different operating systems for complete design flexibility and ease of integration.

EVIA USB Module Features

- Host interfaces : USB 2.0 for WiFi
- This module is available in **M.2** form-factor also
- WiFi technology - Low power dual-band (2.4 and 5 GHz), 1-stream MU-MIMO 802.11ac
- WLAN Security : WPA/WPA2 Personal, WPS 2.0, Enterprise security (STA only)
- WLAN Encryption : WEP, TKIP, AES
- Operating modes : STA, SoftAP, P2P Group Owner, P2P Client, STA + SoftAP, STA + P2P Group Owner, STA + P2P Client
- Module Power save : Deep sleep mode, protocol power save modes - Legacy, UAPSD and GreenTx
- Host Power save : WoW, FW Offloading
- WMM, DFS (Master, Client)
- Roaming : 11r/FT, Legacy fast roaming
- 802.11ai : FILS-SK in STA mode

EVIA USB DVK Kit Contents

BALI USB EVK

2 x Micro USB Cable

Toradex Ixora Board

USB-UART Converter

DB9 Female Adapter

Ixora Power Adapter

U.FL Flag Antenna

EVIA USB DVK Features

The EVIA USB Development Kit (DVK) is a platform that enables evaluation of hosted Wi-Fi, connectivity. It uses USB interface for Wi-Fi. The DVK includes procedure for Linux build and instructions set, scripts to test the following:

- Wi-Fi Functionality
- WiFi Security modes
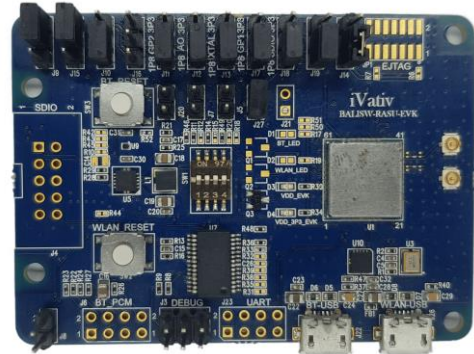- Throughputs
- Power Consumption

Applications

- Consumer electronics
- Smart appliances
- Applications where plug n play high-speed wireless connectivity is needed

6141 Running Springs Rd
San Jose, CA 95135
www.ivativ.com

June 4, 2024

Email: info@ivativ.com
Ph: (408) 893 7812

Page **1** of **2**

![iVativ - Enabling IoT Innovations]

EVIA USB Module Specifications

WLAN Technology	802.11a/b/g/n, 1-stream MU-MIMO 802.11ac
Frequency band	2.4GHz, 5GHz
On air data rates	**2.4 GHz** 11b - 1,2,5.5,11Mbps 11g - 6,9,12,18,24,36,48,54Mbps 11n - MCS0 to MCS7 or up-to 150Mbps **5 GHz** 11a - 6,9,12,18,24,36,48, 54Mbps 11n/ac - MCS0 to MCS9 or up-to 433Mbps
Security features	WPA/WPA2 -PSK TKIP/AES, WPS 2.0, Enterprise Security (EAP) STA only.
Modulation schemes	**2.4 GHz** 11b - BPSK,QPSK, CCK 11g - BPSK, QPSK, 16-QAM, 64-QAM 11n - PSK, QPSK, 16-QAM, 64-QAM **5 GHz** 11a/n/ac - BPSK,QPSK, 16-QAM, 64-QAM
Antenna options	Antenna pin
Supported Host OS	Linux Android Windows 10
Host interfaces	Wi-Fi – USB 2.0
Max throughput	300Mbps
Maximum Transmit Power	Wi-Fi 18dBm
Receive Sensitivity	Wi-Fi -97.5dBm
WLAN bandwidths	20/40/80MHz
Power supply	3.3v to 5.5v
Operating Temperature	-40^{0}C to 85^{0}C
Humidity	5-90%non-condensing
Package	11.75mm x 12mm x 1.6mm LGA
Certifications and approvals	Module certifications - FCC, IC, CE,TELEC

EVIA USB Evaluation Board

The development kit for EVIA USB comes with everything needed for verification of IEEE 802.11n/ac functionality on USB interface. The package contains the following contents:

- 1 x EVIA USB EVK
- 1 x U.FL Flag antenna
- 1 x Micro USB cables
- 4 x Legs to stand the USB EVK
- 1 x Toradex Ixora Board with power adaptor
- 1 x IDC-DB9 male adapter cable
- 1 x USB-serial converter
- Software Drivers for the following development boards
- Toradex Ixora or i.MX6 Sololite

EVIA USB DVK Part Ordering

I952HCR0-I0L-DVK   EVIA USB Industrial Temp, Antenna Pin DVK Kit

Additional information

For the latest collaterals, please visit http://www.ivativ.com

6141 Running Springs Rd
San Jose, CA 95135
www.ivativ.com

June 4, 2024

Email: info@ivativ.com
Ph: (408) 893 7812
Page **2** of **2**