EVIA SDIO DVK Product Brief

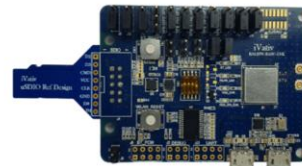## Wi-Fi 802.11ac (1x1)

Description

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

EVIA SDIO EVK board connects to host processor with SDIO (Wi-Fi) interface. It comes with drivers for different operating systems for complete design flexibility and ease of integration.

EVIA SDIO Module Features

- ❖ Host interfaces : SDIO 3.0 for
- ❖ 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
- ❖ Operating modes : STA, SoftAP, P2P Group Owner, P2P Client, STA + SoftAP, STA + P2P Group Owner, STA + P2P Client , Support for multiple BSSID (2 softAPs + STA)
- ❖ Module Power save : Deep sleep mode, protocol Power save modes - Legacy, UAPSD and GreenTx
- ❖ Host Power save : WoW, FW Offloading
- ❖ Enterprise security (STA only)
- ❖ WMM, DFS (Master, Client)
- ❖ Roaming : 11r/FT, Legacy fast roaming
- ❖ 802.11ai : FILS-SK in STA mode

EVIA SDIO DVK Kit Contents

BALI SDIO EVK

Toradex Ixora Board

1 x Micro-USB Cable

USB-UART Converter

DB9 Female Adapter

Ixora Power Adapter

U.FL Flag Antenna

EVIA SDIO DVK Features

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

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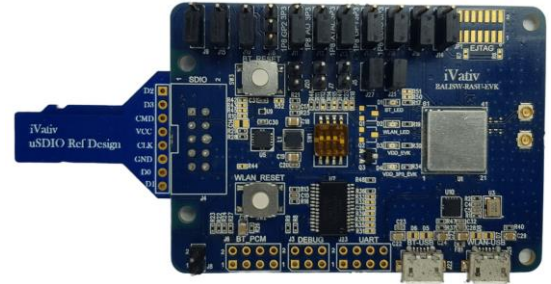- ❖ Throughputs
- ❖ Power Consumption

Applications

- ❖ Industrial IoT
- ❖ Security Cameras
- ❖ Automotive in-vehicle Infotainment
- ❖ PoS terminals
- ❖ Printers

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June 4, 2024

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EVIA SDIO 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 Hz** 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
Host interfaces	Wi-Fi – SDIO 3.0 / SDR104
Max throughput	310Mbps
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 & approvals	Module certifications - FCC, IC, CE, TELEC

EVIA SDIO Evaluation Board

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

- ❖ 1 x SDIO Micro SD EVK
- ❖ 4 x Legs for SDIO EVK
- ❖ 1 x U.FL Flag antenna
- ❖ 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 SDIO DVK Part Ordering

I950HCR0-I0L-DVK	EVIA SDIO Industrial Temp, Antenna Pin DVK Kit

Additional information

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

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