

# EVIA PCIe DVK Product Brief

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

### Description

This development kit comes with everything needed for verification of EVIA PCIe 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 Wi-Fi for superior user experience.

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

### EVIA PCIe Module Features

- ❖ Host interfaces : PCIe 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
- ❖ Enterprise security (STA only)
- ❖ 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 : Firmware Offloading
- ❖ WMM, DFS (Master, Client)
- ❖ Roaming : 11r/FT, Legacy fast roaming
- ❖ 802.11ai : FILS-SK in STA mode

### EVIA PCIe DVK Kit Contents



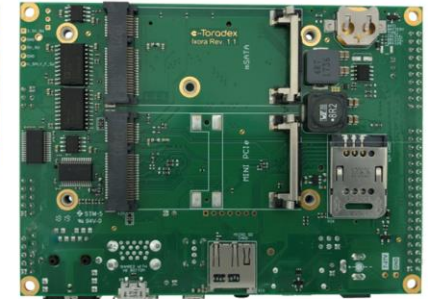
BALI PCIe CARD



U.FL Flag Antenna



USB-UART Converter



Toradex Ixora Board



DB9 Female Adapter



Ixora Power Adapter

### EVIA PCIe DVK Features

The EVIA PCIe Development Kit (DVK) is a platform that enables evaluation of hosted Wi-Fi. It uses PCIe 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

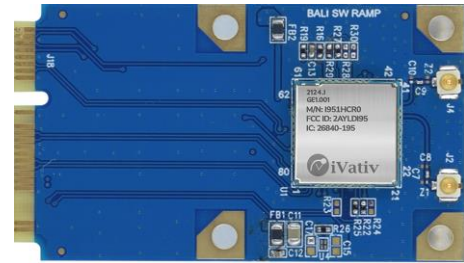
### Applications

- ❖ Consumer Electronics
- ❖ Industrial IoT

### EVIA PCIe Module Specifications

WLAN Technology	802.11a/b/g/n, 1-stream MU-MIMO 802.11ac
Frequency band	2.4GHz, 5GHz
On air data rates	<b>2.4 GHz</b> 11b - 1,2,5.5,11Mbps 11g - 6,9,12,18,24,36,48,54Mbps 11n - MCS0 to MCS7 or up-to 150Mbps <b>5 GHz</b> 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	<b>2.4GHz</b> 11b - BPSK,QPSK, CCK 11g - BPSK, QPSK, 16-QAM, 64-QAM 11n - PSK, QPSK, 16-QAM, 64-QAM <b>5 GHz</b> 11a/n/ac - BPSK,QPSK, 16-QAM, 64-QAM
Antenna options	Antenna pin
Supported Host OS	Linux Windows 10 Android
Host interfaces	WiFi - PCIe 2.1
Max throughput	330Mbps
Maximum Transmit Power	WiFi 18dBm
Receive Sensitivity	WiFi -97.5dBm
WLAN bandwidths	20/40/80MHz
Power supply	3.3v to 5.5v
Operating Temperature	-40 <sup>o</sup> C to 85 <sup>o</sup> C
Humidity	5-90% non-condensing
Package	11.75mm x 12mm x 1.6mm LGA
Certifications & approvals	Module certifications - FCC, IC, CE, TELEC

### EVIA PCIe Card



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

- ❖ 1 x Full Mini PCIe card
- ❖ 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
  - ❖ Toradex Ixora or i.MX6 Sololite

### EVIA PCIe DVK Part Ordering

I951HCRO-IOL-DVK	EVIA PCIe Industrial Temp, Antenna Pin DVK Kit
------------------	--

### Additional information

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