Intel® Dual Band Wireless-AC 7265
User manual

Introduction:

Intel® Dual Band Wireless-AC 7265 (code name Stone Peak 2 or StP2) shall be the VHT-5G Wi-Fi 2x2 and Bluetooth combination single chip solution. StP2 shall use Intel's 2nd generation 802.11ac Wi-Fi solution and shall support both 2.4 and 5.2 GHz bands. On the 5.2 GHz band it shall operate on an 80 MHz wide channel reaching PHY rates of up to 867 Mbps. StP2 shall use a Bluetooth core that shall support Bluetooth 4.0 standard including Bluetooth 4.0 Low Energy (BLE). StP2 shall have 2 antenna ports: one shall be Wi-Fi only and the second will be shared between Wi-Fi and Bluetooth. Wi-Fi shall support Rx antenna diversity.
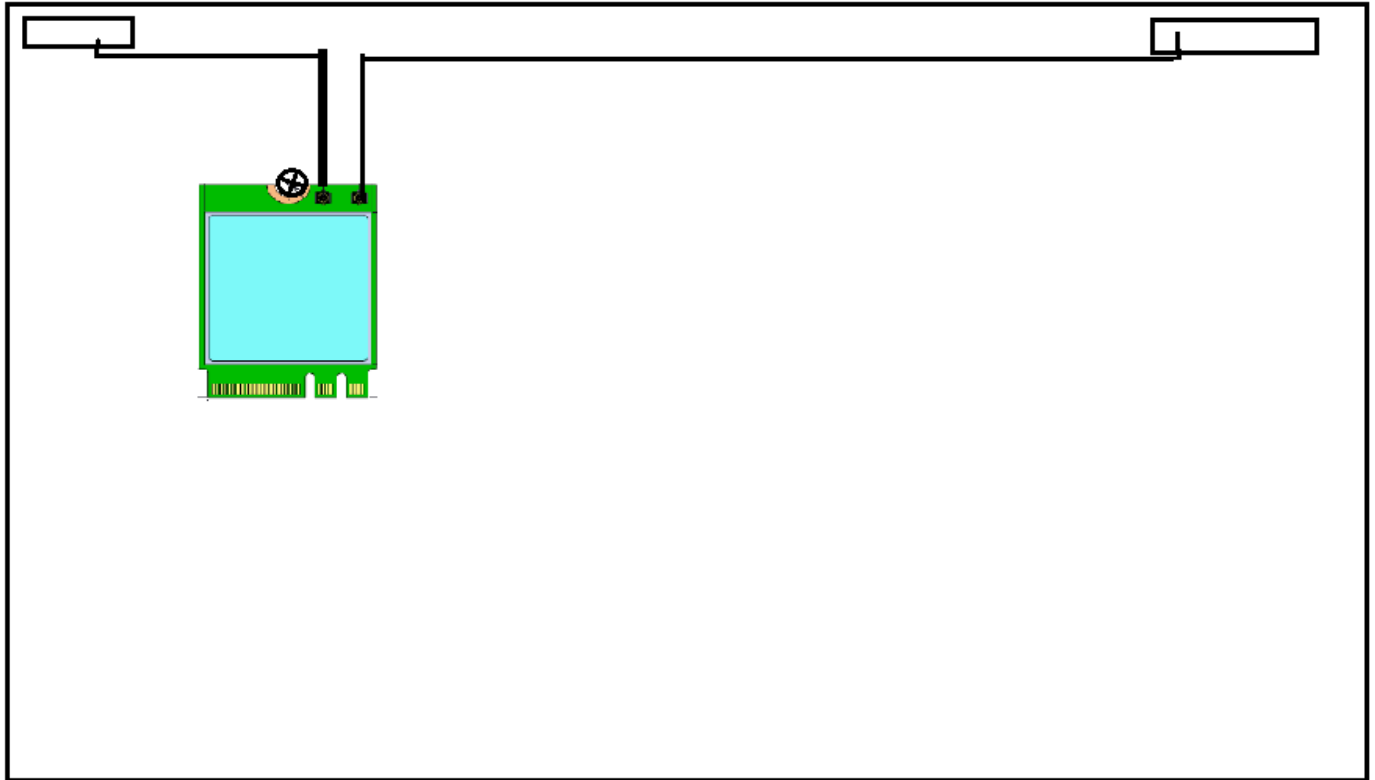
HW describe:

Form Factors	M.2 (Next Generation Form Factor - NGFF)	
Electrical interfaces	PCIe and USB 2.0	
Antenna Interface Connector	Hirose U.FL-R-SMT mates with cable connector U.FL-LP-066	
Antenna Diversity	On-board diversity	
IEEE 802.11 Networking Standards	802.11abgn, 802.11ac, 802.11d, 802.11e, 802.11i, 802.11h, 802.11w	
Operating Temperature	0 to +80 degrees Celsius	
Humidity	50% to 90% RH non-condensing (at temperatures of 25 °C to 35 °C)	
Frequency Modulation	**5GHz (802.11ac/n)**	**2.4GHz (802.11b/g/n)**
Frequency band	5.15GHz - 5.85GHz (dependent on country)	2.400 - 2.4835GHz (dependent on country)
Modulation	BPSK, QPSK, 16 QAM, 64 QAM, 256 QAM	CCK, DQPSK, DBPSK
Wireless Medium	5GHz UNII: Orthogonal Frequency Division Multiplexing (OFDM)	2.4GHz ISM: Orthogonal Frequency Division Multiplexing (OFDM)
Channels	All channels as defined by the relevant specification and country rules.	

Spatial streams	Intel® Dual Band Wireless-AC 7265: 2 X 2	
Data Rates	All data rates are theoretical maximums.	
IEEE 802.11ac Data Rates	Intel® Dual Band Wireless-AC 7265: Up to 867 Mbps	
IEEE 802.11n Data Rates	Tx/Rx (Mbps): 300, 270, 243, 240, 216.7, 195, 180, 173.3, 150, 144, 135, 130, 120, 117, 115.5, 90, 86.667, 72.2, 65, 60, 57.8, 45, 43.3, 30, 28.9, 21.7, 15, 14.4, 7.2	
IEEE 802.11a Data Rates	54, 48, 36, 24, 18, 12, 9, 6 Mbps	
IEEE 802.11g Data Rates	54, 48, 36, 24, 18, 12, 9, 6 Mbps	
IEEE 802.11b Data Rates	11, 5.5, 2, 1 Mbps	
Bluetooth	Dual Mode Bluetooth* 2.1, 2.1+EDR, 3.0, 3.0+HS, 4.0 (BLE)	
General		
Operating Systems	Windows* 7 (32-bit and 64-bit), Windows* 8 (32-bit and 64-bit), Windows* 8.1 (64-bit)	
Wi-Fi Alliance* certification	Wi-Fi CERTIFIED* for 802.11ac, a/b/g, n, WMM*, WPA*, WPA2*, and WPS, WPS 2.0, Protected Management Frames. Wi-Fi Direct* for peer-to-peer device connections.	
Architecture	Infrastructure and SoftAP; Supports simultaneous Client and SoftAP modes	
Cisco Compatible Extensions certification	Cisco Compatible Extensions, v4.0	
Security		
Authentication	WPA and WPA2, 802.1X (EAP-TLS, TTLS, PEAP, LEAP, EAP-FAST), EAP-SIM, EAP-AKA	
Authentication Protocols	PAP, CHAP, TLS, GTC, MS-CHAP*, MS-CHAPv2	

Encryption	64-bit and 128-bit WEP, AES-CCMP, TKIP	
Wi-Fi Direct* Encryption and Authentication	WPA2, AES-CCMP	
Product Safety	UL, C-UL, CB (IEC/EN 60950-1)	

Install WLAN card to the host platform by factory.

SW describe:

Portions of Intel® PROSet/Wireless WiFi Connection Utility include software under the following terms:

1. Setup the Intel® PROSet for installing driver to the host platform.
2. Use the administrator to installing driver.

Portions Licensed from Devicescape Software, Inc.

Intel® PROSet/Wireless WiFi Connection Utility contains software licensed from Devicescape Software, Inc. Copyright

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Antenna Placement Within the Host Platform

To ensure RF exposure compliance the antenna(s) used with the Intel® wireless adapters must be installed in

notebook or tablet PC host platforms to provide a minimum separation distance from all persons, in all operating

modes and orientations of the host platform, with strict adherence to the table below. The antenna separation

distance applies to both horizontal and vertical orientation of the antenna when installed in the host system.

Wireless Adapter	Minimum required antenna-to-user separation distance
Intel® Dual Band Wireless-AC 7265	8 mm
* This wireless adapter may be installed in mobile devices only (requires > 20 cm antenna separation from the body of user).	

Information To Be Supplied to the End User by the OEM or Integrator

The following regulatory and safety notices must be published in documentation supplied to the end user of the product or system incorporating the Intel® wireless adapter, in compliance with local regulations. Host system must be labeled with "Contains FCC ID: VUIVJZ12AD11L", FCC ID displayed on label.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.   These limits are designed to provide reasonable protection against harmful interference in a residential installation.   This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.   However, there is no guarantee that interference will not occur in a particular installation.   If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communication Commission (FCC) Radiation Exposure Statement

This EUT is compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

IMPORTANT NOTE:

This module is intended for OEM integrator.

The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification , Doc) of the host device to be addressed by the integrator/manufacturer.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: VUIVJZ12AD11L ".