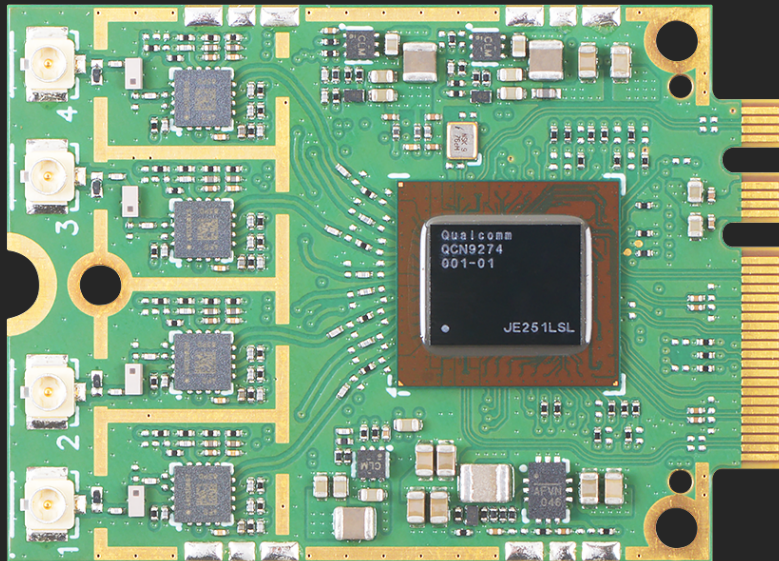




Discover the Noni, a state-of-the-art WiFi7 radio module in a compact M.2 A+E form factor. Powered by Qualcomm's QCN9274 chipsets, Noni operates on the IEEE 802.11be standard with speeds over 11 Gbps in 4x4 MIMO or split 2x2 + 2x2 configurations. It supports up to 320 MHz channel sizes and advanced 4K QAM modulation, enhancing efficiency and connection quality.

Noni features Multi-Link for simultaneous communication on different frequencies, improving reliability and signal strength. Its adaptive interference puncturing maintains performance in challenging environments. With dual-band capabilities in both 5GHz and 6GHz frequencies, Noni is versatile for present and future wireless needs. Embrace a new level of connectivity with Noni's WiFi7 features.

Features

- 4x4 320MHz 802.11be/ax/ac/n/a Wi-Fi 7 radio module/card;
- Wide-band: 5 GHz, 6 GHz full band support;
- PCI Express 3.0 dual-lane interface;
- Additional interfaces: GPIOs, JTAG;
- Noni module available as mini-PCIe, M.2 A+E, SOM;
- Dual-synthesizer WLAN radio up to 320MHz bandwidth support;
- Supports 20/40/80/160MHz in 5 GHz;
- Supports 20/40/80/160 or 320 MHz in 6-7.125 GHz;
- Supports up to 1024 QAM (4SS) and 4096 QAM(2SS);
- Data rates of up to 8647.2 Mbps in 802.11be/ax/ac/n/a channels 5GHz mode;
- Dynamic frequency selection (DFS) and Agile DFS; (dynamic switching between 4 and 3+1);
- Spectral Analysis (SA) and Agile Spectral Analysis (aSA); for all bands (dynamic switching between 4 and 3+1);
- PTA (3-wire) and MCI (2-wire) for advanced coexistence;
- 802.11e-compatible bursting;
- Supports monitor mode;
- Supports:
 - IEEE 802.11a/n/ac/ax/be,
 - IEEE 802.11d/e/h/i/j/k/r/u/v/w,
 - IEEE 802.11ba;
- AES-CCMP/GCMP at 128/256 bits;
- WEP, TKIP hardware encryption;
 - * WAPI 1.0 and WAPI 2.0 hardware encryption
- WPA/WPA2-Personal/WPA2-Enterprise and WPA3 Personal;
- FIPS ECB.

1. Specifications

Platform	
Chipset code	QCN9274
Interface Code	PCIe 3.0 dual lane
Linux Support	QSDK/ath12k (no upstream support)
Linux mainline kernel	From 6.1.x upwords
Windows Support	N/A
Wi-Fi	
Standard	IEEE 802.11a/n/ac/ax/be
Band	5150 -7125MHz
MIMO	4x4
Monitor Mode	yes
Receiver Sensitivity	-94...-92dB (4920-7125MHz)
Antenna Connector	U.FL
Power Supply	
Power Supply	3.3V
Power Consumption	9W
Temperature Range	-40°C to 85°C
Form factor	Mini PCIe / M.2 / SOM
Certifications	CE(RED)/ FCC/ IC**

* Certification is in progress

3. Module pin out and Pin description

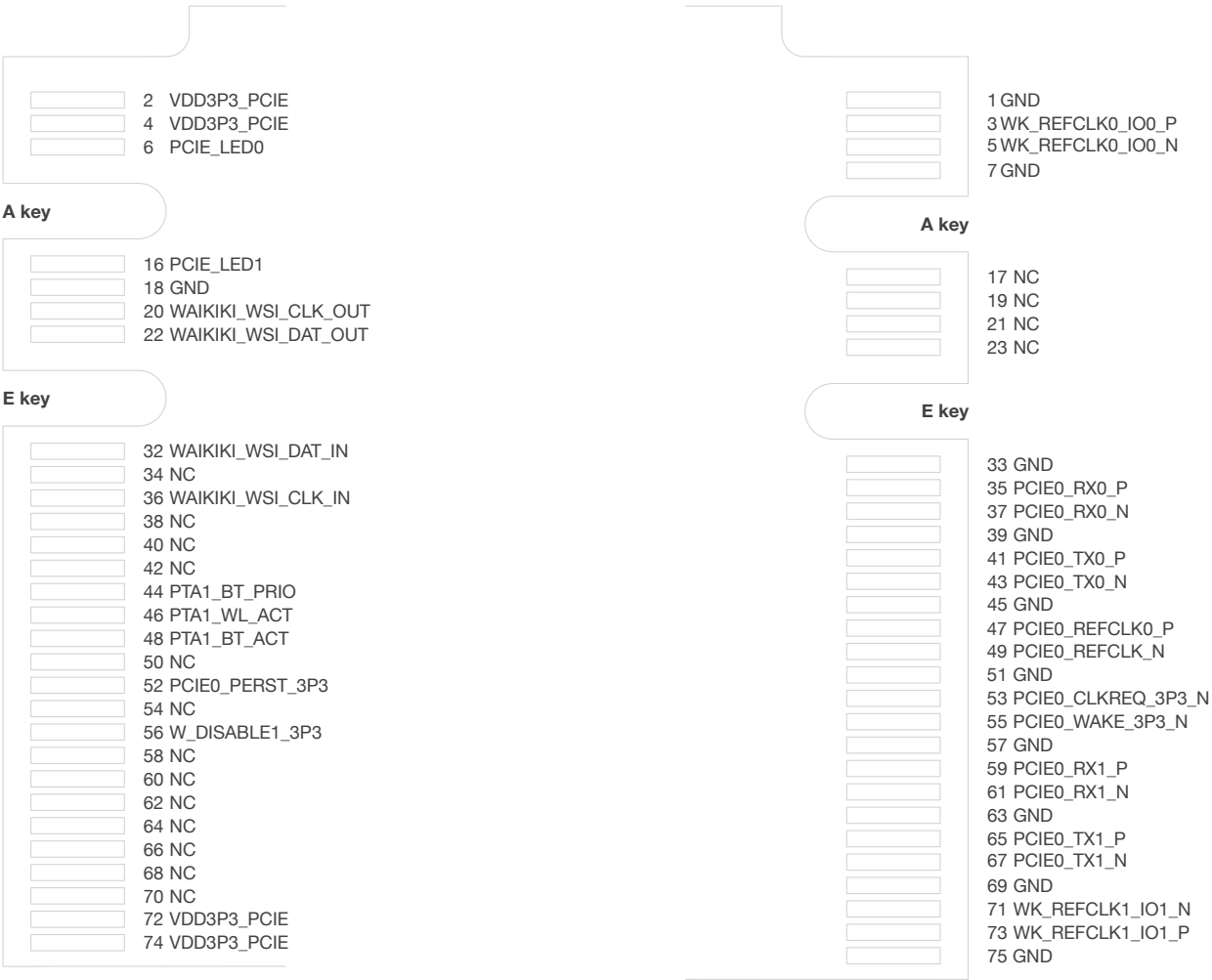


TABLE 3-1. I/O DESCRIPTION (PIN TYPE) PARAMETERS

Symbol	Description
GND	Ground
NC	Not connected
I	Digital input signal
O	Digital output signal
B	Digital bidirectional signal

TABLE 3-2. POWER, GROUND, NC

Pin ID	Pin name	Type	Description
2, 4, 72, 74	VDD3P3_PCIE	I	3.3V input voltage
1, 7, 18, 33, 39, 45, 51, 57, 63, 69, 75	GND	GND	Ground
17, 19, 21, 23, 34, 38, 40, 42, 50, 54, 58, 60, 62, 64, 66, 68, 70	NC	NC	NC

TABLE 3-3. PCIE GEN3

Pin ID	Pin name	Type	Description
53	PCIE0_CLKREQ_3P3_N	B	PCle clock request
52	PCIE0_PERST_3P3	I	PCle reset
55	PCIE0_WAKE_3P3_N	B	PCle wake
56	W_DISABLE1_3P3	I	Primary reset input to the chip driven by external circuitry on board
49	PCIE0_REFCLK_N	I	Reference clock
47	PCIE0_REFCLK_P	I	
43	PCIE0_TX0_N	O	First pair PCle receiver differential signal
41	PCIE0_TX0_P	O	
35	PCIE0_RX0_P	I	First pair PCle receiver differential signal
37	PCIE0_RX0_N	I	
67	PCIE0_TX1_N	O	Second pair PCle transmitter differential signal
65	PCIE0_TX1_P	O	
59	PCIE0_RX1_P	I	Second pair PCle receiver differential signal
61	PCIE0_RX1_N	I	

TABLE 3-4. INTERFACES

Pin ID	Pin name	Type	GPIO	Description
6	PCIE_LED0	O	GPIO_25 (BOOTSTRAP)	LED interface
16	PCIE_LED1	O	GPIO_26 (BOOTSTRAP)	LED interface
20	WAIKIKI_WSI_CLK_OUT	O	GPIO_49	MLO MASTER CLK Operating at 160MHz
22	WAIKIKI_WSI_DAT_OUT	B	GPIO_48	MLO MASTER DATA Operating at 160MHz
32	WAIKIKI_WSI_DAT_IN	B	GPIO_50	MLO SLAVE DATA Operating at 160MHz
36	WAIKIKI_WSI_CLK_IN	I	GPIO_51	MLO SLAVE CLK Operating at 160MHz
44	PTA1_BT_PRIO	I	GPIO_39	Wi-Fi
46	PTA1_WL_ACT	O	GPIO_40 (BOOTSTRAP)	Wi-Fi coexistence with WLAN_ACTIVE (PTA1)
48	PTA1_BT_ACT	I	GPIO_38	Wi-Fi coexistence

TABLE 3-5. CLOCK

Pin ID	Pin name	Type	Description
3	WK_REFCLK0_IO0_P	B	Differential signal pair, reference clock for sharing
5	WK_REFCLK0_IO0_N	B	
71	WK_REFCLK1_IO1_P	B	Differential signal pair, reference clock for sharing
73	WK_REFCLK1_IO1_N	B	

4. Electrical characteristics

TABLE 4-1. POWER SUPPLY DC CHARACTERISTICS

Symbol	Parameter	Minimum	Typical	Maximum	Units
+3V3	3.3 V Supply voltage	3	3.3	3.6	V
	3.3 V Supply current	0.4	1.6	2.1	A

TABLE 4-2. POWER CONSUMPTION

Scenario				Voltage, V	Current, A	Total power, W
TX	4x4	5GHz	MCS0	3.3V	2.01	6.6
		5GHz	MCS13	3.3V	1.75	5.7
RX	4x4	5GHz	-	3.3V	0.46	1.5
Max throughput + CPU load 99%	4x4	5GHz	MCS0	3.3V	2.03	6.7
		5GHz	MCS13	3.3V	1.75	6.4
TX	4x4	6GHz	MCS0	3.3V	2.09	6.6
		6GHz	MCS13	3.3V	1.76	5.8
RX	4x4	6GHz	-	3.3V	0.48	1.6
Max throughput + CPU load 99%	4x4	6GHz	MCS0	3.3V	2.09	6.9
		6GHz	MCS13	3.3V	1.96	6.4

TABLE 4-3. TEMPERATURE LIMIT RATINGS

Parameter	Minimum	Maximum	Units
Storage Temperature (Commercial)	0	+110	°C
Storage Temperature (Industrial)	-40	+110	°C
Commercial Operating Temperature	0	+65	°C
Industrial Operating Temperature	-40	+85	°C
Humidity	30	60	%RH
Storage humidity	15	70	%RH

5. Radio characteristics per chain

TABLE 5-1 5 GHz 802.11BE 20 MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	34.4	68.8	103.2	137.6	206.5	275.3	309.7	344.1	412.9	458.8	516.2	573.5	619.6	688.4
RX sensitivity (dB)	-90	-89	-87	-85	-83	-79	-78	-77	-72	-69	-66	-63	-59	-58

TABLE 5-2 5GHz 802.11BE 40MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	68.8	137.6	206.5	275.3	412.9	550.6	619.4	688.2	825.9	917.6	1032.4	1147.1	1240	1376
RX sensitivity (dB)	-88	-87	-85	-83	-82	-77	-75	-74	-70	-67	-64	-61	-57	-55

TABLE 5-3 5GHz 802.11BE 80MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	144.1	288.2	432.4	576.5	864.7	1152.9	1297.1	1441.2	1729.4	1921.6	2161.8	2402	2596	2884
RX sensitivity (dB)	-87	-86	-84	-82	-82	-74	-72	-71	-67	-64	-60	-58	-55	-52

TABLE 5-4 5GHz 802.11BE 160MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	288.2	576.5	864.7	1152.9	1729.4	2305.9	2594.1	2882.4	3458.8	3843.1	4323.5	4803.9	5188	5764
RX sensitivity (dB)	-87	-84	-82	-79	-78	-71	-70	-68	-63	-61	-57	-55	-52	-50

TABLE 5-6 6GHz 802.11BE 20MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	34.4	68.8	103.2	137.6	206.5	275.3	309.7	344.1	412.9	458.8	516.2	573.5	619.6	688.4
RX sensitivity (dB)	-90	-89	-87	-85	-83	-79	-78	-77	-72	-69	-66	-63	-59	-58

TABLE 5-7 6GHz 802.11BE 40MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	68.8	137.6	206.5	275.3	412.9	550.6	619.4	688.2	825.9	917.6	1032.4	1147.1	1240	1376
RX sensitivity (dB)	-88	-87	-85	-83	-82	-77	-75	-74	-70	-67	-64	-61	-57	-55

TABLE 5-8 6GHz 802.11BE 80MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	144.1	288.2	432.4	576.5	864.7	1152.9	1297.1	1441.2	1729.4	1921.6	2161.8	2402	2596	2884
RX sensitivity (dB)	-87	-86	-84	-82	-82	-74	-72	-71	-67	-64	-60	-58	-55	-52

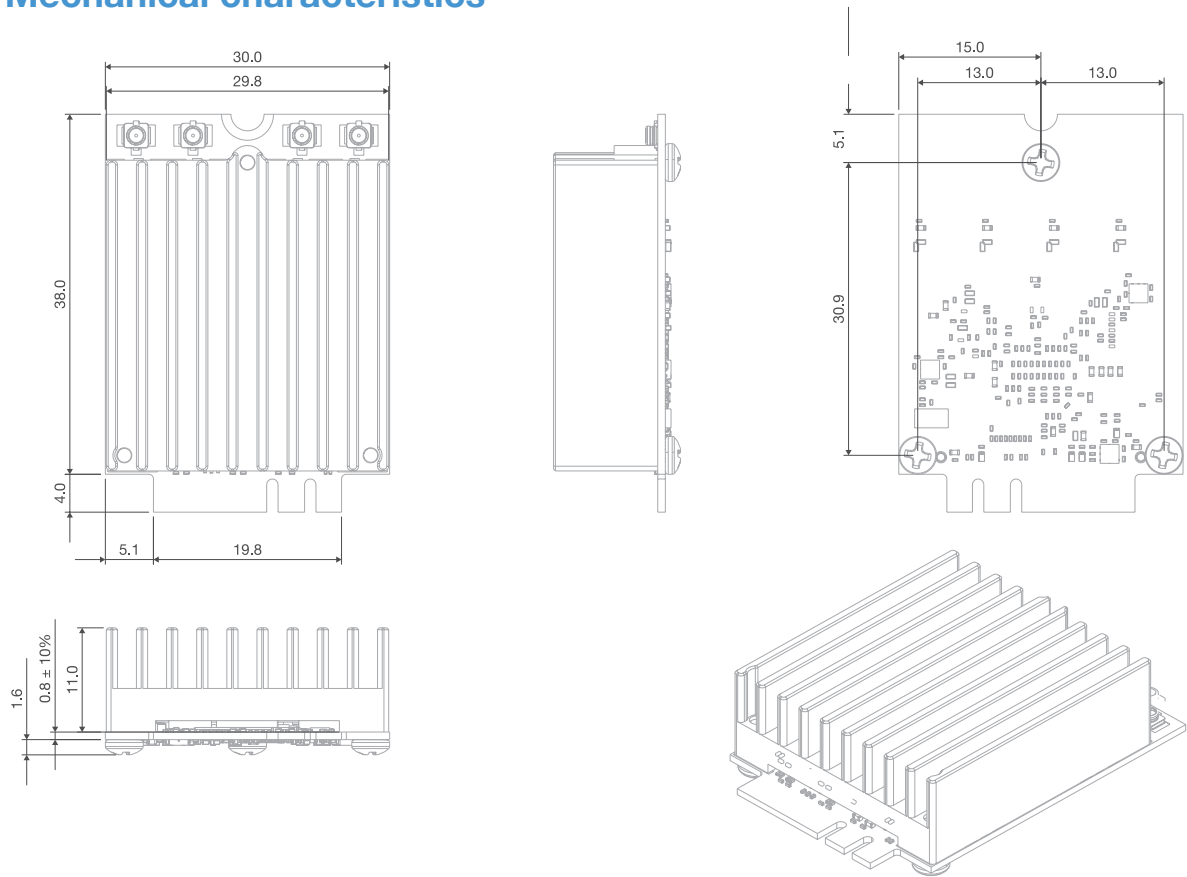
TABLE 5-9 6GHz 802.11BE 160MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	288.2	576.5	864.7	1152.9	1729.4	2305.9	2594.1	2882.4	3458.8	3843.1	4323.5	4803.9	5188	5764
RX sensitivity (dB)	-84	-81	-79	-76	-75	-68-	-67	-64	-60	-58	-54	-52	-51	-50

TABLE 5-10 6GHz 802.11BE 320MHz

	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13
Data rate (Mbps)	576	1152	1728	2308	3460	4612	5188	5764	6916	7968	8648	9608	10376	11528
RX sensitivity (dB)	-84	-81	-79	-76	-75	-68	-67	-64	-60	-58	-54	-52	-51	-50

6. Mechanical characteristics



7. Heatsink size recommendations

It is essential to use heatsink for the hardware designs based on Noni module. Heatsink should be able to dissipate at least 9W and the recommended area is 190cm². It should be directly attached to the top side of Noni module. Maximum ambient temperature with the given heatsink is +55 C.

8. Split mode

In addition to 4x4 MiMo, Noni can also run in split 2x2 mode, allowing it to operate both 5GHz and 6GHz frequencies.

Possible configurations:

2x2	2x2
5GHz	6GHz

NOTE: You will need Linux kernel to use the ath12k driver. Any Linux kernel older than v6.11 will most likely require extra patches and changes in the system.

ath12k is an open source implementation of the driver that supports 802.11be chipsets. This driver is still under development and it will take some time to mature. However, the open source community is actively working to recreate Qualcomm proprietary driver features like radio split mode in the ath12k driver. Note that features like these demand the latest linux kernel (v6.11+ or later) due to the MAC layer changes they rely on. This may limit the number of platforms that the ath12k driver can currently be deployed on, but this may become more broadly feasible in the future.

8.1. Wideband split mode

Noni can also run in wideband split 2x2 + 2x2 mode, allowing it to operate 5GHz and 6GHz frequencies simultaneously. Different split mode configurations can be changed at the firmware level and do not require any hardware changes.

Possible configurations:

Combo	2x2	2x2
1	5GHz	5GHz
2	5GHz	6GHz
3	6GHz	5GHz
4	6GHz	6GHz

NOTE: Radio combinations 2 and 3 are essentially the same.

Currently, wideband split mode can only run on 8devices Mango DVK or Kiwi DVK kits using Qualcomm proprietary wireless driver, which will require NDA signature and Qualcomm approval.

These products can be obtained on our website <https://www.8devices.com>

All inquiries regarding split mode premium are managed through our support page: <https://support.8devices.com/>

8.2. Comparison

- Noni56M2 -x is set to 4x4 configuration by default but can be switched to wideband split mode.
- Noni56M2-2x2 -x is set to 2x2 split mode and is not configurable.

	Noni56M2 -x		Noni56M2-2x2 +x
Radio configuration	4x4	2x2+2x2 Wideband split mode	2x2 split mode
Requires Qualcomm proprietary wireless drive	No	Yes*	No
Ath12k wireless driver support	Yes	No	Yes

* For more information refer to section 8.1.

9. Ordering information

TABLE 9-1. NONI RADIO CARD ORDER NUMBERS AND DESCRIPTIONS

Order Number	Description
Noni56M2	4x4* or 2x2+2x2** 5/6GHz M.2 3042 A+E key from factor Commercial QCN9274
Noni56M2-I	4x4* or 2x2+2x2** 5/6GHz M.2 3042 A+E key form factor Industrial QCN9274
Noni56M2-B	4x4 or 2x2+2x2* 5/6GHz M.2 3042 A+E key from factor Basic QCN6274
Noni56M2-2x2	2x2 5/6GHz M.2 3042 A+E key from factor Commercial QCN9274
Noni56M2-2x2-I	2x2 5/6GHz M.2 3042 A+E key form factor Industrial QCN9274
Noni56M2-2x2-B	2x2 5/6GHz M.2 3042 A+E key from factor Basic QCN6274

*Factory default configuration.

** Requires Qualcomm proprietary wireless driver.

10. Module Warning

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01r01

1.1 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART E has been investigated. It is applicable to the modular.

1.2 Specific operational use conditions

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

1.3 Limited module procedures

Not applicable

1.4 Trace antenna designs

Not applicable

1.5 RF exposure considerations

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm from your body.

1.6 Antennas

This radio transmitter FCC ID:Z9W-NON56 has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna	Antenna Type	Maximum Antenna Gain
Chain 0 & Chain 1 & Chain 2 & Chain 3 FPC 5G WiFi:3.5dBi	FPC	5G WiFi:3.5dBi
Chain 0 & Chain 1 & Chain 2 & Chain 3	FPC	WiFi 6E:3.8dBi

1.7 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains FCC ID: Z9W-NON56"

1.8 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

1.9 Additional testing, Part 15 Subpart B disclaimer

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B

This device is intended only for OEM integrators under the following condition:

The transmitter module may not be co-located with any other transmitter or antenna. As long as the condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:

Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne. Tant que les 1 condition ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the ISED cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate Canada authorization. Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission and spurious emission according to RSS-247, RSS-248 and RSS Gen requirement, only if the test result comply with RSS-247, RSS-248 and RSS-Gen requirement, then the host can be sold legally.

Note Importante:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considérée comme valide et l'ISED ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada. Toute entreprise de l'appareil hôte qui installe ce modulaire avec une approbation modulaire limitée doit effectuer le test d'émission rayonnée et d'émission parasite conformément aux exigences RSS-247, RSS-248 et RSS Gen, seulement si le résultat du test est conforme aux exigences RSS-247, RSS-248 et RSS-Gen, alors l'hôte peut être vendu légalement.

End Product Labeling

The final end product must be labeled in a visible area with the following: Contains IC:11468A-NON56.

Plaque signalétique du produit final

Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante: Contient des IC:11468A-NON56.

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.

10.1. ISED Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device. Cet appareil contient des émetteurs/récepteurs sans licence qui sont conformes aux RSS sans licence d'Innovation, Sciences et Développement économique Canada. L'exploitation est soumise aux deux conditions suivantes :

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences qui pourraient causer un fonctionnement indésirable de l'appareil.

ISED Radiation Exposure Statement:

This equipment complies with ISED RF radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet appareil est

conforme aux limites d'exposition de rayonnement RF ISED établies pour un environnement non contrôlé.

Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.

The device for operation in the band 5150–5350 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems

L'appareil destiné à fonctionner dans la bande 5150-5350 MHz est uniquement destiné à une utilisation à l'intérieur afin de réduire le risque d'interférence nuisible aux systèmes mobiles par satellite dans le même canal.

10.2. FCC Statement

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.

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

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 Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This radio transmitter [IC:11468A-NON56] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device. The antenna gain is 3.5dBi for 5G WiFi (5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz), the antenna gain is 3.8dBi for WiFi 6E (5925-6425MHz, 6425-6525MHz, 6525-6875MHz, 6875-7125MHz), Antenna type: FPC antenna.

Cet émetteur radio [IC:11468A-NON56] a été approuvé par innovation, science et développement économique Canada pour fonctionner avec les types d'antennes énumérés ci - dessous et pour afficher le gain maximal admissible. Le gain du type d'antenne non inclus dans cette liste est supérieur au gain maximal de l'un des types énumérés et ne doit pas être utilisé avec cet équipement. Le gain d'antenne est de 3.5dBi pour WiFi 5G (5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz), cet équipement. Le gain d'antenne est de 3.8dBi pour WiFi 6E (5925-6425MHz, 6425-6525MHz, 6525-6875MHz, 6875-7125MHz), Type d'antenne: FPC d'antenne.

Restriction Notes:

- a. Prohibited for control of or communications with unmanned aircraft systems.
- e. No direct internet connection permitted.
- g. limited to indoor use by low-power indoor access point association.
- i. Attestation Required.
- j. Under the control of an access point and is not capable of initiating a network.

The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.

Operation of transmitters in the 5925-7125MHz band is prohibited for control of or communications with unmanned aircraft systems.

11. Document Revision History

Revision	Revision Date	Description
v1.0	2023-11-28	Initial release
v1.1	2024-03-26	Radio characteristics updated
v1.2	2024-07-24	Heatsink size recommendations added
v1.3	2024-09-25	Ordering numbers updated
v1.4	2024-10-25	Split mode description updated
v1.5	2025-02-07	FCC & IC Statement added
v1.6	2025-05-28	New procut order number added
v1.7	2025-06-16	Module warning, FCC, IC information updated