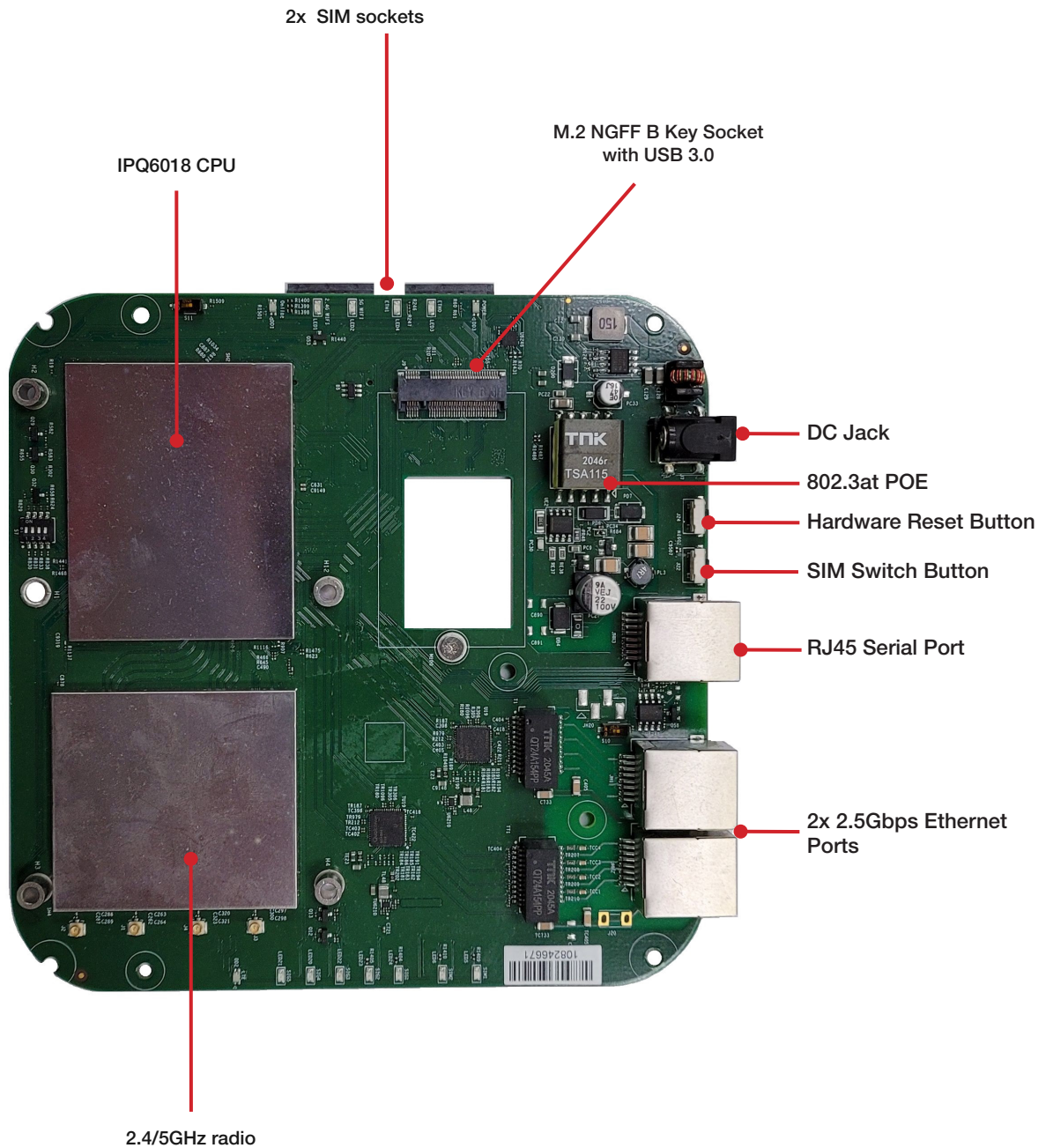


## Component Map



## Power Requirements

DC Power	1x DC 12V for Main Board
Power Consumption	17.5W (Max)

## Serial Interface Pin Assignment

Serial Interface	
Pin	Signal
1	DVDD_3V3
2	UART_TXD_CONN
3	UART_RXD_CONN
4	GND

## JTAG Interface Pin Assignment

JTAG Interface			
Pin	Signal	Pin	Signal
1	VDD_1V8	2	VDD_1V8
3	JTAG_TRSTN	4	NC
5	JTAG_TDI	6	GND
7	JTAG_TMS	8	GND
9	JTAG_TCK	10	GND
11	PULL_UP_1V8	12	GND
13	JTAG_TDO	14	GND
15	JTAG_SRSTN	16	GND
17	GND	18	GND
19	GND	20	GND

## SIM Slot Pin Assignment

SIM Slot	
Pin	Signal
1	VCC
2	RST
3	CLK
4	CD
5	GND
6	NC
7	I/O

## NGFF Slot 1 Pin Assignment

NGFF Slot with USB 3.0			
Top Side		Bottom Side	
1	NC	2	VDD_3V7
3	GND	4	VDD_3V7
5	GND	6	FULL_Card_off
7	USB0_DP	8	WAN_DISABLE
9	USB0_DM	10	NC
11	GND		
Mechanical Key B			
21	NC	20	NC
23	NC	22	NC
25	NC	24	NC
27	GND	26	NC
29	USB0_SS_RXN	28	NC
31	USB0_SS_RXP	30	SIM1_RST
33	GND	32	SIM1_CLK
35	USB0_SS_TXN	34	SIM1_I/O
37	USB0_SS_TXP	36	SIM1_VCC
39	GND	38	NC
41	NC	40	SIM2_CD
43	NC	42	SIM2_I/O
45	GND	44	SIM2_CLK
47	NC	46	SIM2_RST
49	NC	48	SIM2_VCC
51	GND	50	NC
53	NC	52	NC
55	NC	54	NC
57	GND	56	NC
59	NC	58	NC
61	NC	60	NC
63	NC	62	NC
65	NC	64	NC
67	NC	66	SIM1_CD
69	NC	68	NC
71	GND	70	VDD_3V7
73	GND	72	VDD_3V7
75	NC	74	VDD_3V7

## Ethernet Ports Pin Assignment

Ethernet LAN Port (RJ45 2.5Gbps)			
Pin	Signal	Pin	Signal
1	2.5G_CH0_P	2	2.5G_CH0_N
3	2.5G_CH1_P	4	2.5G_CH2_P
5	2.5G_CH2_N	6	2.5G_CH1_N
7	2.5G_CH3_P	8	2.5G_CH3_N

## Federal Communications Commission (FCC) 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 generate, 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 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.

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.

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.

### **RF exposure warning**

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

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

## ISED

### CAN ICES-003 (B)/NMB-003(B)

Canadian Compliance Statement This device complies with Industry Canada license-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage;
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter (IC: 1846A-WPQ618 / Model name: WPQ618) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 1846A-WPQ618 / Model name: WPQ618) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste ci-dessous et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna Type	Frequency Band (MHz)	TX Paths	Max Antenna Gain (dBi)	CDD Directional Gain (dBi)	
				For Power	For PSD
Omni Antenna	2412 ~ 2462	2	8.0	8.0	11.01
	5150 ~ 5850	2	5.0	5.0	8.01

#### Caution:

1. The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2. For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
3. For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate.

4. The high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.
5. DFS (Dynamic Frequency Selection) products that operate in the bands 5250-5350 MHz, 5470-5600MHz, and 5650-5725MHz.

**Mise en garde:**

1. Le dispositif destiné à être utilisé dans la bande de fréquences 5150–5250 MHz est destiné uniquement à une utilisation en intérieur afin de réduire le risque de brouillage préjudiciable causé par les systèmes mobiles à satellites dans le même canal;
2. Pour les dispositifs avec une ou plusieurs antennes détachables, le gain d'antenne maximal autorisé pour les dispositifs des bandes 5250-5350 MHz et 5470-5725 MHz doit être tel que l'équipement respecte encore les normes e.i.r.p. limite;
3. Pour les dispositifs avec une ou plusieurs antennes détachables, le gain d'antenne maximal autorisé pour les dispositifs de la bande 5725-5850 MHz doit être tel que l'équipement soit toujours conforme à la norme e.i.r.p. limites, le cas échéant.
4. Les radars à haute puissance sont attribués en tant qu'utilisateurs principaux (utilisateurs prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer des interférences et / ou des dommages aux dispositifs LE-LAN.
5. Produits DFS (Dynamic Frequency Selection) fonctionnant dans les bandes de fréquences 5250-533 MHz, 5470-5600 MHz et 5650-5725 MHz.

**IMPORTANT NOTE:**

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.