



正基科技股份有限公司

SPECIFICATION

PRODUCT NAME : AC5035M2

REVISION : 0.9

DATE : June 16th , 2026

Customer APPROVED	
Company	
Representative Signature	

PREPARED	REVIEW			APPROVED	DCC ISSUE
	PM	QA	ET		



正基科技股份有限公司



AC5035M2 Data Sheet

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Revision

Revision	Date	Description	Revised By
0.1	2024/06/26	Preliminary Release	Ike
0.2	2024/07/04	HW and SW review	Ike
0.3	2025/04/17	Add extend temperature	Nixon
0.4	2025/07/30	Add UP/DL speed	Nixon
0.5	2025/10/21	Add package info	Nixon
0.6	2025/11/05	Update GNSS part and remove LTE B11	Nixon
0.7	2025/12/16	Check memory	Nixon
0.8	2026/02/24	Modify M2 picture	Nixon
0.9	2026/06/16	Modify package part	Nixon

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1. Introduction

1.1 Overview

The AMPAK Technology® APM5035M2 module is a multipurpose 3GPP Release 17 Redcap module. It was envisioned to operate in conjunction with a host board that must provide power and control for its various applications. The module chipset is Qualcomm SDX35, which supports 4G and 5G technologies and was designed with an advanced 4 nm process for superior performance and power efficiency.

1.2 Block Diagram

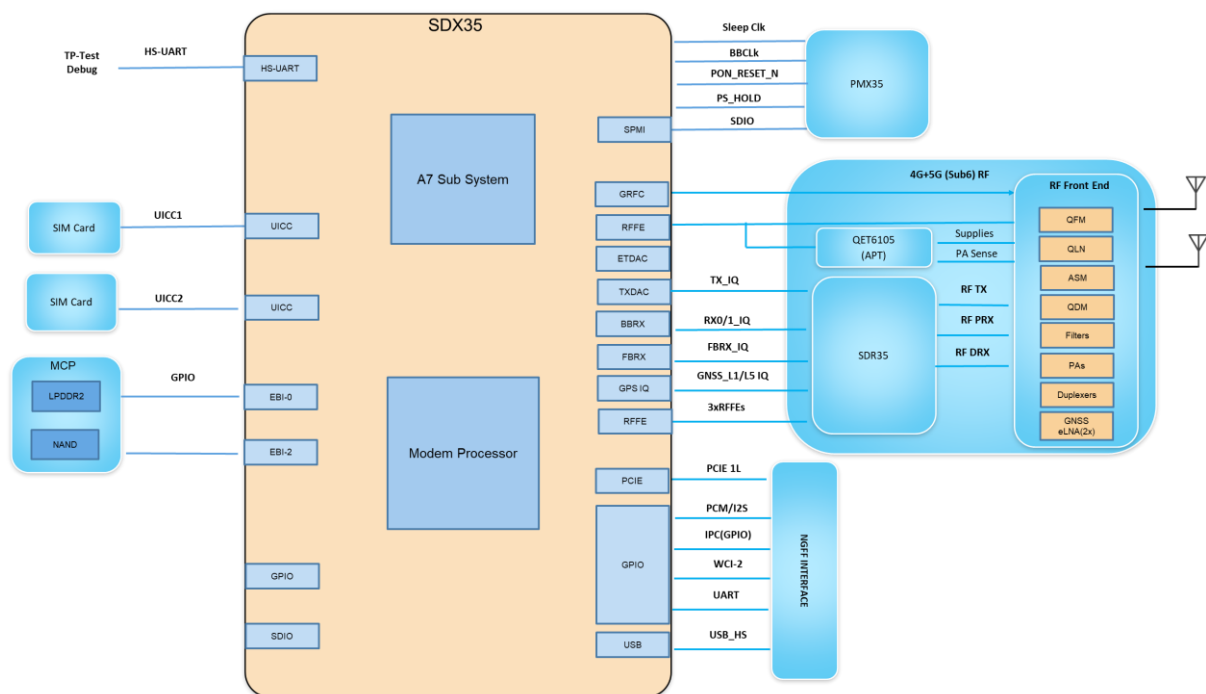


Figure 1-1 High-level block diagram

2. General Specification

2.1 Features

Table 2-1 Module features

Feature	AC5035M2 module
Processors	
Applications	Arm Cortex A7 processor at up to 1.7 GHz
Modem system	Qualcomm DSP Q6 always on subsystem
Always-on subsystem	Cortex-M3 up to 200 MHz
Memory and storage support	
Memory	2Gb LPDDR2 at 533MHz
Storage	4Gb NAND flash
Connectivity	
UIM	Two UIM interfaces
USB	One: HS USB 2.0
PCIe	One: GEN 2.0, 1 lane
Audio Interfaces	Primary and secondary I2C and PCM
RF support	
Standard compliance	3GPP Release 17 Red. Cap. 5G NR sub-6
Multimode support	3GPP LTE FDD and TDD 5G NR sub-6 GHz
Supported bands	See Table xxx
Antenna Ports	2x WWAN (include GNSS)
Technology frequency range	4G, 5G NR sub-6, 600 MHz to 5.0 GHz
Maximum bandwidth	20 MHz
SRS	1T/2R (TDD_LTE)
GNSS	GPS, GLONASS, Galileo, and BeiDou support GNSS path L1
Operation mode	Standalone mode (SA) (5G), No CA support (4G/5G)
MIMO support (4G/5G sub-6)	2 x 2 MIMO

Power tracking	APT
Module chips	
Modem	SDX35
Memory and Storage	JSFCBA3YH3BBG-425A MCP
eSIM(optional)	MFXS-M006b-MFOCMW
Transceiver	SDR125
RF front end	QPA6590, QFM6515, QPM6579, QDM5302
Envelop tracker	1x QET6105
PMIC primary	PMX35
38.4 MHz crystal	EXS00A-CS12755
Power supply	
Single rail	3.3 V from the host
Data Rate	
Speed	Uplink : 50-100 Mbps , Downlink: 180 -220 Mbps
Mechanical/thermal	
XY-dimension	30 mm x 42 mm
Z-dimension	1.67 mm per M.2 specification
PCB thickness	0.8 mm $\pm 10\%$ per M.2 specification
Mounting	Single sided (when debug is not included)
Shielding	Two-piece metal shield 1.35 mm in height
Functional temperature[°C]	-30 to +75
Extended temperature[°C]	-40 to +85
Performance	-20 to +60

2.2

Form factor

The AC5035M2 module is manufactured on a type 3042 standard add-in card with the following main characteristics:

- Dimensions: 30 mm x 42 mm
- Dimensions tolerances: ± 0.15 mm

- Socket family: socket 2
- Notch: key B
- Number of pins: 75
- Mounting: single-sided



Figure 2-1 AC5035M2 module form factor

2.3 Pin Definition

The AC5035M2 module is available in dual-sided 75-pin key-B type connector. The keying scheme and the pinout diagram are shown in the following figure. For more information on module-specific pin characteristics.

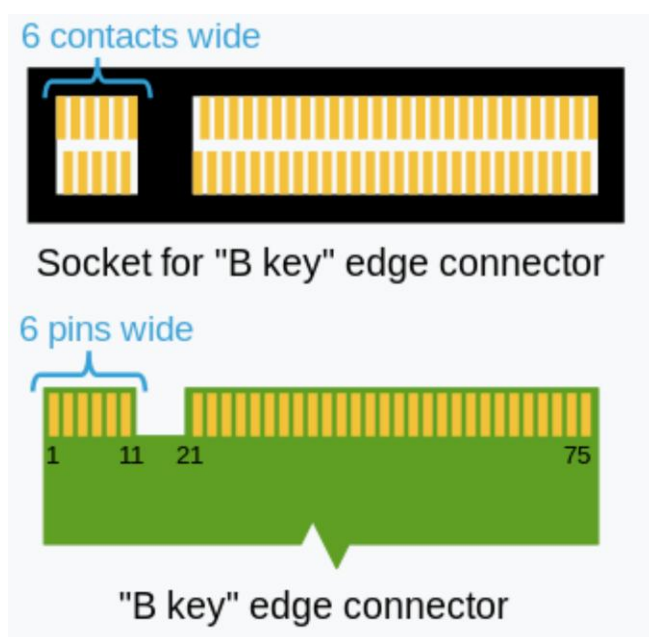


Figure 2-2 Dual-sided key-B PCIe connector pinout

2.4 I/O parameter definitions

Table 2-2 I/O parameter definitions

Pin attribute	Description
AI	Analog input
AO	Analog output
DI	Digital input
DO	Digital output
PI	Power input
PO	Power output
OD	Open drain
PU	Pull-up
PD	Pull-down

2.5 Pin Description

Table 2-3 Pin description

Pin no.	Pin name	Pin characteristic		Module specific functional description
		Voltage	Type	
1	CONFIG_3	0/NC	DO	Indicates the configuration of the Add-in card
2	3.3 V	3.3	PI	Power supply input
3	GND	0/1.8	DI	Defines the module communication interface Low: PCIe (default) High: USB
4	3.3 V	3.3	PI	Power supply input
5	GND	0	PI	Return path current
6	FULL_CARD_POWER_OF F#	0/1.8/3.3	DI/PD	A single control to turn off the module. Active Low
7	USB_D+	0/3.3	DI/DO	USB Data+ defined in the USB 2.0 Specification
8	W_DISABLE1#	0/1.8/3.3	DI/PU	Disable radio operation Active low
9	USB_D-	0/3.3	DI/DO	USB Data- defined in the USB 2.0 Specification
10	GPIO_9/LED_1#/IPC_	0/3.3	DO/OD	Indicate LED status

	7			Open drain and active low
11	GND	0	PI	Return path current
12	ADD-IN CARD KEY B	Notch location		
13	ADD-IN CARD KEY B	Notch location		
14	ADD-IN CARD KEY B	Notch location		
15	ADD-IN CARD KEY B	Notch location		
16	ADD-IN CARD KEY B	Notch location		
17	ADD-IN CARD KEY B	Notch location		
18	ADD-IN CARD KEY B	Notch location		
19	ADD-IN CARD KEY B	Notch location		
20	GPIO_5/AUDIO_0/RFU	0/1.8	DI/DO	Primary I2S serial clock
21	CONFIG_0	0/NC	DO	Indicate the configuration of the Add-in card
22	GPIO_6/AUDIO_1/RFU	0/1.8	DI	Primary I2S data0 signal or UART debug receiver (Rx)
23	GPIO_11-WoWWAN#	0/1.8	OD/DI	Wake the host by the WWAN device. Active low
24	GPIO_7/AUDIO_2/RFU / IPC_5	0/1.8	PO	1.8 V power supply for MIPI antenna tuner or Primary I2S data1 signal
			DO	
25	DPR	0/1.8	DI	BodySAR detection pin
				When high: Disable the SAR power back off
				When low: Enable the SAR power back off
26	GPIO_10/W_DISABLE 2#	0/1.8/3.3	DI/PU	Disable GPS operation. Active low
27	GND	0	PI	Return path current
28	GPIO_8/AUDIO_3/RFU / IPC_6	0/1.8	DI/DO	Primary I2S word select or UART debug transmitter (Tx)
29	NC			NOTE It is NC in the M.2 design
30	UIM-RESET	0/1.8/2.85	DO	UIM1 reset signal
31	NC			NOTE It is NC in the M.2 design

32	UIM-CLK	0/1.8/2.85	DO	UIM1 clock reference signal
33	GND	0	PI	Return path current
34	UIM-DATA	0/1.8/2.85	DI/DO/PU	UIM1 data signal
35	NC			NOTE It is NC in the M.2 design
36	UIM-PWR	0/1.8/2.85	PO	UIM1 power supply
37	NC			NOTE It is NC in the M.2 design
38	NC	0/1.8	DI	Wi-Fi co-existence with n79 GPIO control (WLAN to SDR)
39	GND	0	PI	Return path current
40	GPIO_0/GNSS_SCL/ SIM_DET2/IPC_0	0/1.8	DI/PU	An indication to the modem to detect SIM2 insertion/removal
41	PETn0	0/1.2	DO	PCIe data transmitter (Tx0) differential pair – negative
42	GPIO_1/GNSS_SDA/ UIM_DATA2/IPC_1	0/1.8/2.85	DI/DO	UIM2 data signal
43	PETp0	0/1.2	DO	PCIe data transmitter (Tx0) differential pair – positive
44	GPIO_2/GNSS_IRQ/ UIM_CLK2/IPC_2	0/1.8/2.85	DO	UIM2 clock reference signal
45	GND	0	PI	Return path current
46	GPIO_3/SYSCLK/ GNSS_0/UIM_RST2/ IPC_3	0/1.8/2.85	DO	UIM2 reset signal
47	PERn0	0/1.2	DI	PCIe data receiver (Rx0) differential pair – negative
48	GPIO_4/TX_BLANKING / GNSS_1/UIM_PWR2/ IPC_4	0/1.8/2.85	PO	UIM2 power supply
49	PERp0	0/1.2	DI	PCIe data receiver (Rx0) differential pair – positive
50	PERST#	0/3.3	DI	Functional reset to the module. Active low. Defined in the PCIe CEM Specification
51	GND	0	PI	Return path current

52	CLKREQ#	0/3.3	OD	Reference clock request signal. Active low. Defined in the PCIe CEM Specification
53	REFCLKn	0/0.7	DI/DO	PCIe reference clock- signal (100 MHz). Defined in the PCIe CEM Specification
54	PEWAKE#	0/3.3	OD	Request the system to return from a sleep/suspended state. Active low. Defined in the PCIe CEM specification
55	REFCLKp	0/0.7	DI/DO	PCIe reference clock+ signal (100 MHz). Defined in the PCIe CEM specification
56	NC(RFFE_DATA)	0/1.8	DO	MIPI data for external tunable antenna
57	GND	0	PI	Return path current
58	NC(RFFE_CLK)	0/1.8	DO	MIPI clock for external tunable antenna
59	NC			It is NC in the M.2 design
60	COEX3	0/1.8	DO	Wi-Fi co-existence with n79 GPIO control (WLAN to SDR) QPM6579 FBRX_OUT
61	NC			It is NC in the M.2 design
62	COEX_RXD	0/1.8	DI	For LTE/WLAN co-existence. LTE_FRAME_SYNC
63	NC			It is NC in the M.2 design
64	COEX_TXD	0/1.8	DO	For LTE/WLAN co-existence. LTE_ACTIVE
65	NC			It is NC in the M.2 design
66	SIMDETECT	0/1.8	DI/PU	An indication to the modem to detect SIM1 insertion/removal
67	RESET#	0/1.8	DI/PU	Reset the WWAN solution. Active low
68	SUSCLK(GNSS_0)	0/1.8	DO	NAV_GPIO_1_DR_SYNC
69	CONFIG_1	0/NC	DO	Indicate the configuration of the Add-in card
70	3.3 V	3.3	PI	Power supply input
71	GND	0	PI	Return path current

72	3.3 V	3.3	PI	Power supply input
73	GND(VIO_CFG)	0/NC	PI	Indicate an independent IO voltage domain for sideband signals
				VIO_CFG = NC for 1.8 V IO VIO_CFG = GND for 3.3 V IO
74	3.3 V	3.3	PI	Power supply input
75	CONFIG_2	0/NC	DO	Indicate the configuration of the Add-in card

3. Electronics Specification

3.1 Absolute maximums

No functionality is guaranteed outside the following operating specifications.

Table 3-1 Absolute maximum ratings

Symbol	Pin number	Parameter	Conditions	Min	Max	Unit
3.3 V	2, 4, 70, 72, 74	Supply voltage	–	3.135	3.465	V
		Ripple voltage	1 Hz to 100 kHz	–	100	mVpp
		Current consumption limit (max avg at 100 μ s)	–	–	2500	mA

NOTE Transmitter burst activity must also be accounted for in the 100 mVpp ripple limit

3.2 Logic signals

The 3.3 V and 1.8 V module logic levels specifications for single-ended digital signals are given in the following tables.

Table 3-2 DC specification for 3.3 V logic signaling

Symbol	Parameter	Condition	Min	Max	Unit
3.3V	Supply voltage	–	3.135	3.465	V
V_{IH}	Input high voltage	–	2.0	3.6	V
V_{IL}	Input low voltage	–	-0.5	0.8	V
I_{OL}	Output low current for open-drain signals	0.4 V	4	–	mA
I_{OH}	Output high current for open-drain signals	0.4 V	9	–	mA
I_{IN}	Input leakage current	0 V to 3.3 V	-10	+10	μ A
I_{LKG}	Output leakage current	0 V to 3.3 V	-50	+50	μ A

Table 3-3 DC specification for 1.8 V logic signaling

Symbol	Parameter	Condition	Min	Max	Unit
VDD18	Supply voltage	–	1.7	1.9	V
V_{IH}	Input high voltage	–	$0.7 * VDD18$	$VDD18 + 0.3$	V
V_{IL}	Input low voltage	–	-0.3	$0.3 * VDD18$	V
V_{OH}	Output high voltage	0.4 V	$VDD18 + 0.45$	–	V
V_{OL}	Output low voltage	0.4 V	–	0.45	V

I_{IN}	Input leakage current	0 V to VDD18	-10	+10	μA
I_{LKG}	Output leakage current	0 V to VDD18	-50	+50	μA

NOTE For more detailed information on PCIe electrical requirements, logic signaling specifications, and other electrical features, see *PCI Express M.2 Specification Revision 4.0, Version 1.0*.

4. Application interfaces

4.1 Peripheral components interface express (PCIe)

PCIe communication between the module and the host is supported either via one lane on Gen 4 or via two lanes on Gen 3. The interface is also backward compatible with the PCIe Gen 2.

Table 4-1 PCIe bus interface pins

Pin number	Pin name	Pin attribute	Functional description
53	REFCLKn	DI/DO	PCIe reference clock signal (100 MHz) differential pair – negative
55	REFCLKp	DI/DO	PCIe reference clock signal (100 MHz) differential pair – positive
54	PEWAKE#	OD	PCIe WAKE#. Open drain with pull-up on the module. Active low
52	CLKREQ#	OD	Reference clock request signal. Open Drain with pull up on module. Active low.
50	PERST#	DI	PCIe functional reset
49	PERp0	DI	PCIe data receiver (Tx0) differential pair – positive
47	PERn0	DI	PCIe data receiver (Tx0) differential pair – negative
43	PETp0	DO	PCIe data transmitter (Rx0) differential pair – positive
41	PETn0	DO	PCIe data transmitter (Rx0) differential pair – negative
37	PERp1 (NC in the design)	DI	PCIe data receiver (Tx1) differential pair – positive
35	PERn1 (NC in the design)	DI	PCIe data receiver (Tx1) differential pair – negative
31	PETp1 (NC in the design)	DO	PCIe data transmitter (Rx1) differential pair – positive
29	PETn1 (NC in the design)	DO	PCIe data transmitter (Rx1) differential pair – negative

NOTE The AC coupling capacitors required for the PCIe (Tx) signals are featured on the module while those required for PCIe (Rx) signals must be included in the host.

4.2 Universal serial bus (USB)

The legacy USB 2.0 is available in the module.

Table 4-2 USB interface pins

Pin no.	Pin name	Functional description
7	USB_D+	HS USB 2.0 data transmitter/receiver differential pair – positive
9	USB_D-	HS USB 2.0 data transmitter/receiver differential pair – negative

4.3 User identity module (UIM)

The UIM interface is compliant with ETSI and IMT-2020 standards and supports both Class B (3.0 V $\pm$ 10%) and Class C (1.8 V $\pm$ 10%) SIM cards. Two separate UIM interfaces are available in the module, namely UIM1 and UIM2, and they can both be used simultaneously. Either the user can have two external SIM cards or one external SIM and one internal (eSIM optional). When the internal eSIM is used, only the UIM1 interface will be available externally.

Table 4-3 UIM1 and UIM2 interface pins

Pin number	Pin name	Pin attribute	Functional description
30	UIM_RESET	DO	SIM Card 1 reset signal Active low
32	UIM_DATA	DI/DO/PU	SIM Card 1 bi-directional data signal
34	UIM_CLK	DO	SIM Card 1 reference clock signal
36	UIM_PWR	PO	SIM Card 1 power supply (provided by the module to the host)
66	SIMDETECT	PU	SIM Card 1 presence indication signal
46	GPIO_3/SYSCLK/GNSS_0/ UIM_RST2/IPC_3	DO	SIM Card 2 reset signal Active low
42	GPIO_1/GNSS_SDA/UIM_DATA2/ IPC_1	DI/DO/PU	SIM Card 2 bi-directional data signal
44	GPIO_2/GNSS_IRQ/UIM_CLK2/ IPC_2	DO	SIM Card 2 reference clock signal

48	GPIO_4/TX_BLANKING/GNSS_1/ UIM_PWR2/IPC_4	PO	SIM Card 2 power supply (provided by the module to the host)
40	GPIO_0/GNSS_SCL/SIM_DET2/ IPC_0	PU	SIM Card 2 presence indication signal
3, 5, 11, 27, 33, 39, 45, 51, 57, 71	GND		UIM1 and UIM2 reference ground common to module ground

5. Control pins and status indicators

The following table summarizes the control signals and the status indicators featured in the module.

Table 5-1 Control signals and status indicators

Pin number	Pin name	Pin attribute	Functional description
6	FULL_CARD_POWER_OFF#	DI/PD	Turns the module ON/OFF
8	W_DISABLE1#	DI/PU	Enables/disables the radio operation
26	GPIO_10/W_DISABLE2#	DI/PU	Enables/disables the GPS/GLONASS operation (option, default no)
10	GPIO_9/LED_1#/IPC_7	OD/DO	Indicates if the RFFE is ON or OFF
23	GPIO_11-WoWWAN#	OD/DO	Wakes up the host
25	DPR	DI/PU	Enables/disables SAR power back off
67	RESET#	PU	Resets the module

5.1 FULL_CARD_POWER_OFF#

The FULL_CARD_POWER_OFF# (FCPO#) is the module's hard reset, which is made available externally through pin 6. The input pin features an internal 100 k Ω pull-down resistor and can be driven either by 3.3 V or 1.8 V signals.

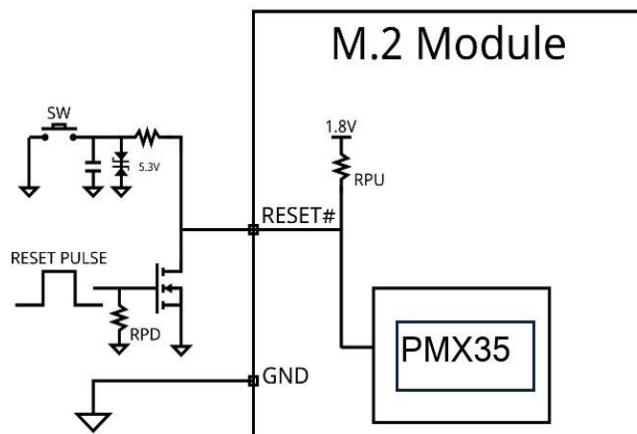


Figure 5-1 FULL_CARD_POWER_OFF circuit diagram

Table 5-2 FULL_CARD_POWER_OFF# status description

Logic level	Module status	Status description
Low (0 V)	OFF	SDX35 M.2 module is OFF
High (1.8 V/3.3 V)	ON	SDX35 M.2 module is ON

5.2 RESET#

The RESET# is a 1.8 V active low signal that when asserted takes the module immediately to the reset condition. The input pin features an internal 100 k Ω pull-up resistor to a 1.8 V internal supply. As shown in the following figure, the reset pulse signal can be either sent through an external GPIO or through a discrete push-button for manual use.

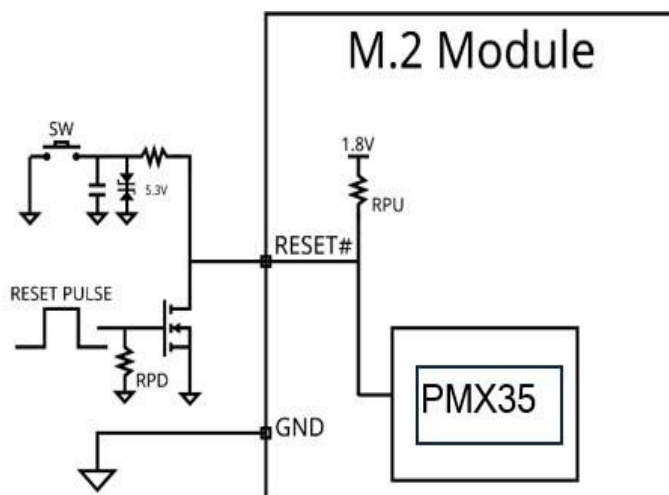


Figure 5-2 RESET# circuit diagram

Be aware that when the RESET# signal is triggered the modem is disconnected from the network, the system drivers are removed, and all data in the module is lost.

Table 5-3 RESET# status description

Logic level	Module status	Status description
Low (0 V)	Reset	The module enters in reset mode and only boots when the signal is high again
High (1.8 V)	ON	The module is ON

5.3 W_DISABLE# and W_DISABLE2#

W_DISABLE1# and W_DISABLE2# are two low-active input pins that are made available externally for enabling/disabling the radio and the GPS/GLONASS operation. Both pins feature an internal pull-up resistor that should be configured using software to either a 3.3 V or 1.8 V rail, depending on the host. Both voltage rails are supported by the PMX35 GPIO.

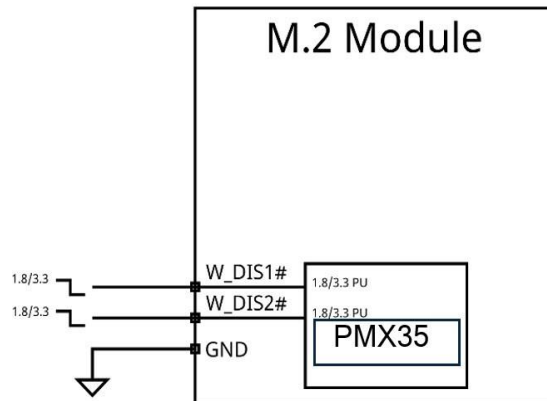


Figure 5-3 W_DISABLE1# and W_DISABLE2# circuit diagram

Table 5-4 W_DISABLE1# status description

Logic level	Module status	Status description
W_DISABLE1#		
Low (0 V)	Radio OFF	WWAN is disabled, no RF operation is allowed
High (1.8 V/3.3 V)	Radio ON	WWAN is enabled, RF operation allowed (requires internal pull-up via software)
W_DISABLE1#		
Low (0 V)	GPS/GLONASS ON	GPS/GLONASS is disabled, no RF operation is allowed
High (1.8 V/3.3 V)	GPS/GLONASS OFF	GPS/GLOBASS is enabled, RF operation is allowed (requires internal via using software)

5.4 LED_1#

The LED_1# output pin is internally connected to 10 mA sink current GPIO and must be used to drive an external LED, indicating the radio status of the module. As depicted in the following figure, a current-limiting resistor must be placed in series with the external LED to reduce the power consumption.

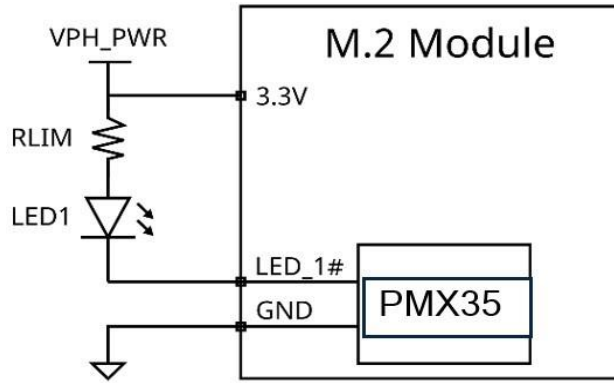


Figure 5-4 LED_1# reference circuit diagram

Table 5-5 LED_1# status description

Logic level	LED status	Status description
Low (0 V)	ON	Radio is not capable of transmitting and the LED is emitting light
High (3.3 V)	OFF	Radio can transmit and the LED is not emitting light

5.5 WoWWAN#

The WoWWAN# open-drain output pin is used to send a wake-up signal from the module to the host. This signal is a one-second-long low-level pulse and for this reason requires a pull-up resistor on the host board.

Table 5-6 WoWWAN# status description

Logic level	Host status	Status description
1 sec-long Low (0 V)	Wake-up	Data is incoming and the module wakes up the host
High (3.3 V)	Idle/sleep	The host is waiting for a wake-up signal from the module

5.6 DPR

The dynamic power reduction (DPR) input pin is used by wireless devices to meet regulatory specific absorption rate (SAR) requirements for RF exposure. The signal must be provided by the host sensor as a response to the proximity of the wireless device, triggering a power reduction in the module's radio transmission. The power reduction required varies depending on the application and must be ultimately determined by the OEM and card vendor. The maximum Tx power can be set by AT commands when the DPR pin is low.

Table 5-7 DPR status description

Logic level	Module status	Status description
Low (0 V)	SAR enabled	Radio is capable of transmitting
High (1.8 V)	SAR disabled	Radio is not capable of transmitting

6. Configuration pins

In addition to the control pins, the module provides four other pins to determine the specific configuration of M.2 add-in card and indicate whether the card is present or not. The following table shows the internal connections of module configuration pins. To understand the meaning of each of the 16 possible decodes, see *PCI Express M.2 Specification Rev 4.0*.

Table 6-1 CONFIG[3..0] pin configuration

CONFIG_0 (Pin# 21)	CONFIG_1 (Pin# 69)	CONFIG_2 (Pin# 75)	CONFIG_3 (Pin# 1)
Open	Ground	Ground	Open

The host must provide a pull-up resistor for each of these pins to either 1.8 V or 3.3 V .

7. RF support

The following figure presents the RF high-level block diagram of the module, including its transceiver, three antennas, low noise amplifiers (LNA), power amplifiers (PA), filters, envelop trackers, and all its main connections.

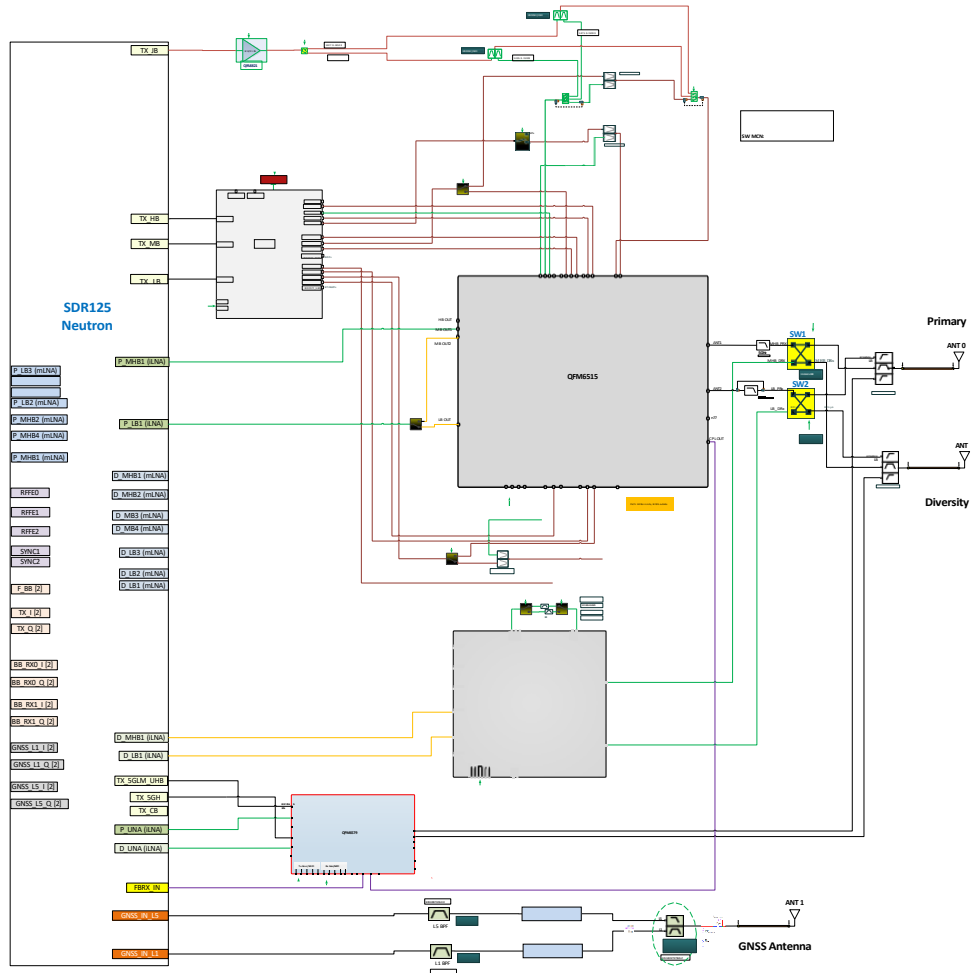


Figure 7-1 AC5035M2 module RF high-level block diagram

The frequency range of each antenna supported band group is listed in the following table according to their block diagram colors. For information on location of antennas, see [Mechanical information](#).

Table 7-1 Band group frequencies of antennas

Port	Band group	Frequency range (MHz)
ANT1	LB TRX0	617 – 960
	MHB TRX0	1695 – 2690
	N77/N78/N79 TRX0	3300 – 5000
ANT4	LBRX1	617 – 960
	MHBRX1	1695 – 2690



	N77/N78/N79 RX1/SRS TX	3300 – 5000
ANT2 (option, default no)	GNSS L1/L5	1164 – 1610

Table 7-2 Supported RF bands

Technology	Supported bands
LTE	TDD: 34, 38, 39, 40, 41, 42, 43, 48 FDD: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 21, 25, 26, 28, 30, 66, 70, 71
5G NR	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n30, n38, n40, n41, n48, n66, n70, n71, n77, n78, n79

8. Mechanical Information

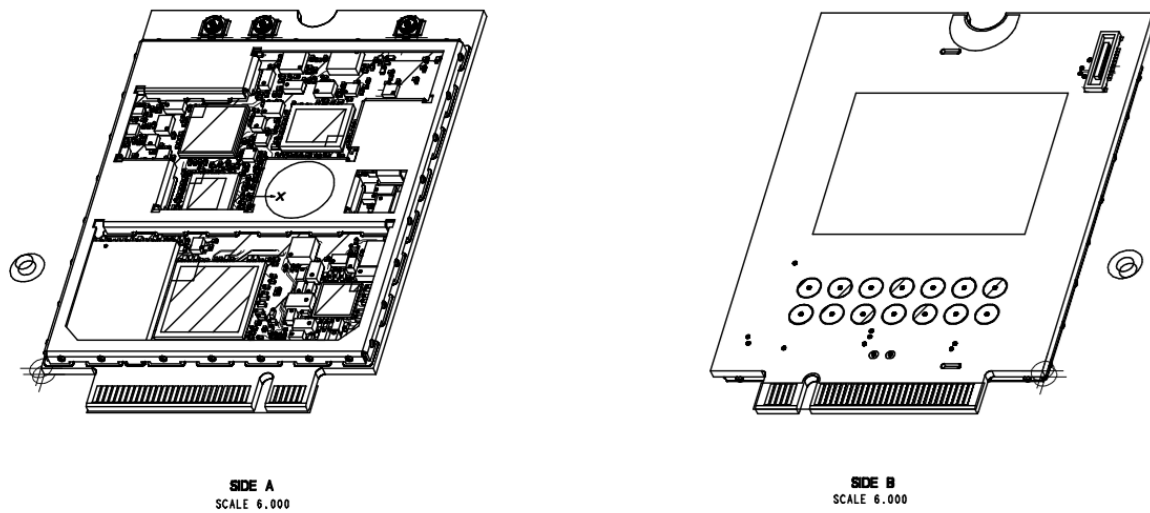


Figure 8-1 Module 3D overview

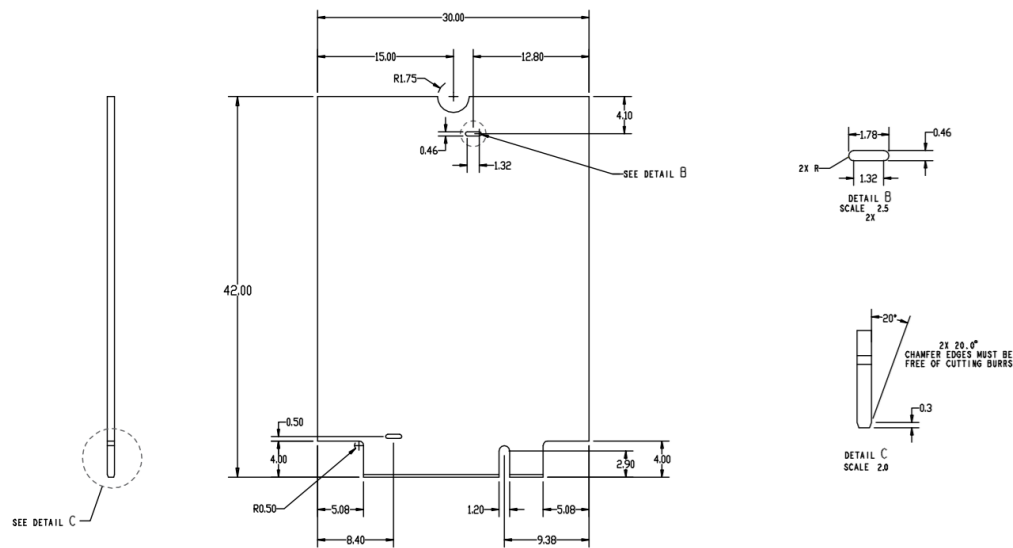


Figure 8-2 Physical Dimension

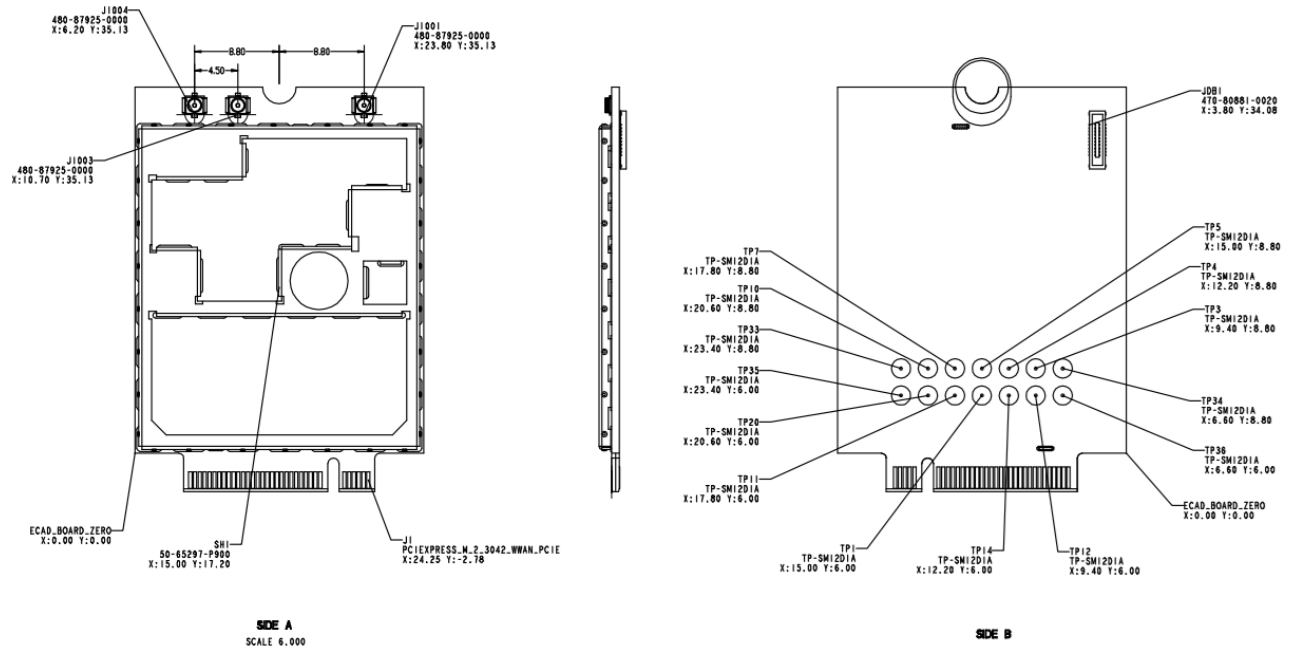


Figure 8-3 Module connectors locations

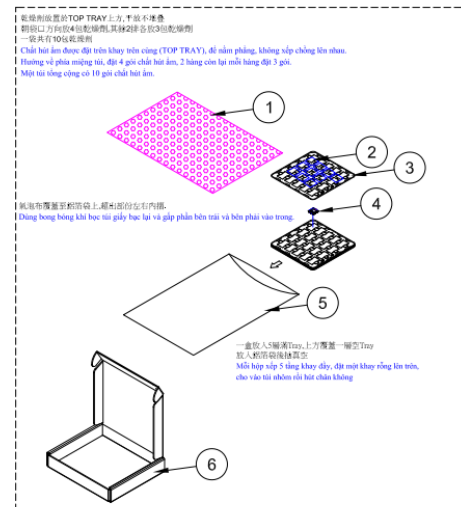
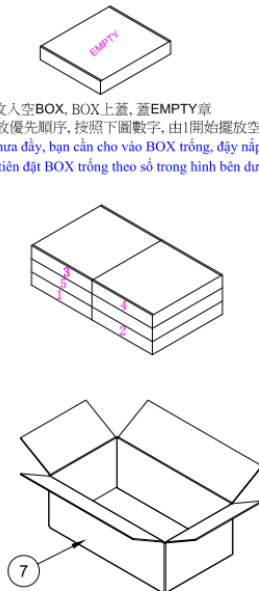
9. Package Information



NOTES:

1. Carton封箱時, 膠帶以H型封箱.
Khi niêm phong thùng Carton, dán băng keo niêm phong theo hình chữ H.
2. 各零件內容之檢驗, 請依各科號之材料承認書.
Các kiểm tra nội dung từng linh kiện, dựa theo giấy chứng nhận nguyên vật liệu từng mã liệu (P/N).

未滿箱需放入空BOX, BOX上蓋, 蓋EMPTY章
空BOX擺放優先順序, 按照下圖數字, 由1開始擺放空BOX
Nếu hộp chưa đầy, bạn cần cho vào BOX trống, đặt nắp lại và dán tem EMPTY.
Thứ tự ưu tiên đặt BOX trống theo số trong hình bên dưới, bắt đầu từ số 1 cho đến khi đặt BOX trống



No	TITLE	Q'TY	No	TITLE	Q'TY
1	Bubble Wrap	6/600	6	BOX	6/600
2	DESICCANT 3g	60/600	7	CARTON(OD:553*333*218mm)	1/600
3	AES TRAY PLATE	36/600			
4	WNRMDQ-100	1			
5	BAG-ESD ALUMINUM FOIL VACUUM	6/600			

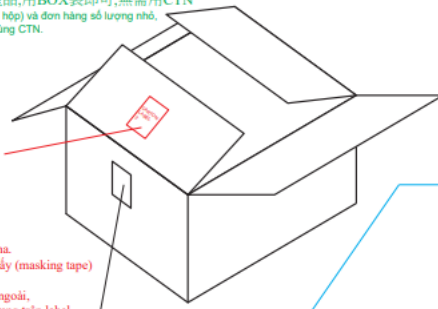
Figure 9-1 Module package overview



1依實際變更Điền theo nơi sản xuất thực tế
vvv: Taiwan or China or Vietnam

單批/併批:針對尾數(≤1盒)及小量出貨的產品,用BOX裝即可,無需用CTN
 Xuất lẻ/xuất gộp: Đối với sản phẩm có số lượng cuối (≤1 hộp) và đơn hàng số lượng nhỏ,
 chỉ cần dùng thùng BOX để đóng gói, không cần dùng thùng CTN.

*只有台灣出貨時需要
 CARTON LABEL 2打印內容 / QC蓋章 / 尾數章
 皆同 CARTON LABEL 僅將產地改為
 Made in Taiwan, China
 請連同底紙,用美紋膠帶浮貼於短邊上蓋。
 封箱後無法看到label不要貼到label文字
 (多張label時,由左至右,由上而下浮貼)
 *Chỉ áp dụng khi xuất hàng từ Đài Loan:
 Nội dung in trên CARTON LABEL 2 / Dấu QC /
 Dấu số lượng cuối là giống CARTON LABEL,
 chỉ thay đổi nơi sản xuất thành Made in Taiwan, China.
 Vui lòng giữ nguyên lớp giấy nền, dùng băng dính giấy (masking tape)
 dán nổi lên nắp trên của cạnh ngắn của thùng carton,
 sau khi đóng thùng label không thể nhìn thấy từ bên ngoài,
 khi dán băng dính không được che hoặc để lên nội dung trên label
 (nếu có nhiều label, dán theo thứ tự từ trái sang phải,
 từ trên xuống dưới)



單批 Lô đơn

Carton LABEL

Font tpe:Arial
 size 20pt

AMPAK Technology Inc.

(1T)Carton No.: CXYMMDDXXXXXX
 PO: NA
 (P)Model Name: XXXXXXXX (XXXX)
 (1P)P/N: 999-XXX-XXXXR
 51P P/N: 51P-XXX-XXXXR
 (LD)Lot D/C:
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQQ
 (Q)Quantity: QQQ
 Manufacture: YYYY/MM/DD
 Product size: 30x42mm
 MSL:NA
 Made in XXXXXX
 RoHS H/F

併批 Lô gộp

Carton LABEL

AMPAK Technology Inc.

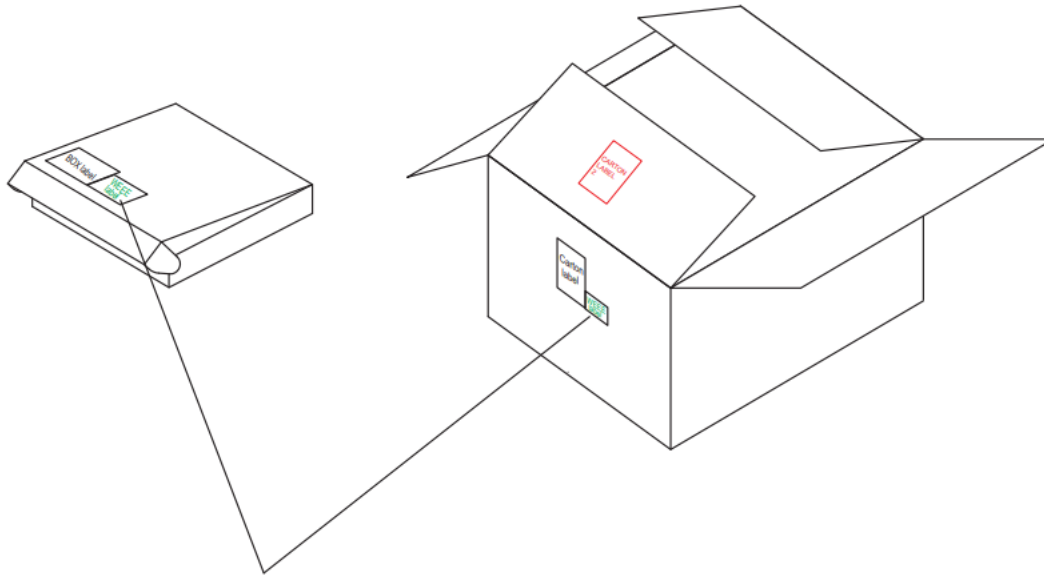
(1T)Carton No.: CXYMMDDXXXXXX
 PO: NA
 (P)Model Name: XXXXXXXX (XXXX)
 (1P)P/N: 999-XXX-XXXXR
 51P P/N: 51P-XXX-XXXXR
 (LD)Lot D/C:
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ01
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ02
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ03
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ04
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ05
 XPKGYMMDDnnnnn ABCCDEEE YYWW QQ06
 (Q)Quantity: QQQ
 Manufacture: YYYY/MM/DD
 Product size: 30x42mm
 MSL:NA
 Made in XXXXXX
 RoHS H/F

QR code設定: Cài đặt QR code
 模組(M): 2, 選單(K): 自動, 起始碼(S):
 Mã-mô (M): 2, Mask (K): Tự động
 Số-a (S): M - Phục hồi 15%
 QR code尺寸大於10mm*10mm
 Mã QR phải có kích thước lớn h
 kích thước sẽ tăng lên tùy thuộc
 nội dung nội dung gồm Carton No
 QQuantity(Manufacture)MSL-NA

(條碼)出內容參考如下・資料連
 (Xem nội dung quét mã vạch bẽ
 lô đơn
 CXYMMDDXXXXXXNA(P)XX
 1P99-XXX-XXXXR(51P-XXX-X
 LD)XPKGYMMDDnnnnn-ABCC
 QQQQ/YYYY/MM/DD(MSL-NA)

併批 Lô gộp
 CXYMMDDXXXXXXNA(P)XX
 1P99-XXX-XXXXR(51P-XXX-X
 LD)XPKGYMMDDnnnnn-ABCC
 XPKGYMMDDnnnnn-ABCCDE
 XPKGYMMDDnnnnn-ABCCDE
 XPKGYMMDDnnnnn-ABCCDE
 XPKGYMMDDnnnnn-ABCCDE
 QQQQ/YYYY/MM/DD(MSL-NA)

藍色尾
 若QTY
 請在標
 頭上標
 註數量



WEEE label



Warning

RF Exposure Information (SAR)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. This equipment should be installed and operated to ensure a minimum of **20 cm** spacing to any person at all times.

Cet appareil a été testé avec une distance de séparation de **20 cm**. Gardez toujours l'appareil éloigné de votre corps pour vous assurer que les niveaux d'exposition restent égaux ou inférieurs aux niveaux testés.

Informations relatives à la sécurité des personnes utilisatrices ou non

Respect des restrictions d'usage spécifiques à certains lieux (hôpitaux, avions, stations-service, établissements scolaires...).

Pour les téléphones mobiles, rappel de l'interdiction de l'usage d'un téléphone tenu en main par le conducteur d'un véhicule en circulation.

Précautions à prendre par les porteurs d'implants électroniques (stimulateurs cardiaques, pompes à insuline, neurostimulateurs...) concernant notamment la distance entre l'équipement radioélectrique et l'implant (15 centimètres dans le cas des sources d'exposition les plus fortes comme les téléphones mobiles).

Informations sur les comportements à adopter pour réduire l'exposition aux rayonnements émis par les équipements radioélectriques

Utiliser l'équipement radioélectrique dans de bonnes conditions de réception pour diminuer la quantité de rayonnements reçus.

Utiliser un kit mains-libres ou un haut-parleur, si adapté à l'équipement radioélectrique.

Faire un usage raisonné des équipements radioélectriques comme le téléphone mobile, par les enfants et les adolescents, par exemple en évitant les communications nocturnes et en limitant la fréquence et la durée des appels.

Eloigner les équipements radioélectriques du ventre des femmes enceintes.

Eloigner les équipements radioélectriques du bas-ventre des adolescents.

Hereby, **AMPAK Technology Inc.** declares that the radio equipment type **AC5035M2** is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

www.address.com/EU DoC.pdf



Waste Electrical and Electronic Equipment (WEEE)

This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

Maximum RF Output power (Unit: dBm)

Mode	Band Number	Maximum Average Power (dBm)
LTE	LTE Band 1	25.00
	LTE Band 3	25.00
	LTE Band 7	24.00
	LTE Band 8	25.00
	LTE Band 20	25.00
	LTE Band 28	24.60
	LTE Band 34	24.50
	LTE Band 38	25.00
	LTE Band 40	25.00
	LTE Band 41_PC3	25.00
	LTE Band 41_PC2	27.00
	LTE Band 42_PC3	25.10
	LTE Band 42_PC2	27.10
	LTE Band 43	24.50

FR1	5G NR n1	25.00
	5G NR n3	25.00
	5G NR n7	24.00
	5G NR n8	25.00
	5G NR n20	25.00
	5G NR n28	24.50
	5G NR n38	25.00
	5G NR n40	25.00
	5G NR n41_PC3	25.20
	5G NR n41_PC2	27.20
	5G NR n77_PC3	25.50
	5G NR n77_PC2	27.50
	5G NR n78_PC3	25.50
	5G NR n78_PC2	27.50

Mode	Band Number	Maximum Average Power (dBm)
RedCap FR1	n1	25.00
	n7	24.00
	n8	25.00
	n28	24.50
	n41_PC3	25.20
	n78_PC3	25.50

減少電磁波影響，請妥適使用

電波功率密度 MPE 標準值為：1 mW/cm²，送測產品實測值為：0.188248 mW/cm²，建議使用時設備天線至少距離人體 20 公分。