

2I740AW

Intel® ATOM® Amston Lake x7000 series CPU,

Onboard LPDDR5 / eMMC,

1 x LAN / HDMI® / USB / COM

All-In-One

Intel® ATOM® Amston Lake x7000 series CPU,

Onboard LPDDR5 8 / 16 / 32 GB,

HDMI®, USB 3.2 Type C DP ALT

eMMC 5.1 32~256 GB (OEM Option)

2 x M.2, 1 x Nano SIM,

1 x 2.5 GbE, 5 x USB, 4 x COM,

Wide Range DC-IN 9~24V

CAUTION

**RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.**

**DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS**

NO. 2I740AW

Release date: AUG. 20. 2026

Contents

2I740AW

Warning!	1
Hardware Notice Guide	2
CHAPTER 1 GENERAL INFORMATION	4
1-1 MAJOR FEATURE	5
1-2 SPECIFICATION	6
1-3 DIRECTIONS FOR INSTALLING THE M.2 B KEY 2242/3042 PCIe x2-NVME USB 2.0...	7
1-4 DIRECTIONS FOR INSTALLING THE M.2 B KEY 2242/3042/3052 SATA-SSD/PCIe 1x(OEM) USB 2.0/3.2	8
CHAPTER 2 HARDWARE INSTALLATION	9
2-1 DIMENSION-2I740AW	9
2-2 LAYOUT-2I740AW-CONNECTOR AND JUMPER TOP	10
2-3 LAYOUT-2I740AW-FUNCTION MAP TOP	11
2-4 DIAGRAM-2I740AW TOP	12
2-5 FUNCTION MAP-2I740AW	13
2-6 LIST OF JUMPERS	14
2-7 JUMPER SETTING DESCRIPTION	14
2-8 JSB1: CMOS DATA CLEAR	15
2-9 JAT1: AUTO POWER ON FUNCTION	16
CHAPTER 3 CONNECTION	17
3-1 LIST OF CONNECTORS	17
3-2 CMOS BATTERY CONNECTOR	18
3-3 USB INTERFACE	19
3-4 CUL1: LAN PORT 1 RJ45 + USB 3.2 YPE A x 2 CONNECTOR	21
3-5 COM INTERFACE	22
3-6 SMBUS INTERFACE	23
3-7 CI2C1: I2C 1x4 PIN (1.25mm) WAFER	23
3-8 CPI1: DC POWER INPUT 2x4 PIN (2.0mm) WAFER (RED)	24
3-9 CPO1: +12V/+5V DC VOLTAGE OUTPUT 1x4 PIN (2.0mm) WAFER (BLACK)	24
3-10 SIM1: NANO SIM CARD PUSH-PUSH	25
3-11 SW1: POWER BUTTON	25
3-12 NGFF1: PCI EXPRESS M.2 B KEY 2242/3042 H=8.5 SOCKETS 75PIN	26
3-13 NGFF2: PCI EXPRESS M.2 B KEY 2242/3042/3052 H=8.5 SOCKETS 75PIN	28
3-14 DISPLAY INTERFACE	30
3-15 SATA1: SATA PORT 1x7 PIN CONNECTOR (OEM)	31
CHAPTER 4 INTRODUCTION OF BIOS	32
4-1 ENTER SETUP	32
4-2 BIOS MENU SCREEN & FUNCTION KEYS	33
4-3 GETTING HELP	34

4-4 MENU BARS 34

4-5 MAIN 35

4-6 ADVANCED 36

4-6-1 SOC CONFIG CONFIGURATION 37

4-6-1-1 ACPI SETTINGS 38

4-6-1-2 CPU POWER LIMIT CONFIGURATION 40

4-6-1-3 SYSTEM AGENT (SA) CONFIGURATION 42

4-6-1-4 PCH-IO CONFIGURATION 46

4-6-1-4-1 PCI EXPRESS CONFIGURATION 48

4-6-1-4-2 SATA CONFIGURATION 51

4-6-1-5 PCH-FW CONFIGURATION 53

4-6-2 BOOT CONFIGURATION 55

4-6-3 ADVANCED PLATFORM CONFIGURATION 57

4-6-4 SIO F81966 63

4-6-4-1 UART PORT 1 CONFIGURATION 64

4-6-4-2 UART PORT 2 CONFIGURATION 68

4-6-4-3 UART PORT 3 CONFIGURATION 72

4-6-4-4 UART PORT 4 CONFIGURATION 76

4-6-4-5 HARWARE MONITOR 80

4-6-4-6 RESTORE ON POWER LOSS 81

4-7 SECURITY 82

4-8 POWER 86

4-9 BOOT 88

4-10 SAVE & EXIT 89

4-11 HOW TO UPDATE INSYDE BIOS 90

APPENDIX B: RESOLUTION LIST 91

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Warning !

1. **Battery**

Batteries on board are consumables.

The life time of them are not guaranteed.

2. **Fanless solution with HDD**

The specification & limitation of HDD should be considered carefully when the fanless solution is implemented.

3. We will not give further notification in case of changes of product information and manual.
4. SATA interface does not support Hot SWAP function.
5. There might be a 20% inaccuracy of WDT at room temperature.
6. Please make sure the voltage specification meets the requirement of equipment before plugging in.
7. There are two types of SSD, commercial grade and industrial grade, which provide different read/write speed performance, operation temperature and life cycle. Please contact sales for further information before making orders.
8. Caution! Please notice that the heat dissipation problem could cause the MB system unstable. Please deal with heat dissipation properly when buying single MB set.
9. Please avoid approaching the heat sink area to prevent users from being scalded with fanless products.
10. If users repair, modify or destroy any component of product unauthorizedly, We will not take responsibility or provide warranty anymore.
11. DO NOT apply any other material which may reduce cooling performance onto the thermal pad.
12. It is important to install a system fan toward the CPU to decrease the possibility of overheating / system hanging up issues, or customer is suggested to have a fine cooling system to dissipate heat from CPU.

* Hardware Notice Guide

1. Before linking power supply with the motherboard, please attach DC-in adapter to the motherboard first. Then plug the adapter power to AC outlet.
Always shut down the computer normally before you move the system unit or remove the power supply from the motherboard. Please unplug the DC-in adapter first and then unplug the adapter from the AC outlet.
Please refer photo 1 as standard procedures.
2. In case of using DIRECT DC-in (without adapter), please check the allowed range for voltage & current of cables. And make sure you have the safety protection for outer issues such as short / broken circuit, overvoltage, surge, lightning strike.
3. In case of using DC-out to an external device, please make sure its voltage and current comply with the motherboard specification.
4. The total power consumption is determined by various conditions (CPU / motherboard type, device, application, etc.). Be cautious to the power cable you use for the system, one with UL standard will be highly recommended.
5. It's highly possible to burn out the CPU if you change / modify any parts of the CPU cooler.
6. Please wear wrist strap and attach it to a metal part of the system unit before handling a component. You can also touch an object which is ground connected or attached with metal surface if you don't have wrist strap.
7. Please be careful to handle & don't touch the sharp-pointed components on the bottom of PCBA.
8. Remove or change any components from the motherboard will VOID the warranty of the motherboard.
9. Before you install / remove any components or even make any jumper setting on the motherboard, please make sure to disconnect the power supply first.
(follow the aforementioned instruction guide)
10. "POWERON after PWR-Fail" function must be used carefully as below:
When the DC power adaptor runs out of power, unplug it from the DC current;
Once power returns, plug it back after 5 seconds.
If there is a power outage, unplug it from the AC current, once power returns, plug it back after 30 seconds. Otherwise it will cause system locked or made a severe damage.

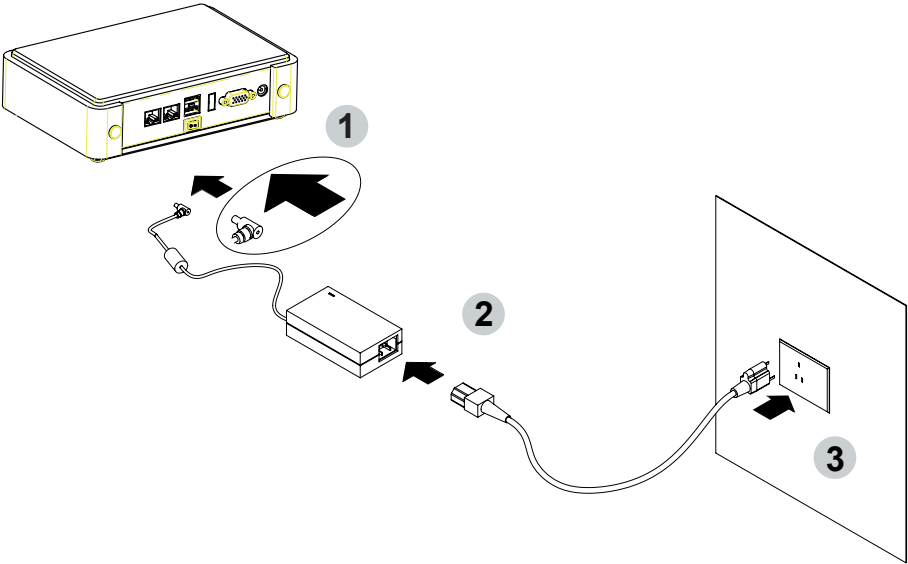
Remark 1:

Always insert / unplug the DC-in horizontally & directly to / from the motherboard. DO NOT twist, it is designed to fit snugly.

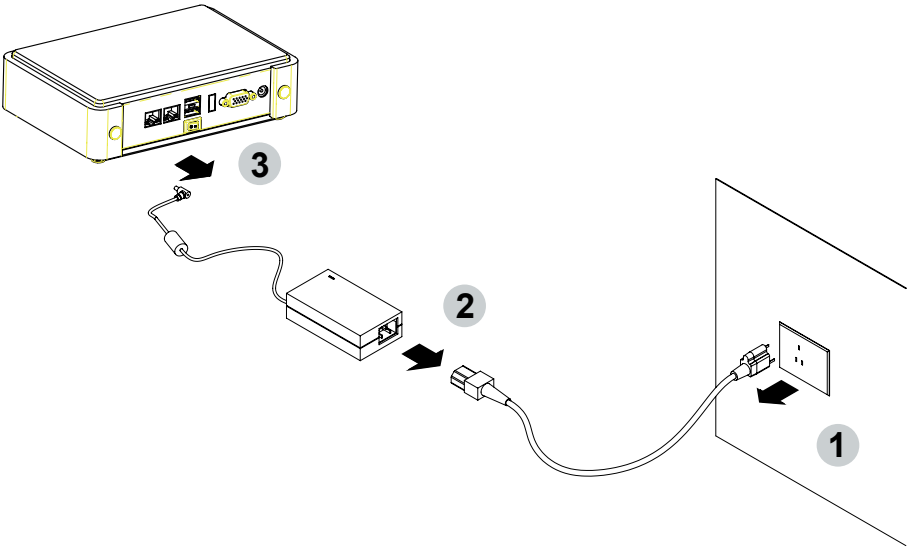
Moreover, erratic pull / push action might cause an unpredictable damage to the component & system unit.

Photo 1

Insert



Unplug



Chapter-1

General Information

The 2I740AW is a 2.5" (117 x 98.2 mm) motherboard powered with Intel® Amston Lake ATOM® x7000 series CPU & offered the ideal platform for high performance applications. The ultra compact (117 x 98.2 mm) motherboard with wide range 9~24V DC power input & embeds Intel 2.5GbE LAN, USBs, COM Ports and HDMI Typc C DP ALT Mode display interface that offer the ideal platforms for high performance applications in Networking, Smart Automation, Machine Vision, In-vehicle, Industry 4.0 and any compact high-performance Internet of Things (IoT) applications.

2I740AW integrated 1 x 2.5GbE LAN, 5 x USB, 1 x Type C USB 3.2 (DP ALT Mode), 4 x COM , HDMI®, onboard LPDDR5 memory, onboard eMMC (32-256GB) (OEM option). and 2 x M.2 along with 1 x Nano SIM expansion slots, it offers the perfect platform for superior graphics performance, integrated IoT features, real-time processing, manageability, and security.

Combined with excellent CPU performance, flexible RS-232 / 422 / 485 connectivity, and a wide-range 9-24V DC-IN power input, the 2I740AW is the ultimate solution for OpenVINO™-based AI accelerator platforms. It is ideal for advanced Edge AI, Intelligent Control, Factory Automation (Industry 4.0), Internet of Things (IoT), and Edge Computing applications.

1-1 Major Feature

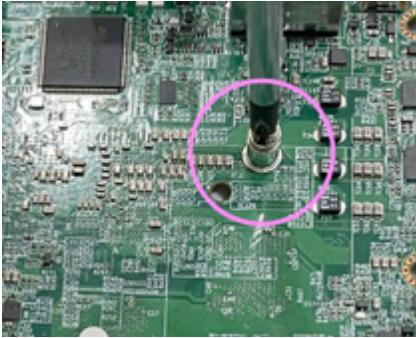
1. Intel® Amston Lake ATOM® x7000 series Processor
2. Intel® UHD Graphics for Intel® Atom x7000 series
3. Support HDMI max up to 4096 x 2160@60Hz
4. Onboard eMMC, max up to 256GB (Option)
5. Onboard LPDDR5, max up to 32GB
6. Support 1 x 2.5 Gbps Intel LAN ports.
7. Support 4 x RS232 selectable to RS485 / RS422 by BIOS
8. 1 x Type C USB 3.2, 4 x Type A USB 3.2 and 1 x USB 2.0 internal
9. Support extended 1 x M.2 B-Key for PCIe x 2 and USB 2.0 interface 1 x M.2 B-Key for SATA and USB 3.0 / 2.0 interface with Nano SIM
10. Hardware Watch Dog Timer, 0~255 sec programmable
11. Wide Range DC IN +9V~24V

1-2 Specification

1. **SOC:** Intel® Amston Lake ATOM® x7000 series Processor
2. **Graphics:** Intel® UHD Graphics for Intel® Atom x7000 series, support HDMI max up to 4096 x 2160@60Hz
3. **Storage:** Onboard eMMC5.1, max up to 256GB (Option)
4. **Memory:** Onboard LPDDR5, max up to 32GB
5. **LAN:** 1 Intel I226-V / I226-IT LAN chipset with 10 / 100 / 1000 / 2500 Mbps for PCIe x 1 V2.1
6. **I/O Chip:** Switch chipset for 4 port RS232 / RS422 / RS485 selected by BIOS
7. **USB:** 1 type C USB 3.2, 4 type A USB 3.2, 1 USB 2.0 internal
8. **Expansion interface:** one M.2 B-Key for PCIe x 2 and USB 2.0 interface, one M.2 B-key for SATA and USB 3.0 / 2.0 interface with Nano SIM.
9. **BIOS:** Insyde UEFI BIOS
10. **Dimension:** 117 x 98.2 mm
11. **Power:** On board DC +9~24V

1-3 Directions for installing the M.2B Key 2242 / 3042 PCIe x2-NVME USB2.0

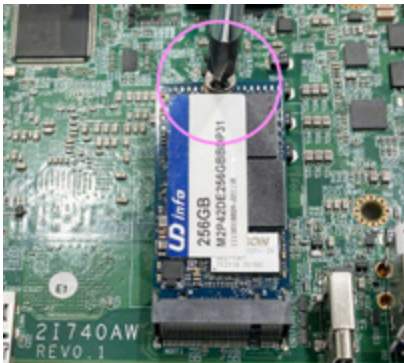
1. Unscrew the screw on the board



2. Plug in the Mini Card in a 45 angle



3. Gently push down the Mini Card and screw the screw back.



1-4 Directions for installing the M.2B Key 2242 / 3042 / 3052 SATA-SSD / PCIe 1 x (OEM) USB2.0 / 3.2

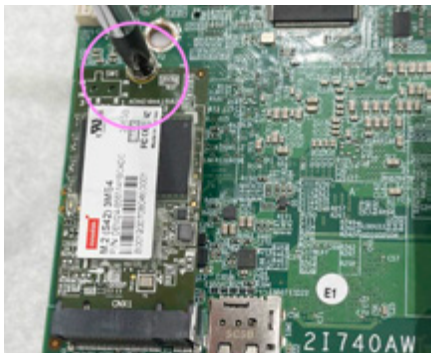
1. Unscrew the screw on the board



2. Plug in the Mini Card in a 45 angle

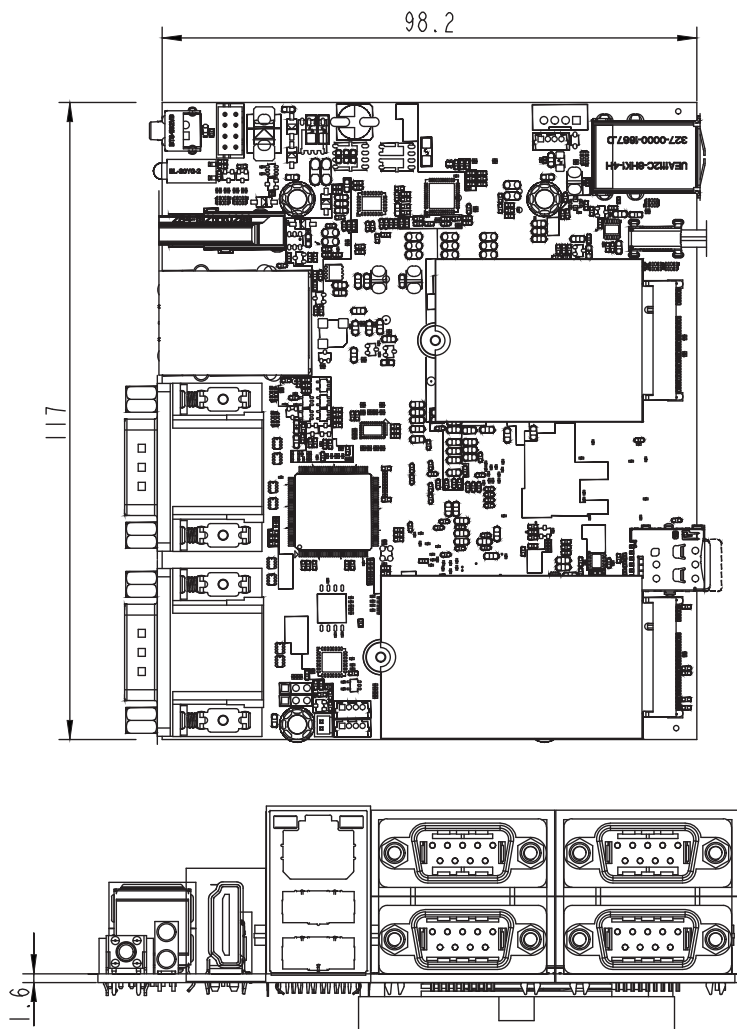


3. Gently push down the Mini Card and screw the screw back.



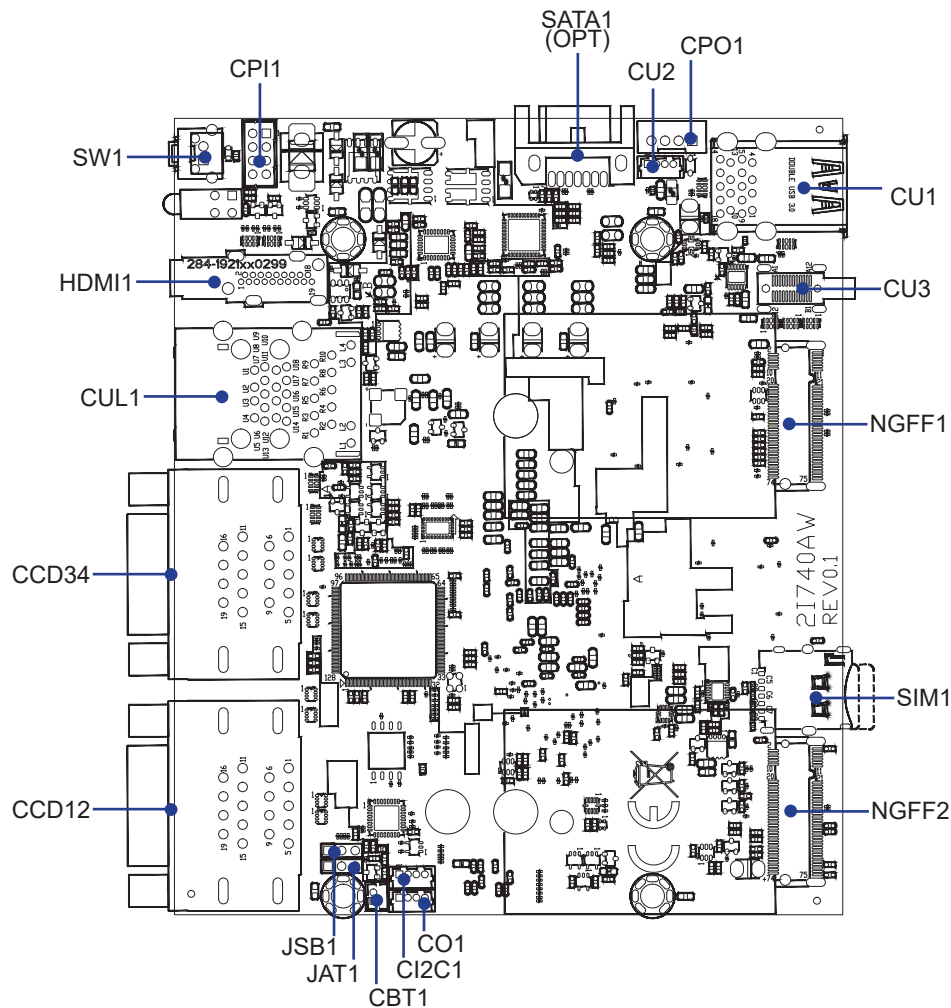
Chapter-2

2-1 Dimension-2I740AW



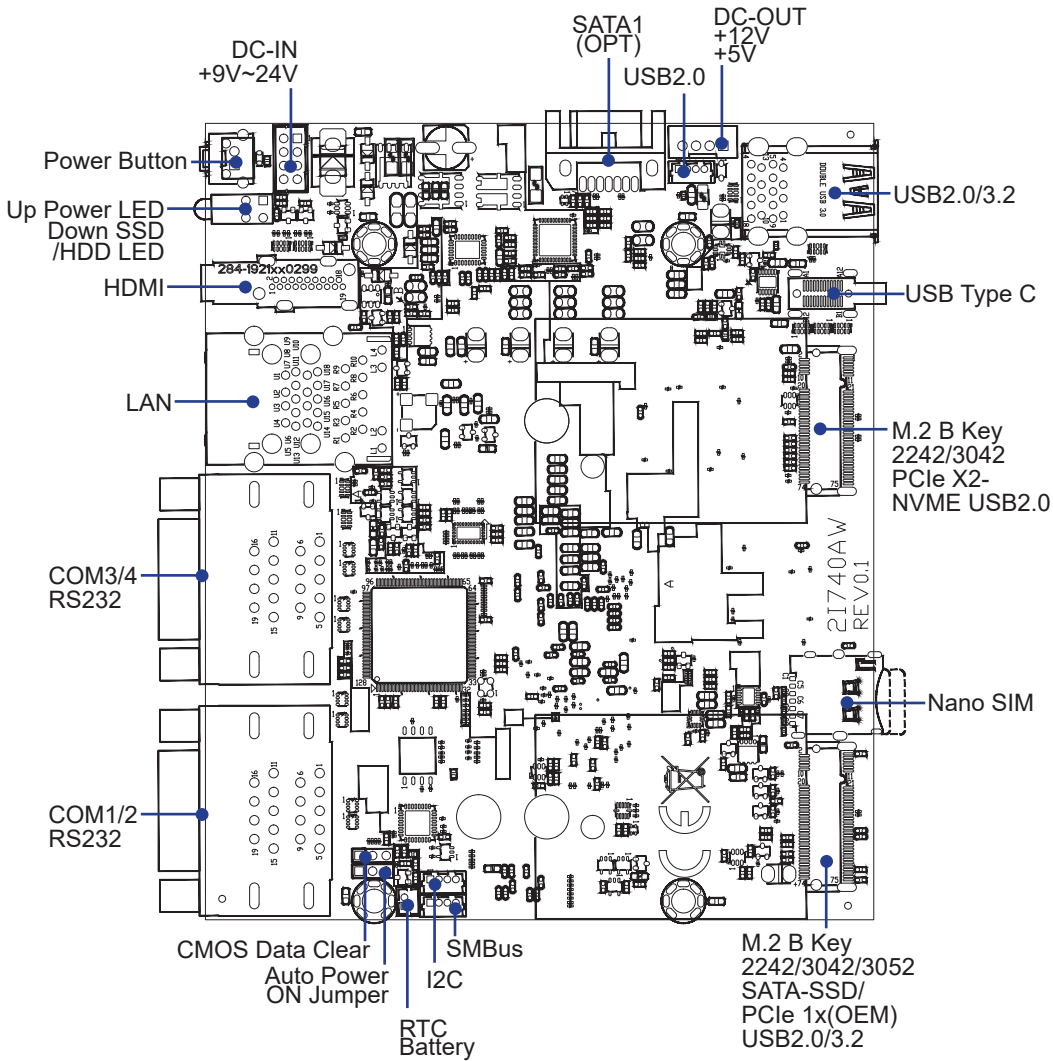
2-2 Layout-2I740AW-Connector and Jumper

TOP



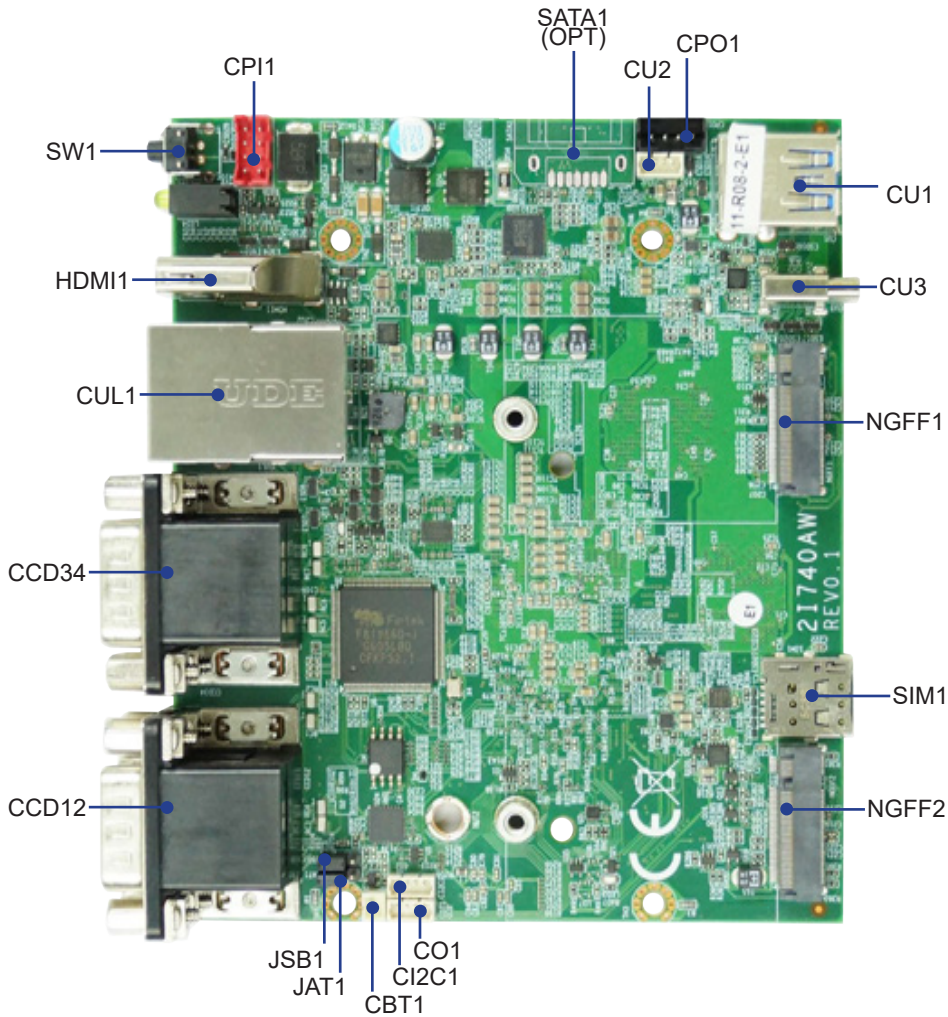
2-3 Layout-2I740AW-Function MAP

TOP



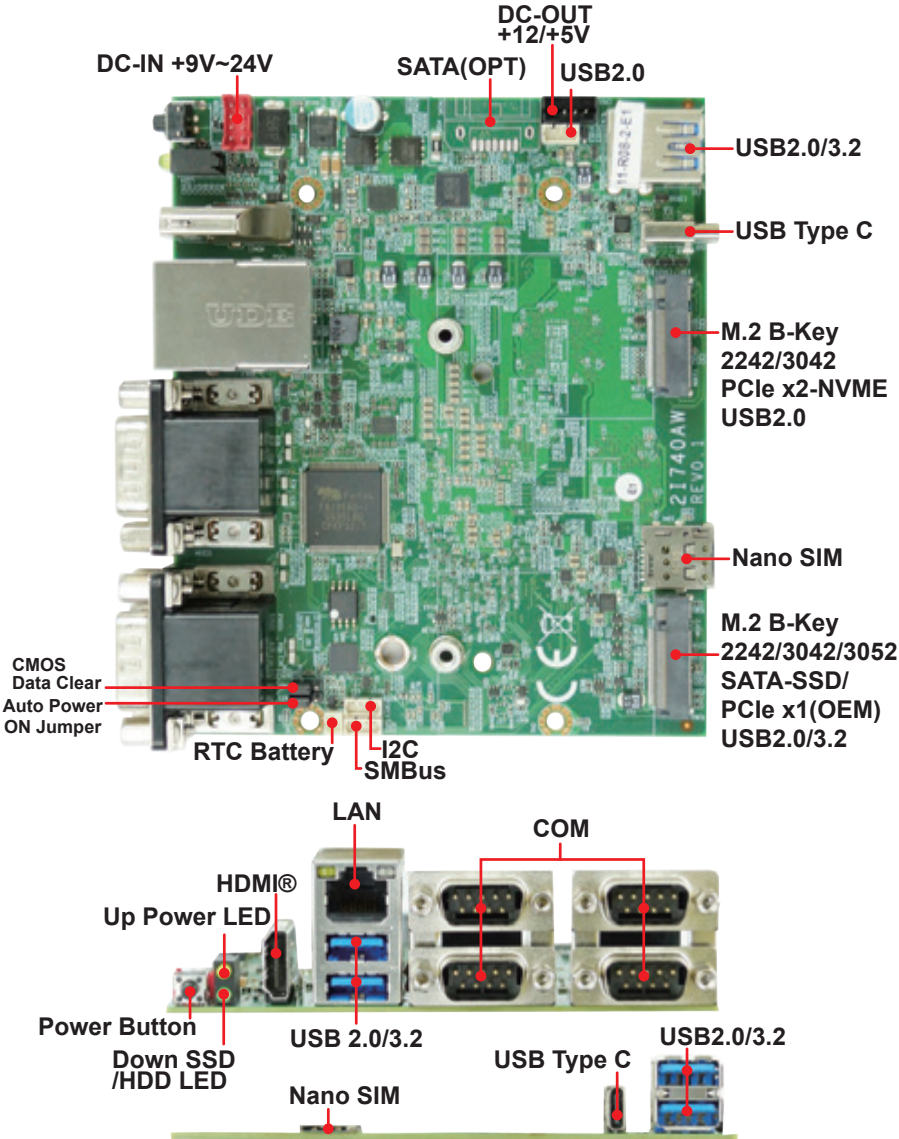
2-4 Diagram- 2I740AW

TOP



2-5 Function MAP- 2I740AW

TOP



2-6 List of Jumpers

JSB1: CMOS DATA Clear

JAT1: Power in always ON function

2-7 Jumper Setting Description

A jumper is ON as a closed circuit with a plastic cap covering two pins. A jumper is OFF as an open circuit without the plastic cap. Some jumpers have three pins, labeled 1, 2, and 3. You could connect either pin 1 and 2 or 2 and 3.

The below figure 2.2 shows the examples of different jumper settings in this manual.

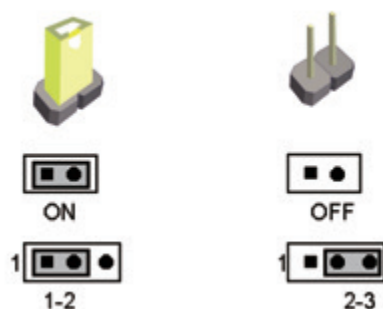


Figure 2.2

All jumpers already have its default setting with the plastic cap inserted as ON, or without the plastic cap as OFF. The default setting may be referred in this manual with a " * " symbol .

2-8 JSB1: CMOS DATA Clear

A battery must be used to retain the motherboard configuration in CMOS RAM.
Close Pin1 and pin 2 of JSB1 to store the CMOS data.

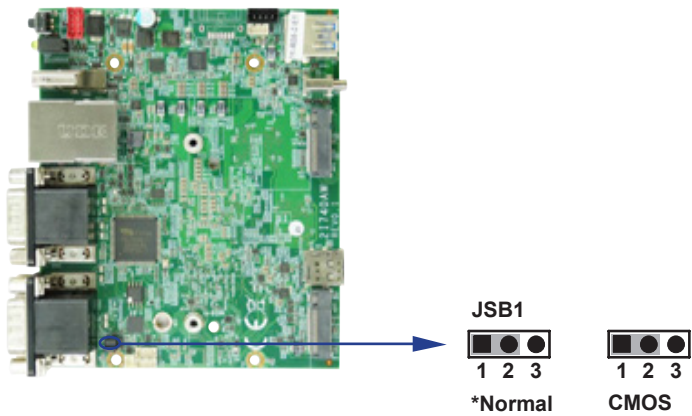
To clear the CMOS, follow the procedures below:

- 1. Turn off the system and unplug the AC power
- 2. Remove DC IN power cable from DC IN power connector
- 3. Locate JSB1 and close pin 1-2 for few seconds
- 4. Return to default setting by Close pin 1-2
- 5. Connect DC IN power cable back to DC IN Power connector

JSB1	DESCRIPTION
*1-2	Normal set
2-3	CMOS data clear

Note: Do not clear CMOS unless

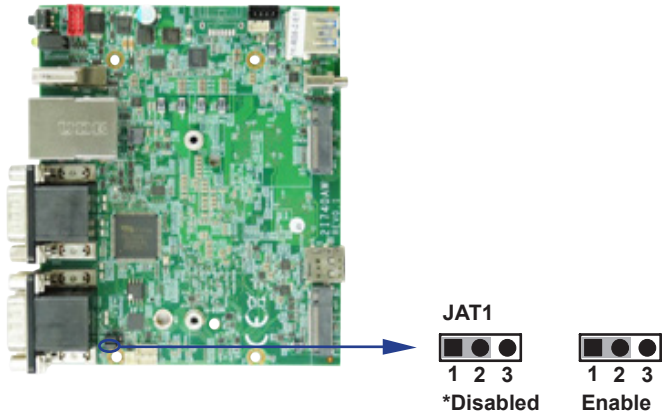
- 1. **Troubleshooting**
- 2. **Forget password**
- 3. **You fail over-clocking system**



2-9 JAT1: Power in always ON function

JAT1	DESCRIPTION
*1-2	Disabled
2-3	Enable

Note: Power always on function default is disabled.



Chapter-3

Connection

This chapter provides all necessary information of the peripheral's connections, switches and indicators. Always power off the board before you install the peripherals.

3-1 List of Connectors

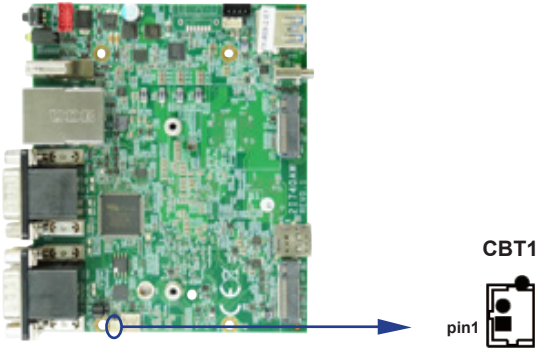
CBT1:	CMOS Battery in 1x2 pin (1.25mm) wafer
CU1:	Dual USB3.2 Gen1 / 2.0 Type A connector
CU2:	USB 2.0 port 1x4 pin (1.25mm) wafer
CU3:	USB 3.2 type C connector
CUL1:	LAN port 1 RJ45 + USB3.2 ype A x 2 Connector
CCD12:	COM1/2 Dual DB9 connector
CCD34:	COM1/2 Dual DB9 connector
CO1:	SMBus 1x4 pin (1.25mm) wafer
CI2C1:	I2C 1x4 pin (1.25mm) wafer
CPI1:	DC-IN 2x4 pin (2.0mm) Red wafer
CPO1:	+12V / +5V output 1x4 pin (2.0mm) Black wafer
SIM1:	Nano SIM card socket
SW1:	Power button
NGFF1:	M.2 B key 2242 / 3042 H=8.5 socket 75pin
NGFF2:	M.2 B key 2242 / 3042 / 3052 H=8.5 socket 75pin
HDMI1:	HDMI typeA connector
SATA1:	SATA connector 7pin (OEM)

3-2 CMOS battery connector

- CBT1: CMOS Battery in 1x2 pin (1.25mm) wafer

PIN NO.	DESCRIPTION
1	Battery in (GND)
2	Battery in (+3V)

NOTE: CBT1 for external connector can extend battery capacity.



3-3 USB Interface

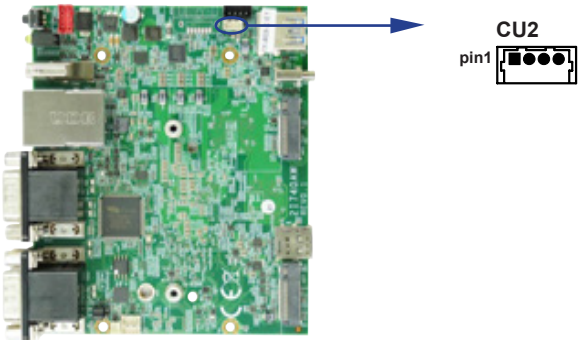
• **CU1: Dual USB 3.2 Gen1 / 2.0 Type A connector**

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
		1	USB3.2 TX+
1	+5V		
2	USB 2.0 D-	2	USB3.2 TX-
		3	GND
3	USB 2.0 D+	4	USB3.2 RX+
4	GND		
		5	USB3.2 RX-



• **CU2: USB 2.0 1x4 pin (1.25mm) wafer**

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+5V	2	DATA-
3	DATA+	4	GND

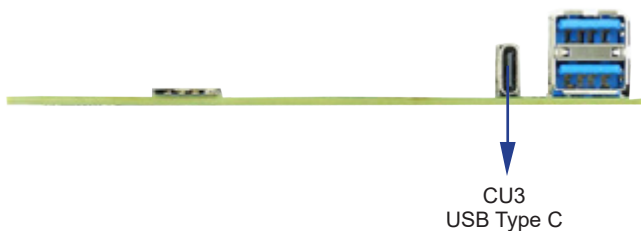


• **CU3: USB Type C 24 pin connector**

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
A1	GND	B12	GND
A2	TCP0_TX0_DP	B11	TCP0_TXRX0_DP
A3	TCP0_TX0_DN	B10	TCP0_TXRX0_DN
A4	+VBUS_5V	B9	+VBUS_5V
A5	CC1	B8	SBU2
A6	USB2_DP	B7	USB2_DN
A7	USB2_DN	B6	USB2_DP
A8	SBU1	B5	CC2
A9	+VBUS_5V	B4	+VBUS_5V
A10	TCP0_TXRX1_DN	B3	TCP0_TX1_DN
A11	TCP0_TXRX1_DP	B2	TCP0_TX1_DP
A12	GND	B1	GND

Note:

1. Support DP Alternate Mode & USB 3.2 Gen 1x1 / 2.0.
2. USB-PD not support.



3-4 CUL1 : LAN port 1 RJ45 + USB3.2 ype A x 2 Connector

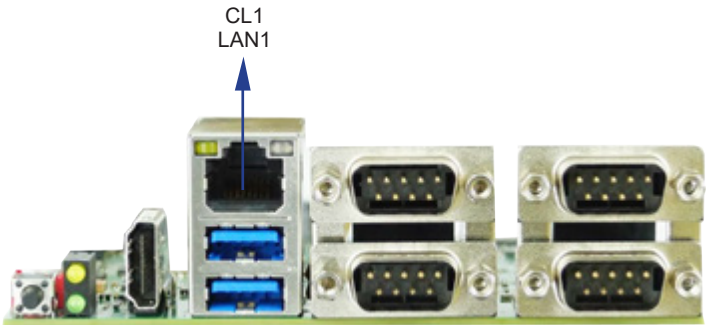
• CUL1: RJ45 LAN Connector (Up)

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	TD0+/TX+	2	TD0-/TX-
3	TD1+/RX+	4	TD2+/NC
5	TD2-/NC	6	TD1-/RX-
7	TD3+/NC	8	TD3-/NC

• RJ45 LAN Connector-LED define 2.5Giga / 1000 / 100Mb Connector

Speed	100 Mbps		1000 Mbps		2.5 Gbps	
Indicate	Link LED	Active LED	Link LED	Active LED	Link LED	Active LED
Light						

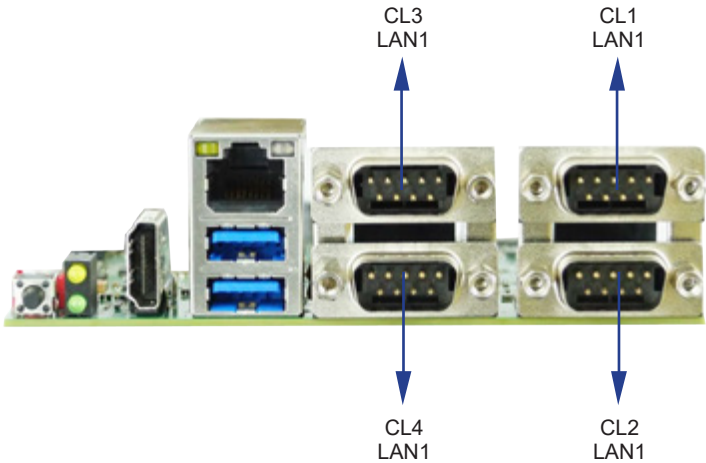
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
		1	USB3.2 TX+
1	+5V		
2	USB 2.0 D-	2	USB3.2 TX-
		3	GND
3	USB 2.0 D+	4	USB3.2 RX+
4	GND		
		5	USB3.2 RX-



3-5 COM interface

- CCD12 / CCD34: COM1 / 2 / 3 / 4 RS232 Dual DB9 connector

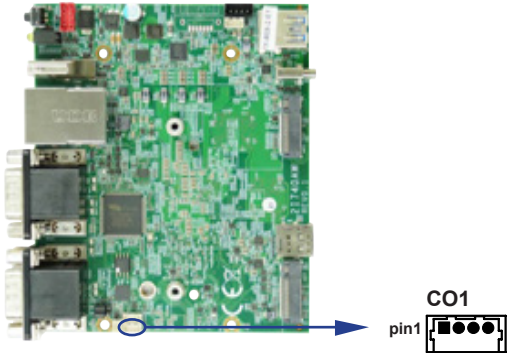
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI
5	GND		



3-6 SMBus Interface

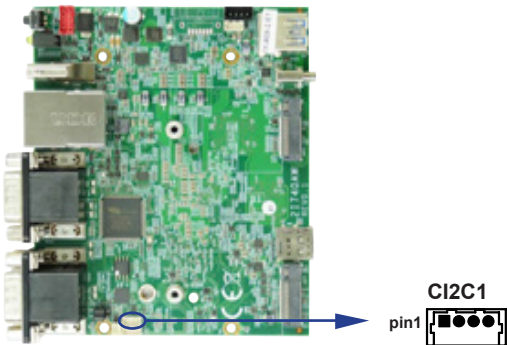
• CO1: SMBus 1x4 pin (1.25mm) wafer

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	2	GND
3	SMB-Clock	4	SMB-Data



3-7 CI2C1: I²C 1x4 pin (1.25mm) wafer

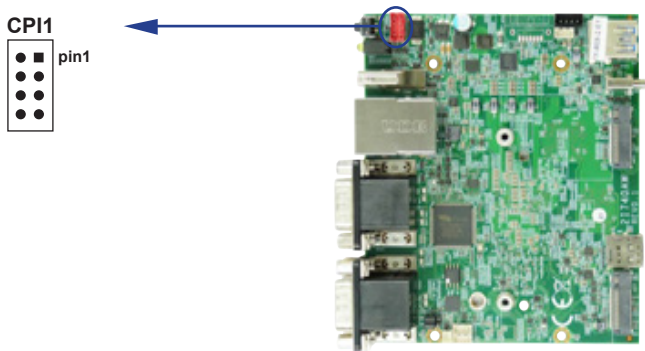
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	2	GND
3	I2C-Clock	4	I2C-Data



3-8 CPI1: DC Power input 2x4 pin (2.0mm) wafer (RED)

PIN NO.	DESCRIPTION
1,2,7,8	GND
3,4,5,6	DC-IN

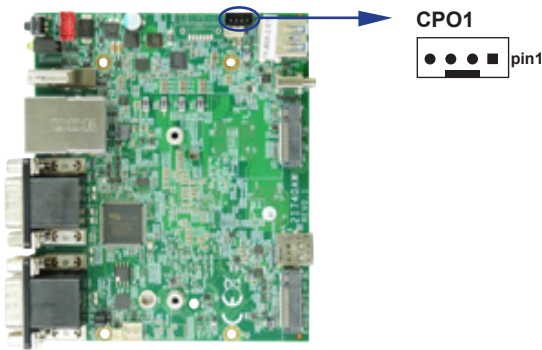
Note: Very important check DC-in Voltage.



3-9 CPO1: +12V/+5V DC voltage output 1x4 pin (2.0mm) wafer (Black)

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+5V	2	GND
3	GND	4	+12V

Note: Attention! Check Device Power in spec.



3-10 SIM1: Nano SIM Card Push-Push

- Follow ISO 7816-2 Smart Card Standard.

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	VCC	2	RST
3	CLK	4	NC
5	GND	6	VPP
7	DATA	8	NC



3-11 SW1: Power Button

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	GND
3	PW_BN	4	GND

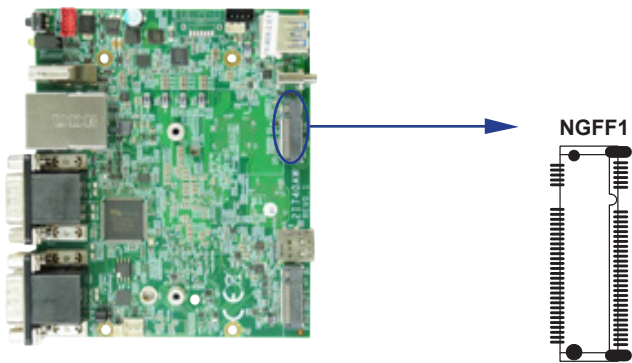


3-12 NGFF1: PCI Express M.2 B key 2242/3042 H=8.5 socket 75pin

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	+3.3V
3	GND	4	+3.3V
5	GND	6	FULL_CARD_PWR
7	USB2.0_P	8	NC
9	USB2.0_N	10	M2_LED
11	GND		
B Key notch			
		20	NC
21	GND	22	NC
23	NC	24	NC
25	NC	26	NC
27	GND	28	NC
29	PCIE10_RX_DN	30	NC
31	PCIE10_RX_DP	32	NC
33	GND	34	NC
35	PCIE10_TX_DN	36	NC
37	PCIE10_TX_DP	38	NC
39	GND	40	NC
41	PCIE9_RX_DN	42	NC
43	PCIE9_RX_DP	44	NC
45	GND	46	NC
47	PCIE9_TX_DN	48	NC
49	PCIE9_TX_DP	50	M2_PRST_N
51	GND	52	SRCCCLKREQ_N
53	CLK_SRC3_DN	54	NC
55	CLK_SRC3_DP	56	NC
57	GND	58	NC
59	NC	60	NC

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
61	NC	62	NC
63	NC	64	NC
65	NC	66	NC
67	NC	68	NC
69	NC	70	+3.3V
71	GND	72	+3.3V
73	GND	74	+3.3V
75	NC		

Note: Supports PCIe-SSD (NVME) & USB 2.0 signal.

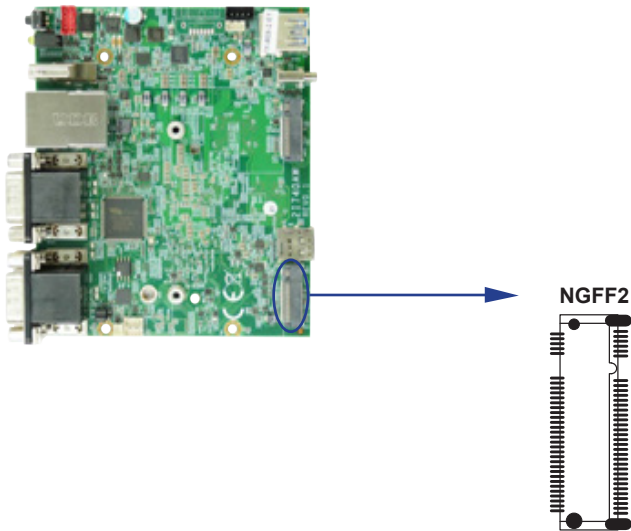


3-13 NGFF2: PCI Express M.2 B key 2242/3042/3052 H=8.5 socket 75pin

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	SATA/USB3.0 PW config	2	+3.3V / +3.7V
3	GND	4	+3.3V / +3.7V
5	GND	6	FULL_CARD_PWR
7	USB2.0_P	8	W_DISABLE_1
9	USB2.0_N	10	M2_LED
11	GND		
B Key notch			
		20	NC
21	GND	22	NC
23	NC	24	NC
25	NC	26	W_DISABLE_2
27	GND	28	NC
29	USB3Rn	30	SIM_RST_M2
31	USB3Rp	32	SIM_CLK_M2
33	GND	34	SIM_DATA_M2
35	USB3Tn	36	SIM_PWR_M2
37	USB3Tp	38	SIM_RST_M2
39	GND	40	NC
41	SATA-RX+	42	NC
43	SATA-RX-	44	NC
45	GND	46	NC
47	SATA-TX-	48	NC
49	SATA-TX+	50	PREST
51	GND	52	NC
53	NC	54	NC
55	NC	56	NC
57	GND	58	NC
59	NC	60	NC

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
61	NC	62	NC
63	NC	64	NC
65	NC	66	SIM_DET
67	MD_RESET_N	68	NC
69	NC	70	+3.3V / +3.7V
71	GND	72	+3.3V / +3.7V
73	GND	74	+3.3V / +3.7V
75	NC		

Note:
1. 4G LTE device VCC voltage is +3.7V.
2. Support USB 3.1 / USB 2.0 & SATA signal.



3-14 Display Interface

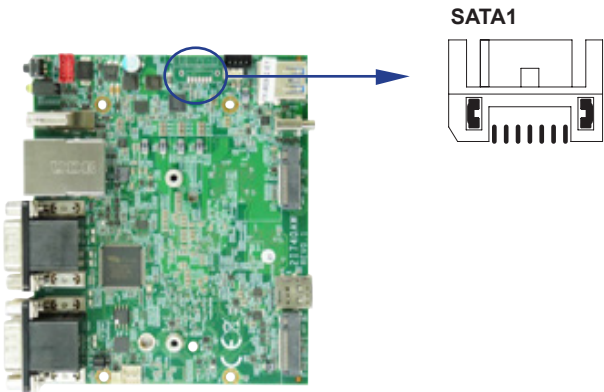
• **HDMI1: HDMI type A connector**

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	TMDS DATA2+	2	GND
3	TMDS DATA2-	4	TMDS DATA1+
5	GND	6	TMDS DATA1-
7	TMDS DATA0+	8	GND
9	TMDS DATA0-	10	TMDS CLK+
11	GND	12	TMDS CLK-
13	NC	14	NC
15	DDC CLOCK	16	DDC DATA
17	GND	18	+5V
19	H.P. Detect		



3-15 SATA1: SATA port 1x7pin Connector (OEM)

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GND	2	TX+
3	TX-	4	GND
5	RX-	6	RX+
7	GND		



Chapter-4

Introduction of BIOS

The BIOS is a program located in the Flash Memory on the motherboard.

This program is a bridge between motherboard and operating system.

When you start the computer, the BIOS program gains control.

The BIOS first operates an auto-diagnostic test called POST (Power on Self Test) for all the necessary hardware, it detects the entire hardware devices and configures the parameters of the hardware synchronization. After these tasks are completed, BIOS will give control of the computer back to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate with, it is the key factor of system stability and of ensuring your system performance at best.

In the BIOS Setup main menu, you can see several options. We will explain these options in the following pages. First, let us see the function keys you may use here:

Press <Esc> to quit the BIOS Setup.

Press ↑↓←→ (up, down, left, right) to choose the option you want to confirm or modify.

Press <F10> to save these parameters and to exit the BIOS Setup menu after you complete the setup of BIOS parameters.

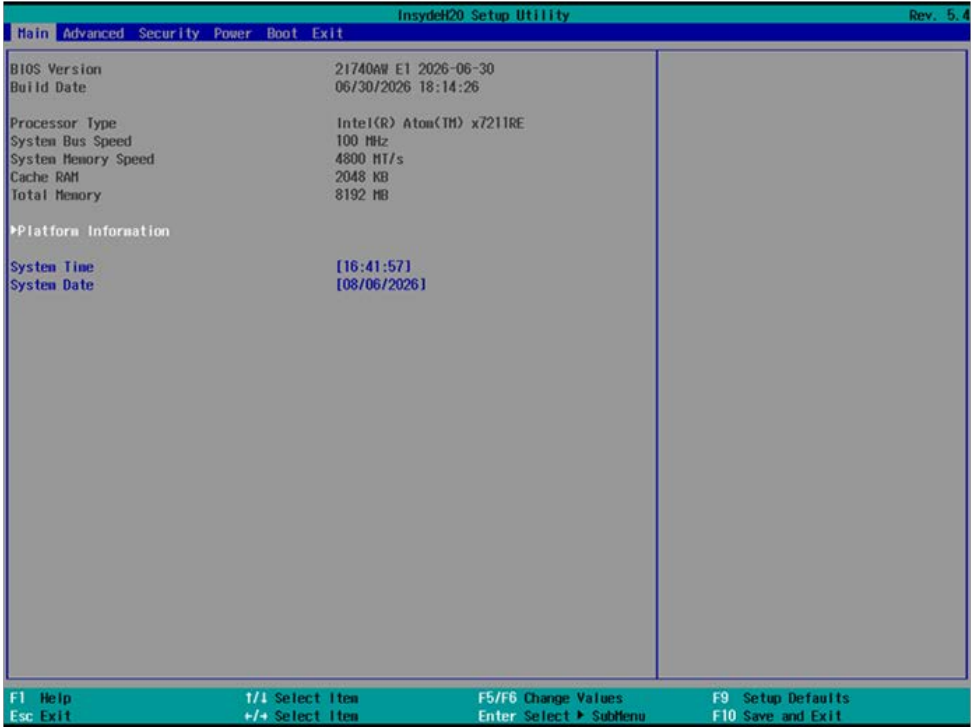
Press Page Up/Page Down or +/- keys to modify the BIOS parameters for the active option.

4-1 Enter Setup

Power on the computer and press key immediately to enter Setup.

If the message disappears before your respond but you still wish to enter Setup, restart the system by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart the system by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys.

4-2 BIOS Menu Screen & Function Keys



In the above BIOS Setup main menu of, you can see several options. We will explain these options step by step in the following pages of this chapter, but let us first see a short description of the function keys you may use here:

- Press >< (right, left) to select screen;
- Press ↑↓ (up, down) to choose, in the main menu, the option you want to confirm or to modify.
- Press <Enter> to select.
- Press <+>/<-> or <F5>/<F6> keys when you want to modify the BIOS parameters for the active option.
- [F1]: General help.
- [F2]: Previous values.
- [F3]: Optimized defaults.
- [F4]: Save & Reset.
- Press <Esc> to quit the BIOS Setup.

4-3 Getting Help



Status Page Setup Menu / Option Page Setup Menu

Press F1 to pop up a help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

4-4 Menu Bars

There are six menu bars on top of BIOS screen:

Main To change system basic configuration

Advanced To change system advanced configuration

Chipset To change PCH IO configuration

Security Password settings

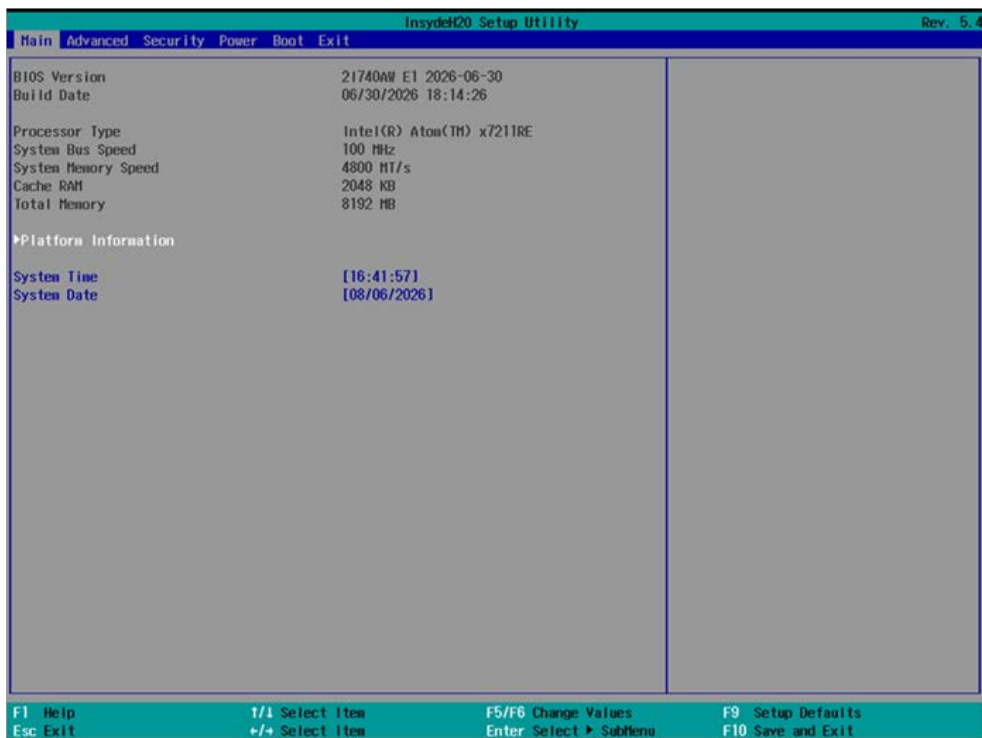
Boot Quiet boot or boot from USB selected.

Save & Exit Save setting, loading and exit options.

User can press the right or left arrow key on the keyboard to switch from menu bar.

The selected one is highlighted.

4-5 Main



Main menu screen includes some basic system information. Highlight the item and then use the <+> or <-> and numerical keyboard keys to select the value you want in each item.

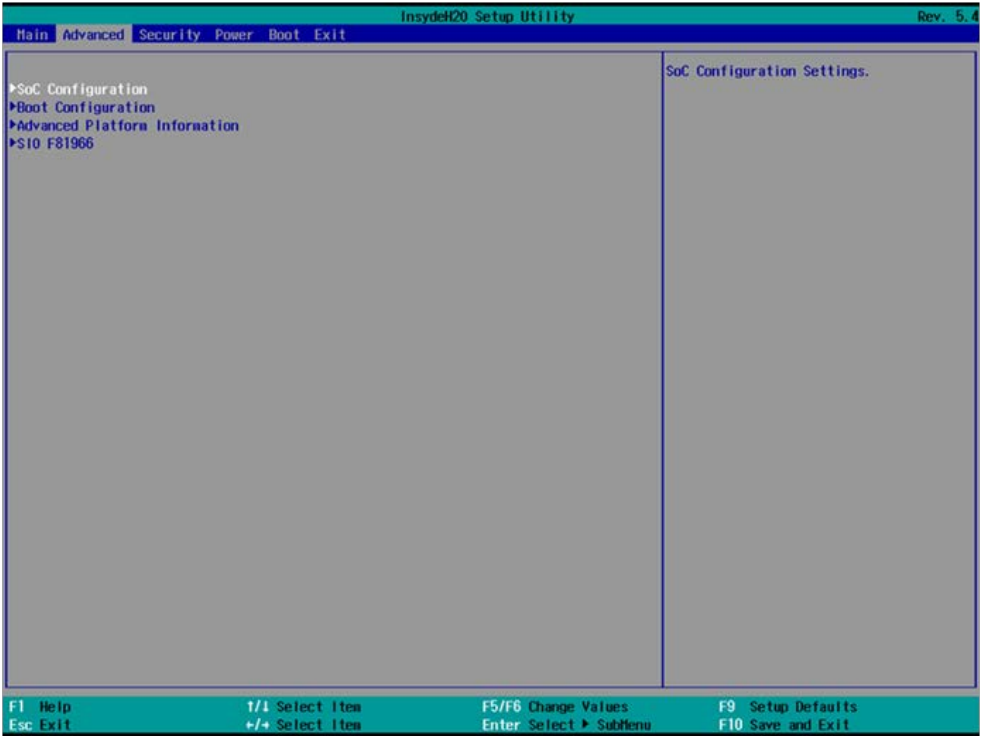
System Date

Set the Date. Please use [Tab] to switch between data elements.

System Time

Set the Time. Please use [Tab] to switch between data elements.

4-6 Advanced



SOC Config Configuration

Please refer section 4-6-1

Boot Configuration

Please refer section 4-6-2

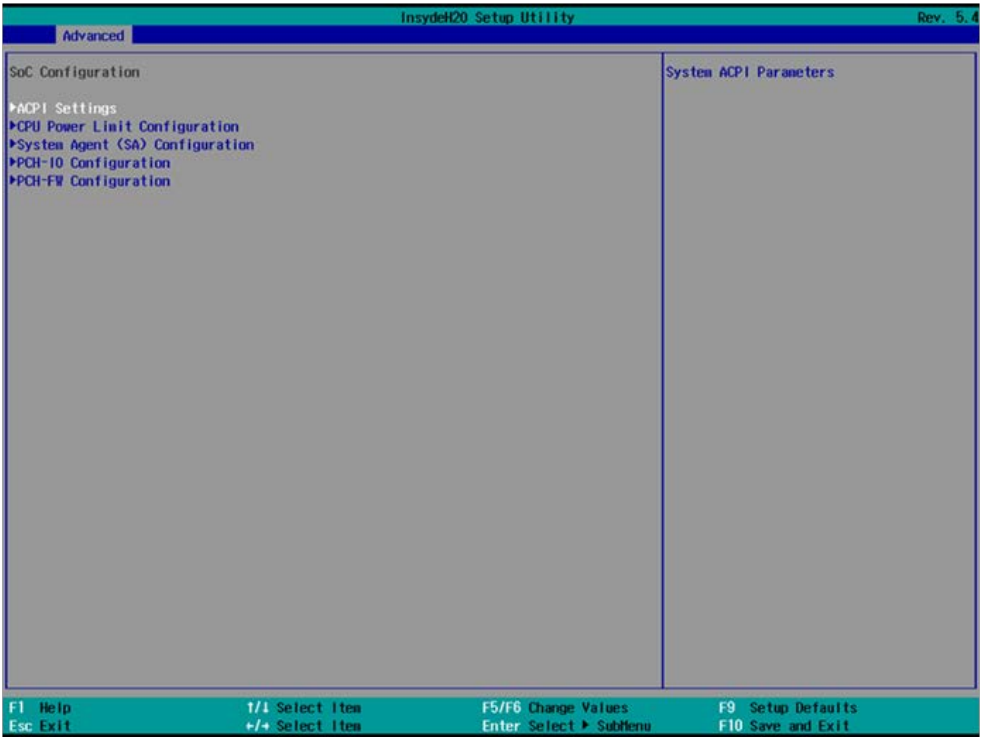
Advanced Platform Information

Please refer section 4-6-3

SIO F81966

Please refer section 4-6-4

4-6-1 SoC Config Configuration



ACPI Settings

Please refer section 4-6-1-1

CPU Power Limit Configuration

Please refer section 4-6-1-2

System Agent (SA) Configuration

Please refer section 4-6-1-3

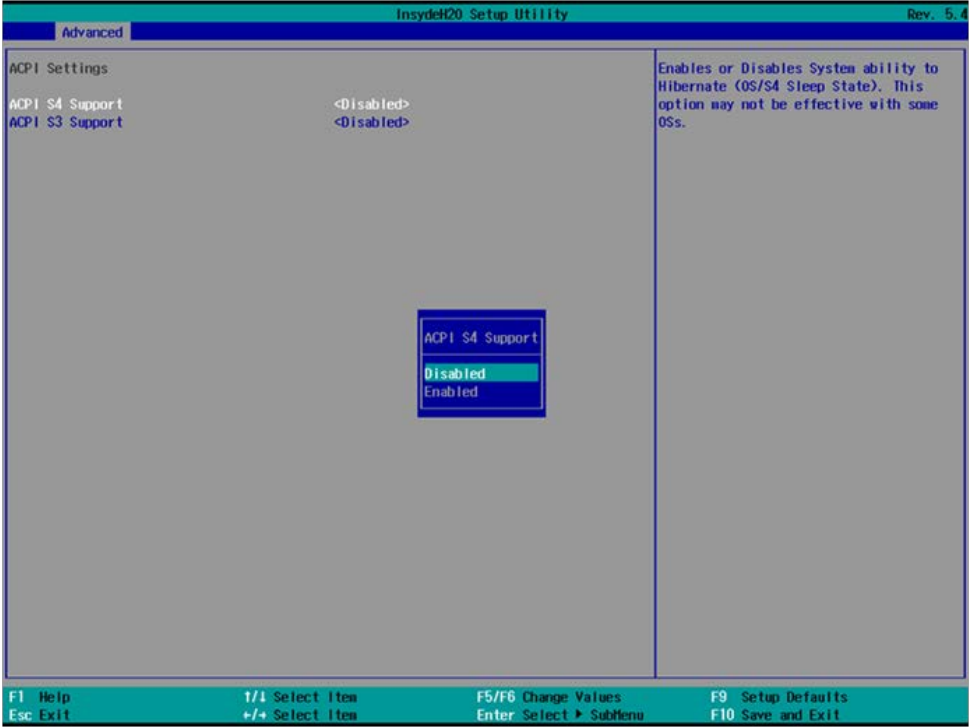
PCH-IO Configuration

Please refer section 4-6-1-4

PCH-FW Configuration

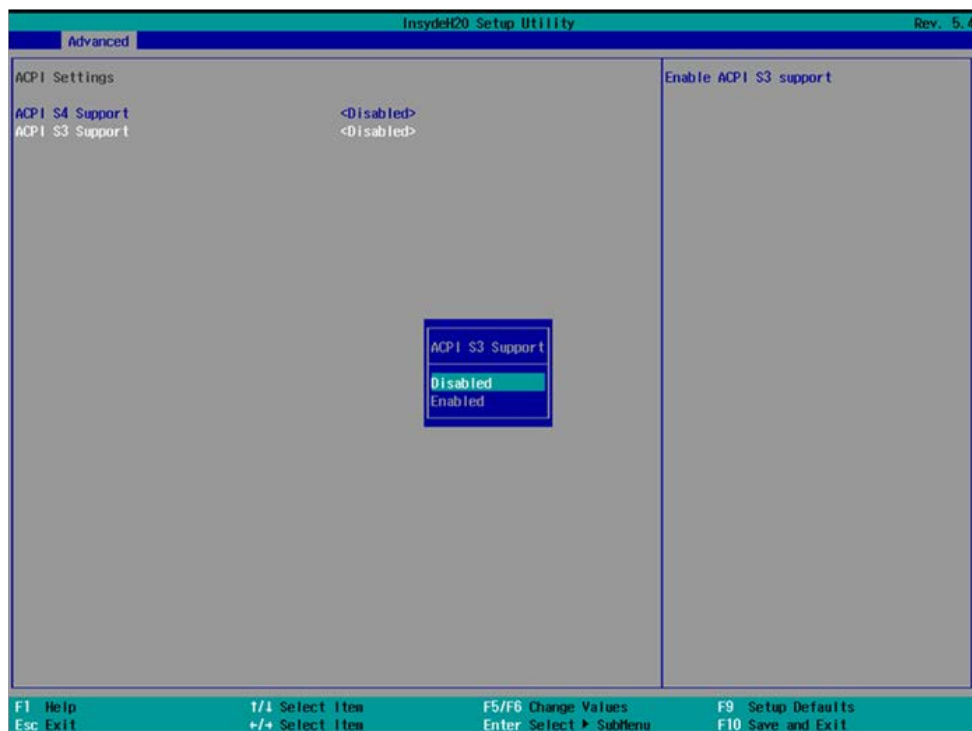
Please refer section 4-6-1-5

4-6-1-1 ► ACPI Settings



ACPI S4 Support

To select ACPI S4 (suspend to disk) support. The optional settings:
Enabled or Disabled (default)



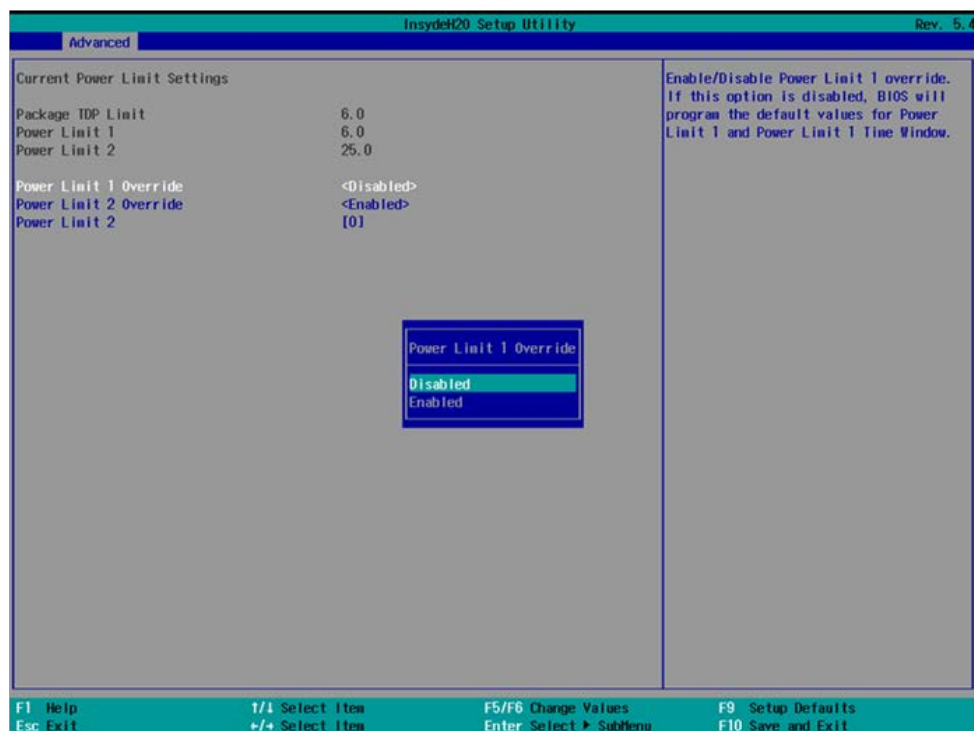
ACPI S3 Support

To select ACPI S3 (sleep state) support. The optional settings: Enabled or Disabled (default)

4-6-1-2 ► CPU Power Limit Configuration

InsydeH2O Setup Utility		Rev. 5.4
Advanced		
Current Power Limit Settings		Enable/Disable Power Limit 1 override. If this option is disabled, BIOS will program the default values for Power Limit 1 and Power Limit 1 Time Window.
Package TDP Limit	6.0	
Power Limit 1	6.0	
Power Limit 2	25.0	
Power Limit 1 Override	<Disabled>	
Power Limit 2 Override	<Enabled>	
Power Limit 2	[0]	
F1 Help T/1 Select Item F5/F6 Change Values F9 Setup Defaults Esc Exit +/- Select Item Enter Select ► SubItem F10 Save and Exit		

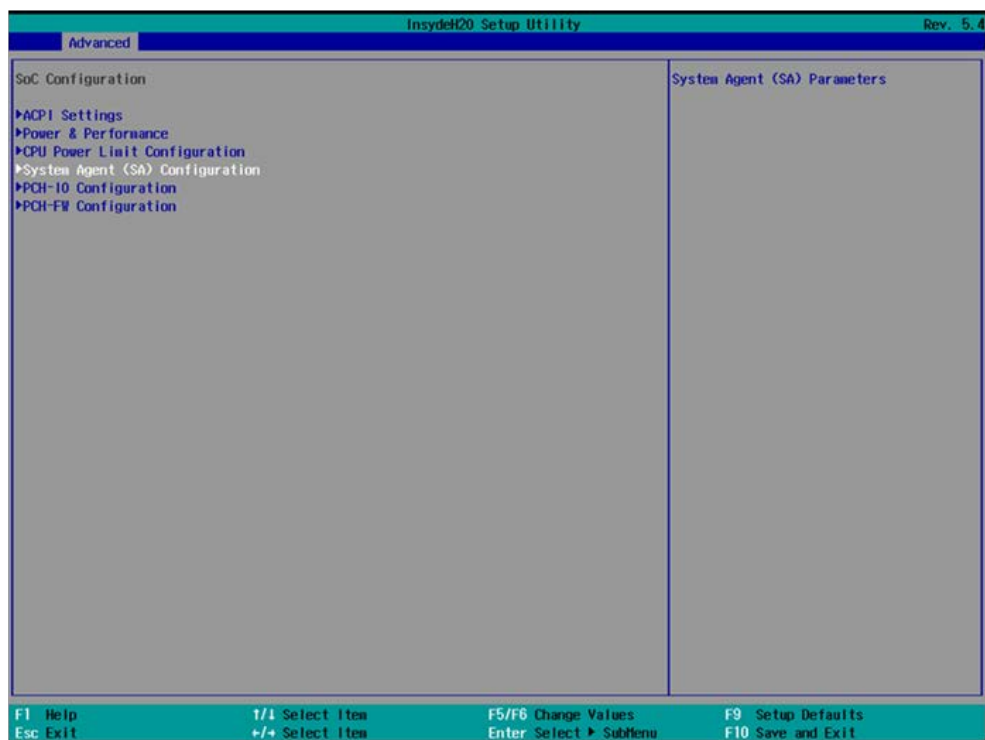
The setting follows INTEL Atom® x7211RE Processor power limit default configuration.

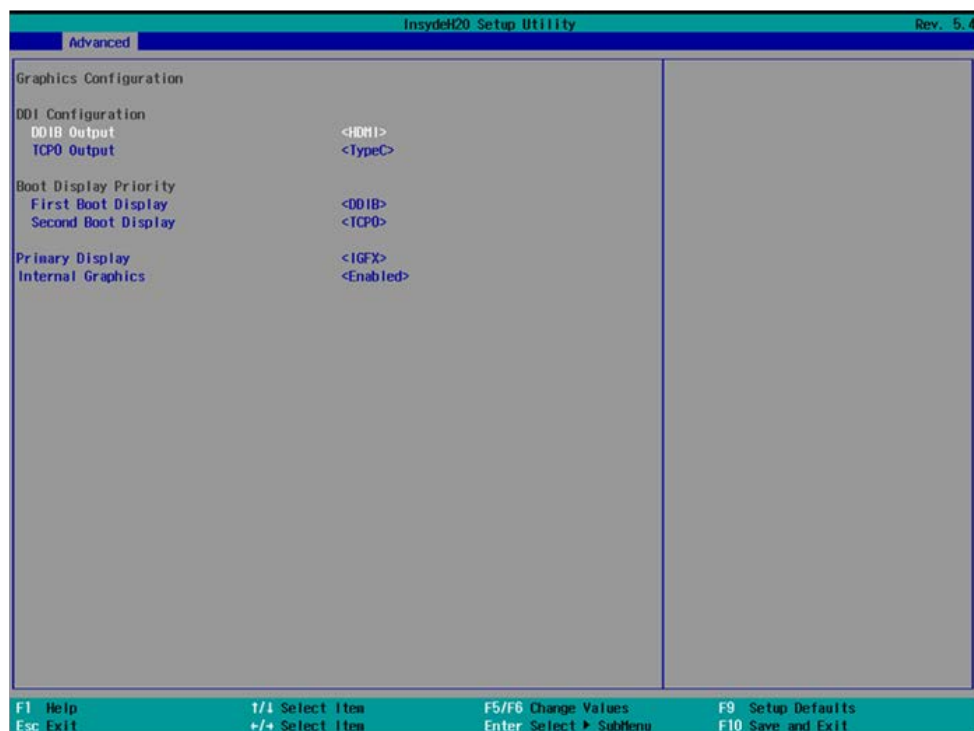


Power Limit Override

Enable / disable PL1 / PL2 and enter the power numerical value from 0 to 20000 to get higher or lower CPU TDP

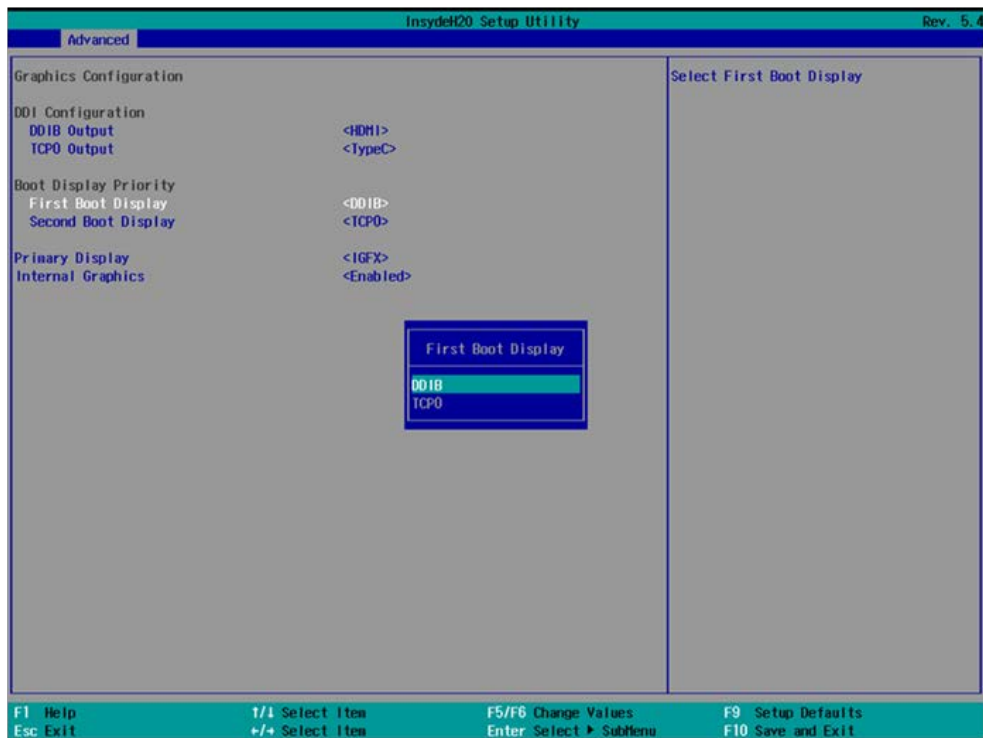
4-6-1-3 ► System Agent (SA) Configuration





Graphic Configuration DDI Configuration

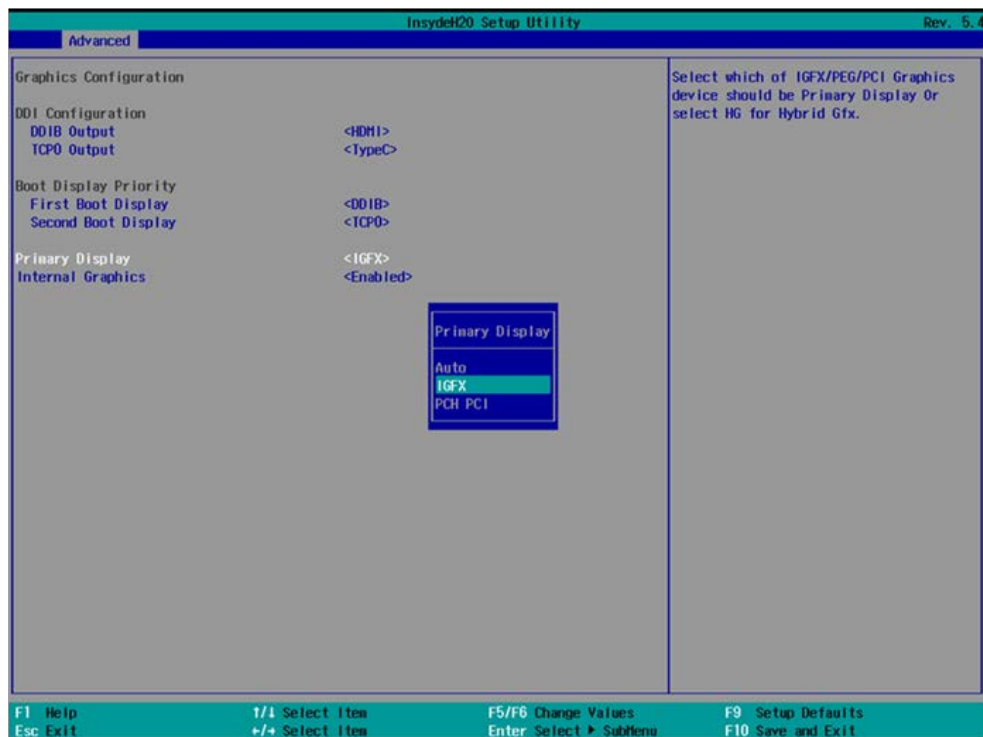
To select Display priority, there are DDIB HDMI, TCP0 Type C



Boot Display Priority

To select First Boot Display priority. DDIB HDMI or TCP0 Type C

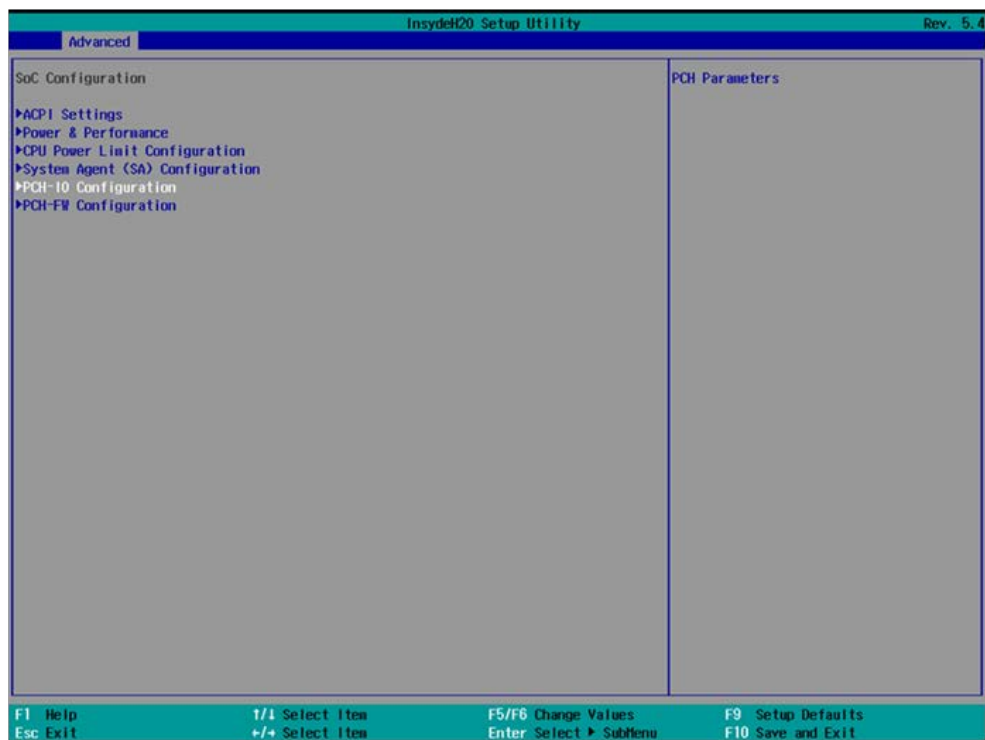
To select Second Boot Display priority, default is TCP0 Type C

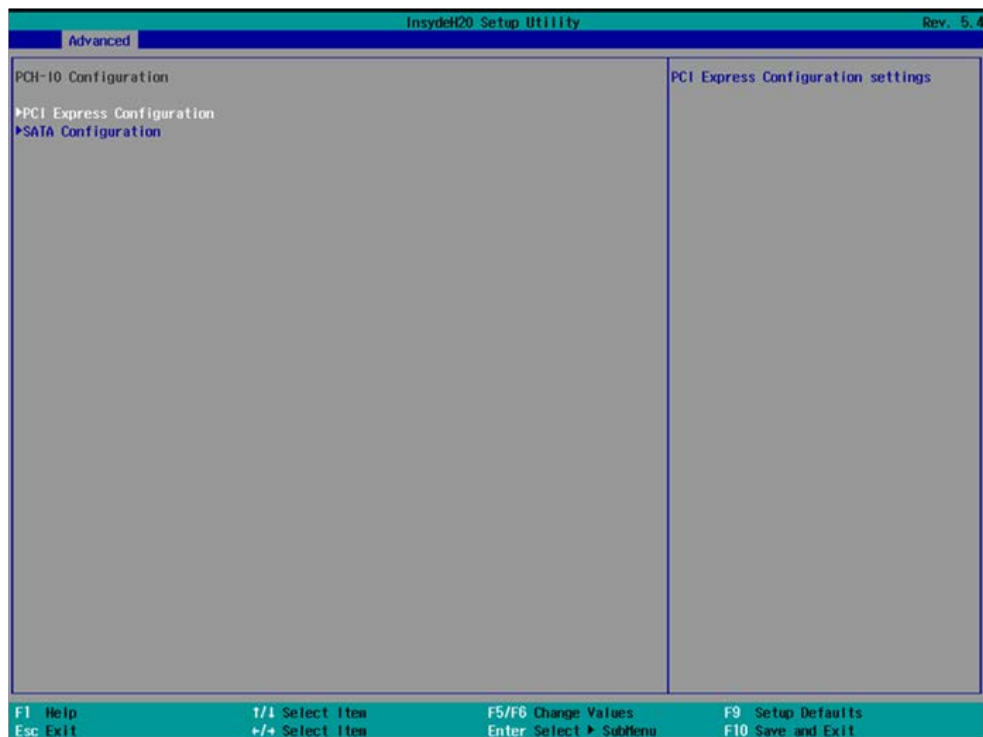


Primary Display

The optional settings are: Auto, IGFX, PCH PCI

4-6-1-4► PCH-IO Configuration





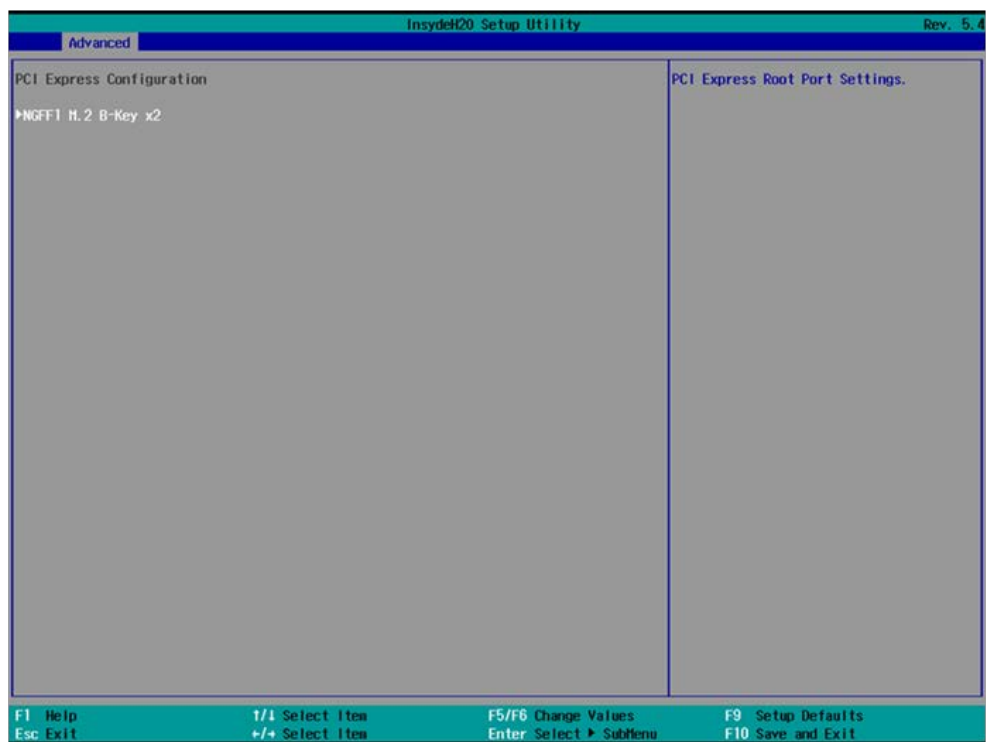
PCI Express Configuration

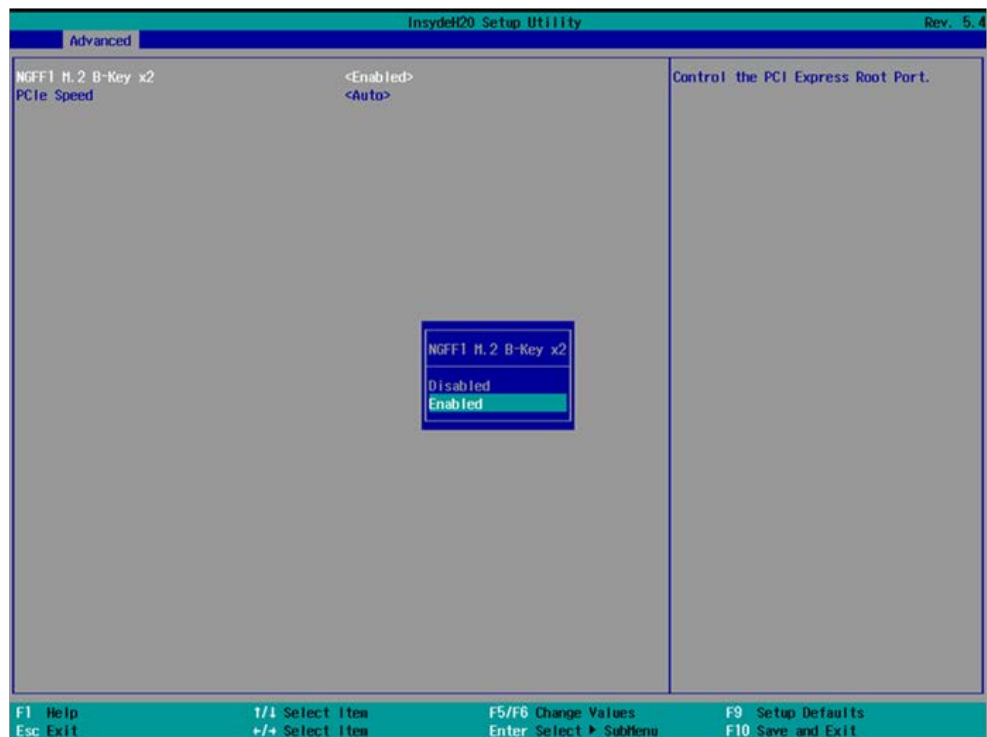
Please refer section 4-6-1-4-1

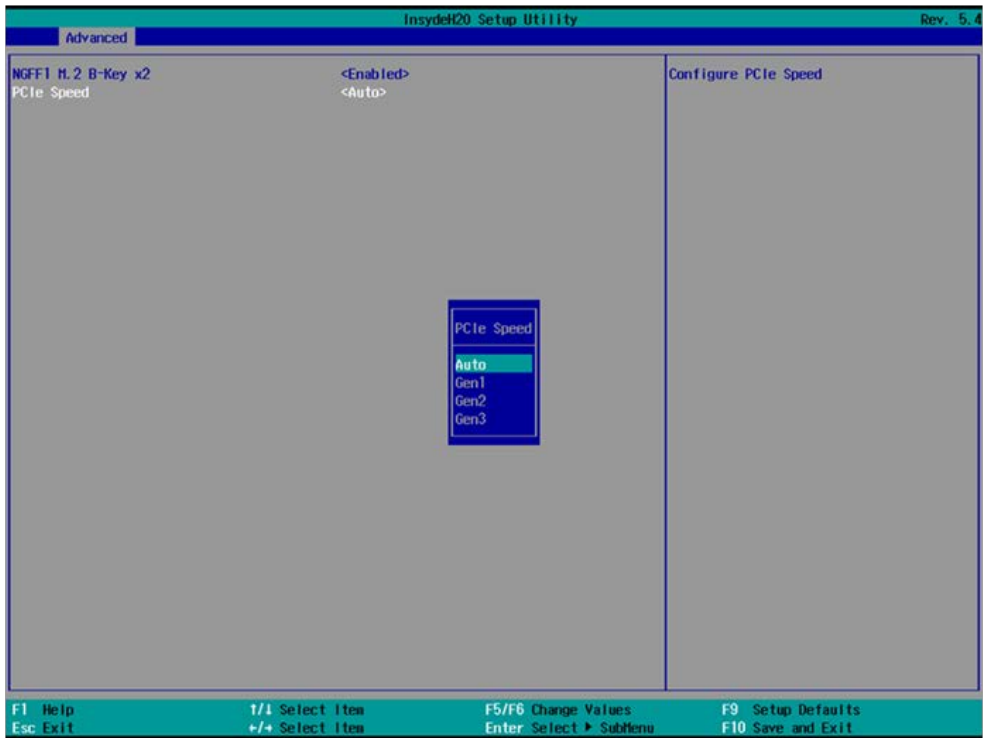
SATA Configuration

Please refer section 4-6-1-4-2

4-6-1-4-1 ► PCI Express Configuration

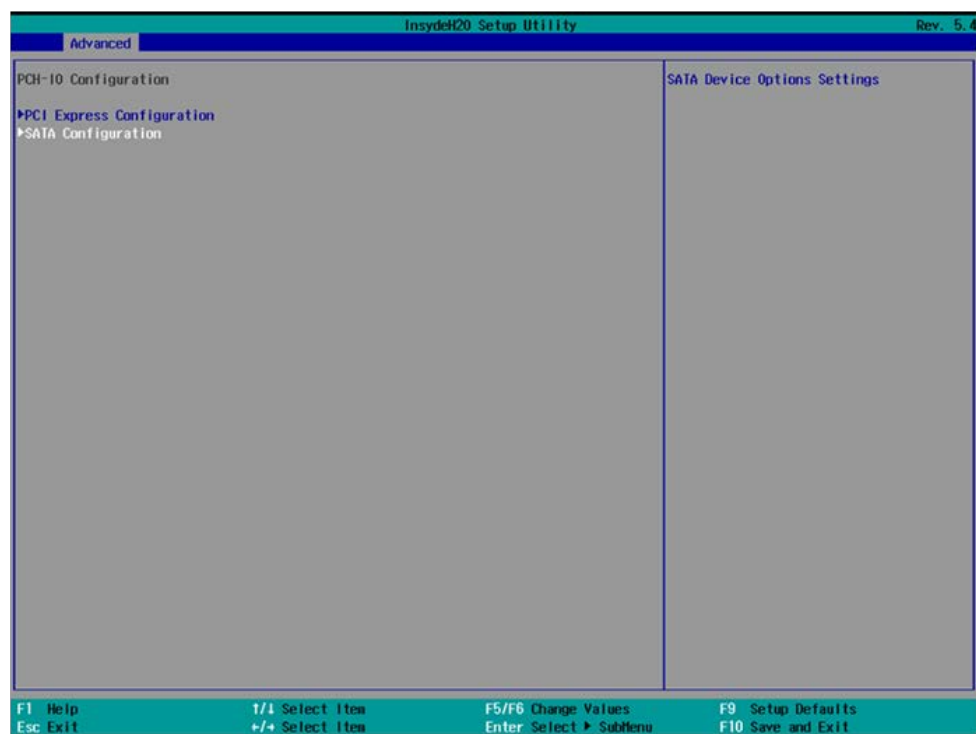


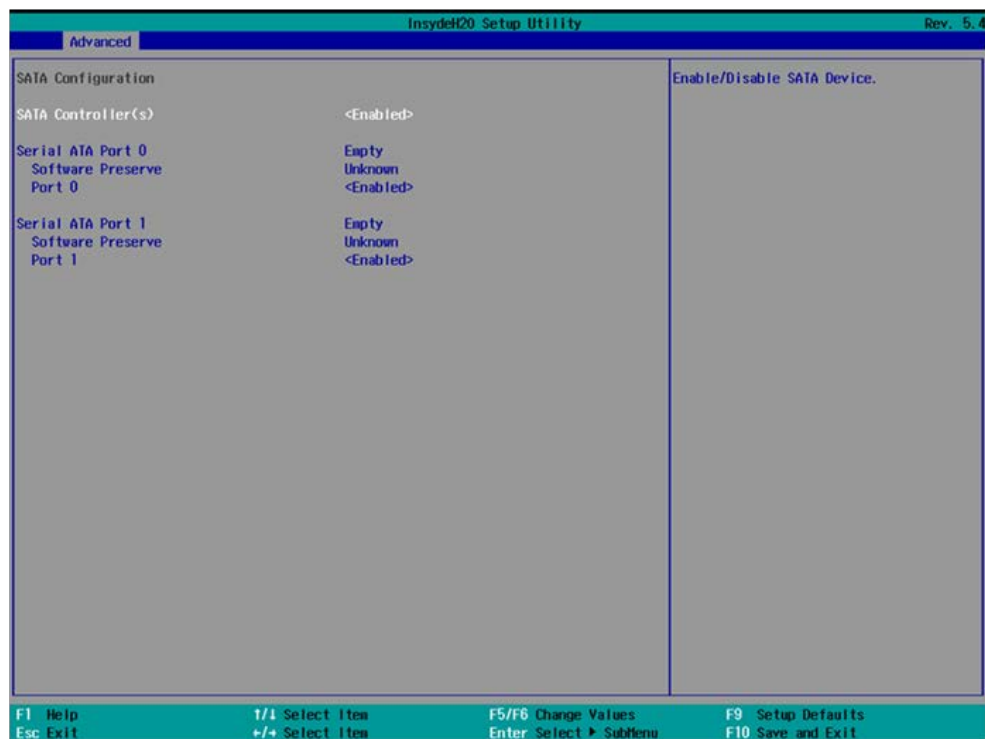




To select NGFF1 device enabled or not and to change the PCIe Speed, there are Auto, Gen1, Gen2, Gen3, default is Auto

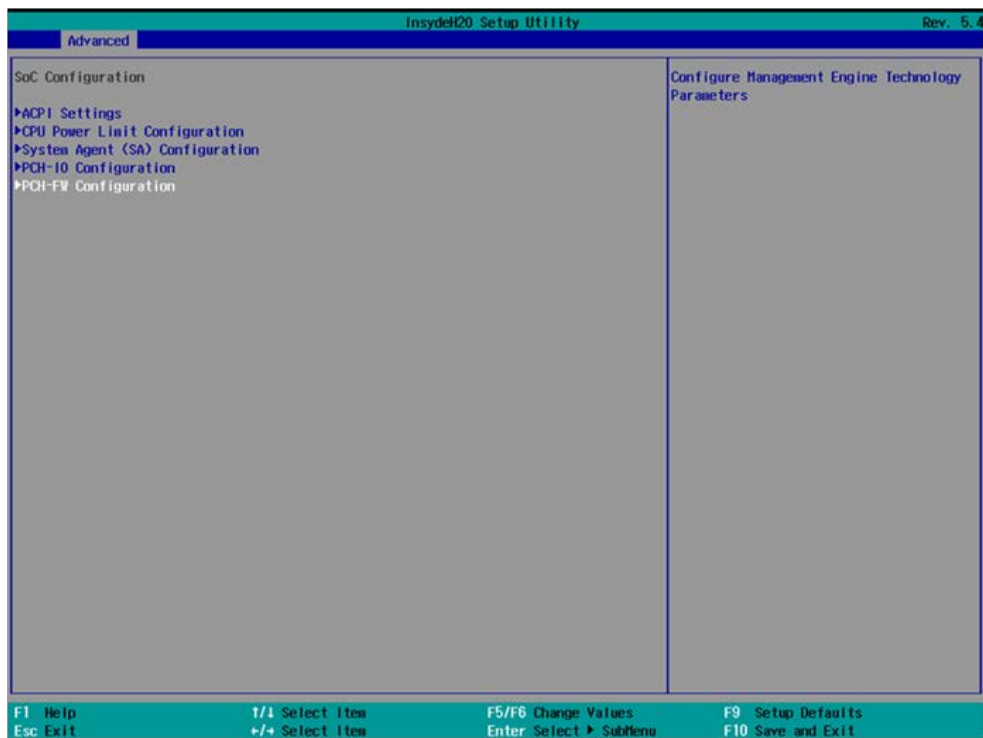
4-6-1-4-2 ► SATA Configuration





To select SATA device enabled or not.

4-6-1-5 ► PCH-FW Configuration



Advanced

ME Firmware Version	16.50.20.1647
ME Firmware Mode	Normal Mode
ME Firmware SKU	Consumer SKU
ME Firmware Status 1	0x90000255
ME Firmware Status 2	0x39850106
ME Firmware Status 3	0x00000020
ME Firmware Status 4	0x00004000
ME Firmware Status 5	0x00000000
ME Firmware Status 6	0x00400002

ME Firmware Version

F1 Help

↑/↓ Select Item

F5/F6 Change Values

F9 Setup Defaults

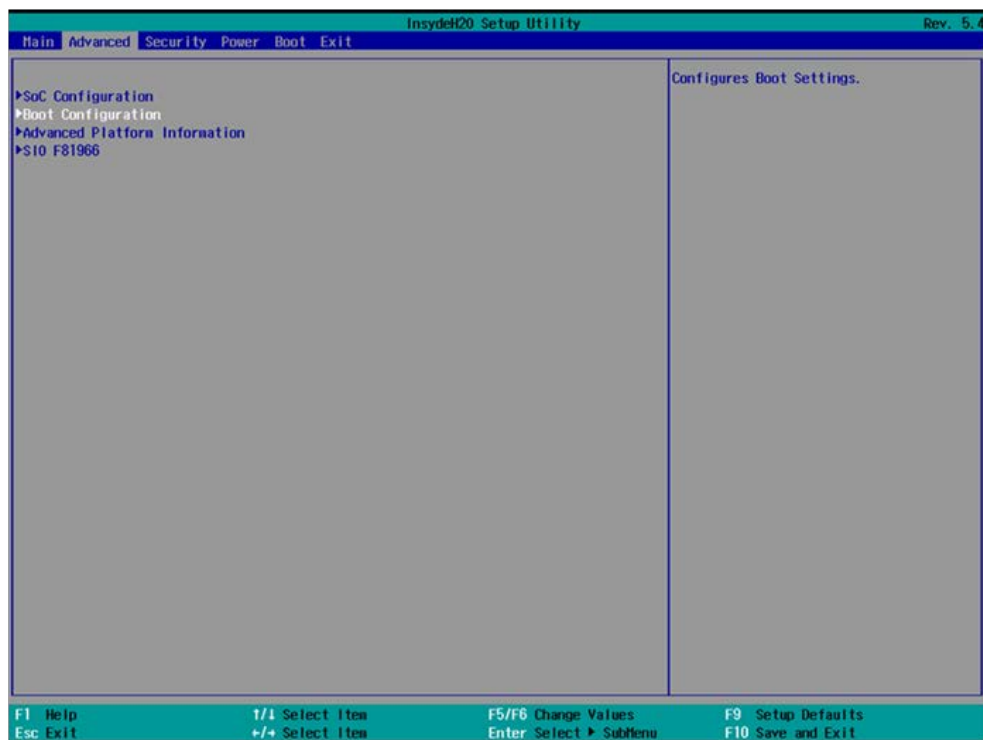
Esc Exit

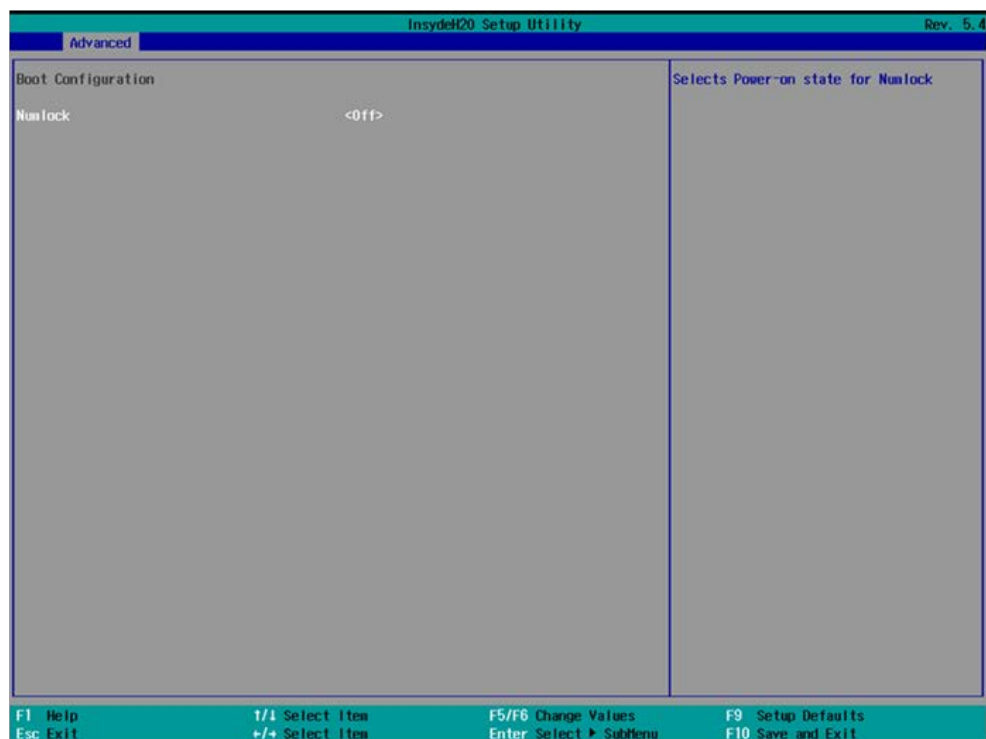
←/→ Select Item

Enter Select ► SubItems

F10 Save and Exit

4-6-2 Boot Configuration

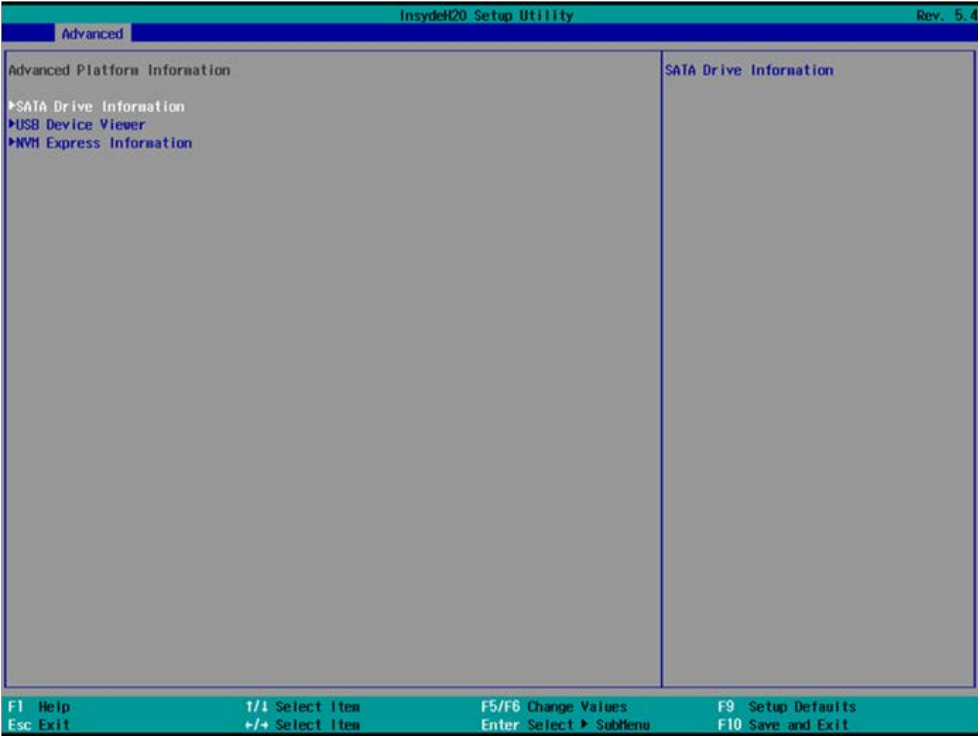


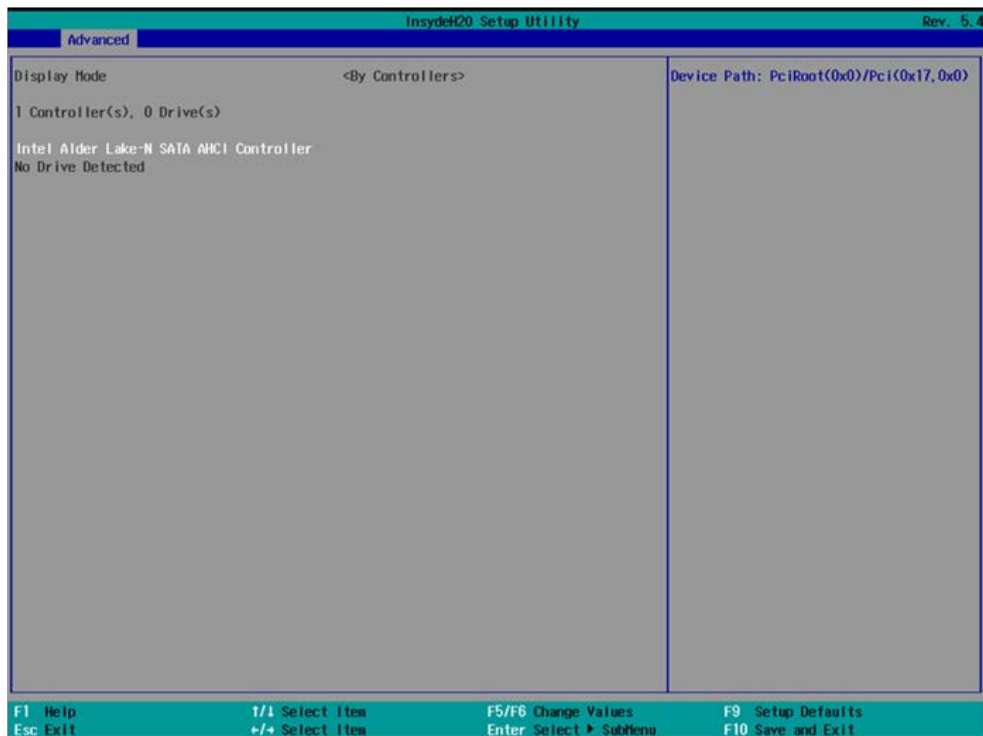


To select Power-on state for NumLock, default is <off>

4-6-3 Advanced Platform Configuration

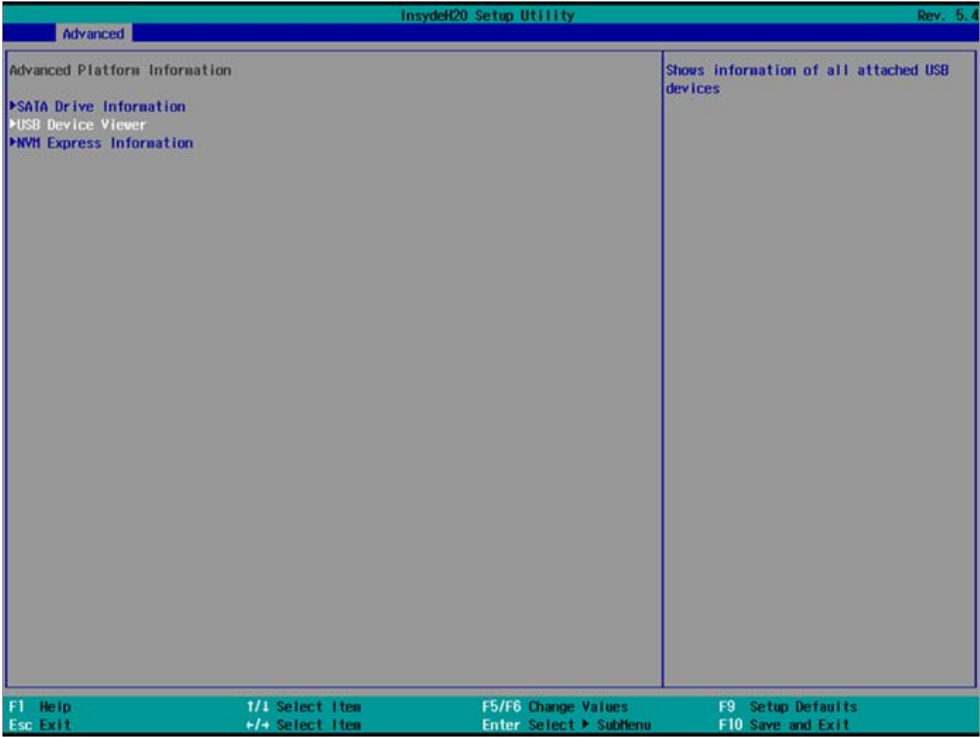
SATA Drive Information

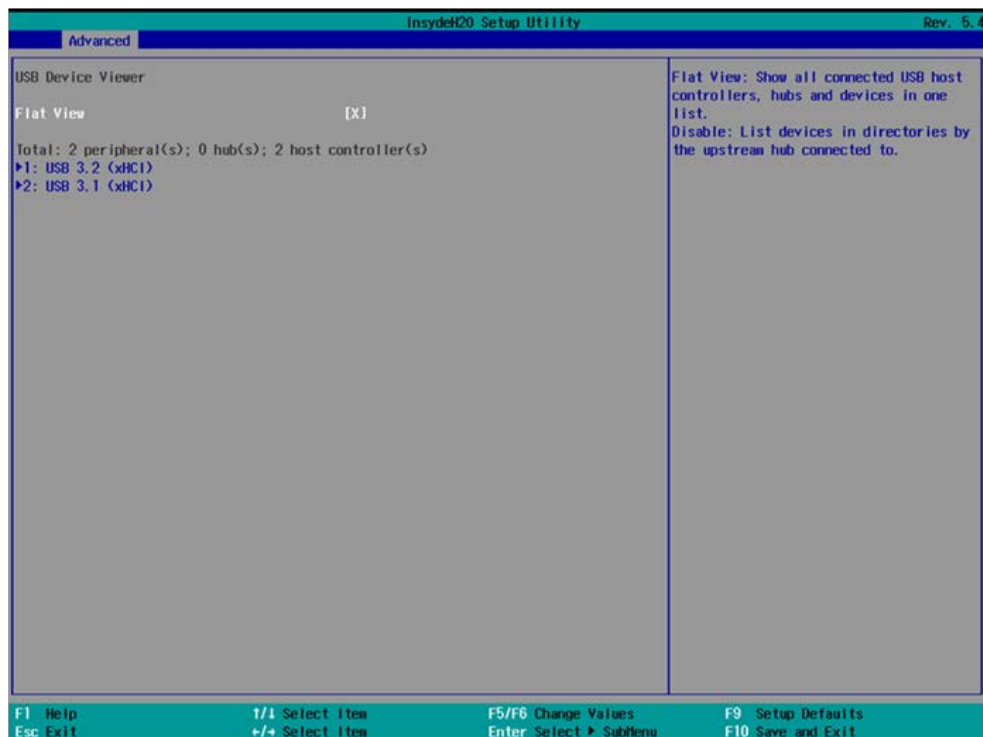




Shows SATA Drive information

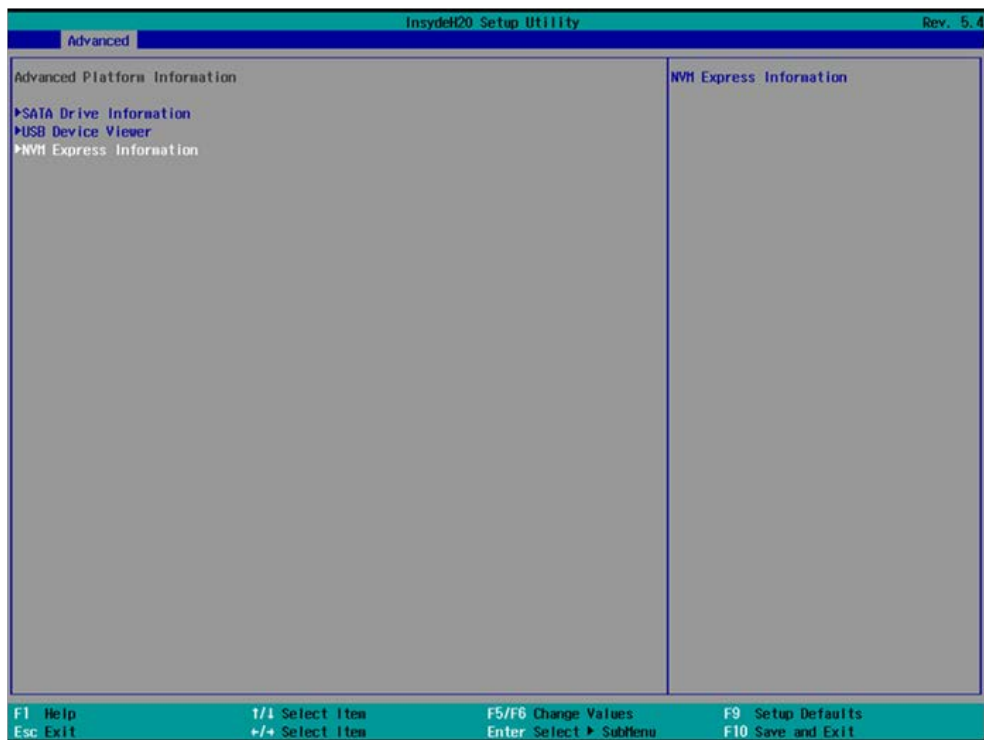
USB Device Viewer





Shows USB Drive information

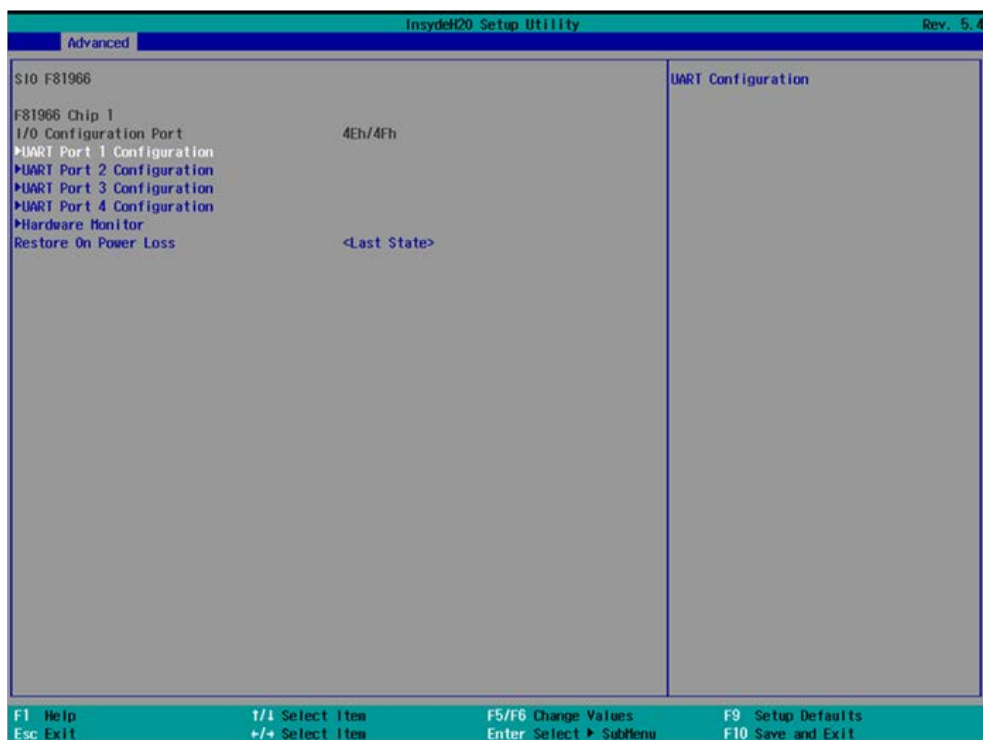
NVM Express Information





Shows NVMe Device information

4-6-4 SIO F81966



UART Port 1 Configuration

Please refer section 4-6-4-1

UART Port 2 Configuration

Please refer section 4-6-4-2

UART Port 3 Configuration

Please refer section 4-6-4-3

UART Port 4 Configuration

Please refer section 4-6-4-4

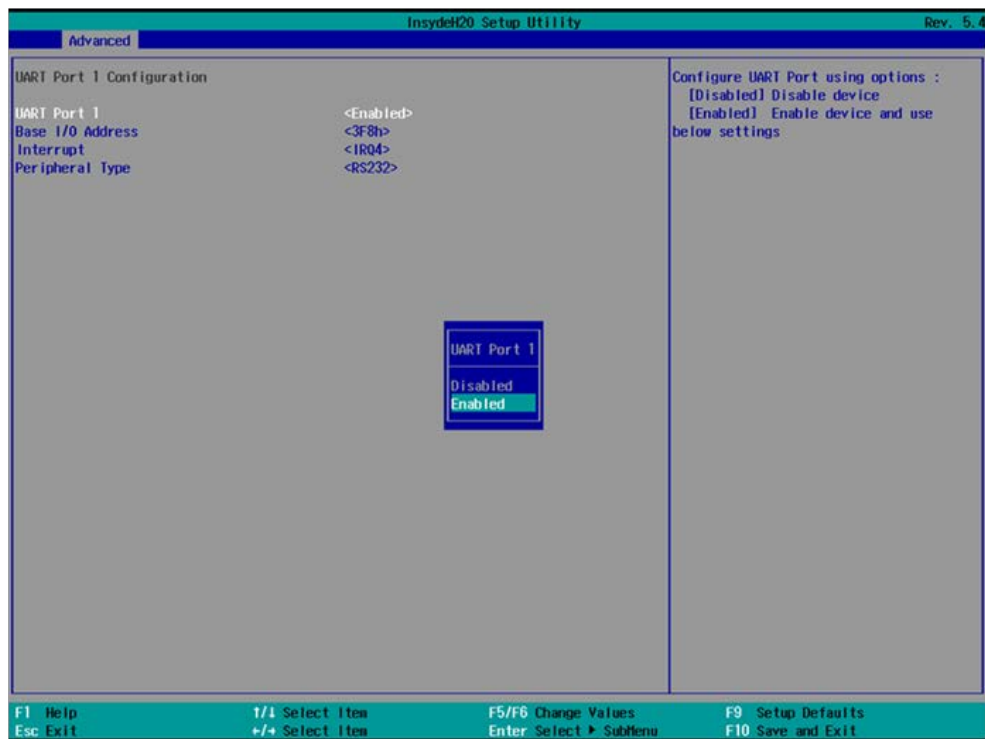
Hardware Monitor

Please refer section 4-6-4-5

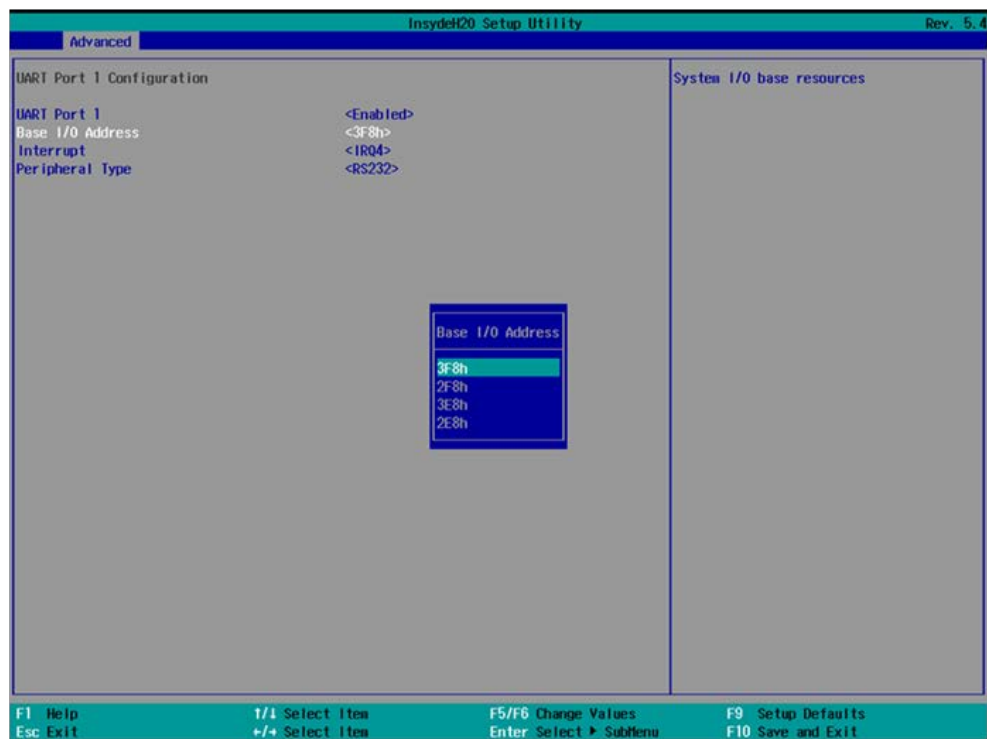
Restore on Power Loss

Please refer section 4-6-4-6

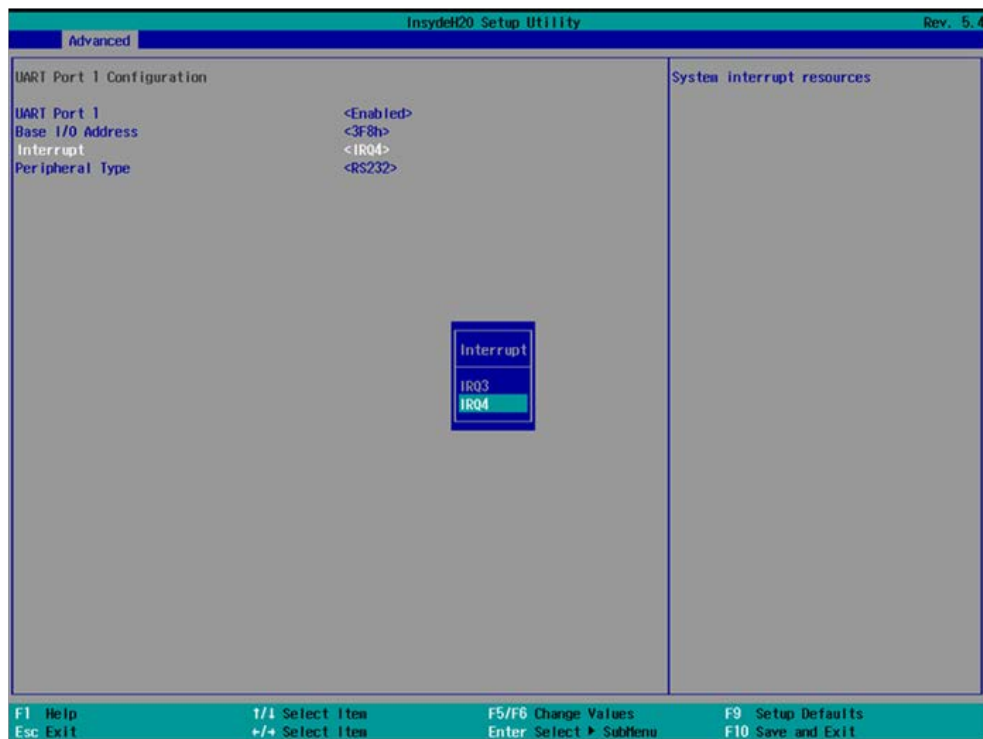
4-6-4-1 ► UART Port 1 Configuration



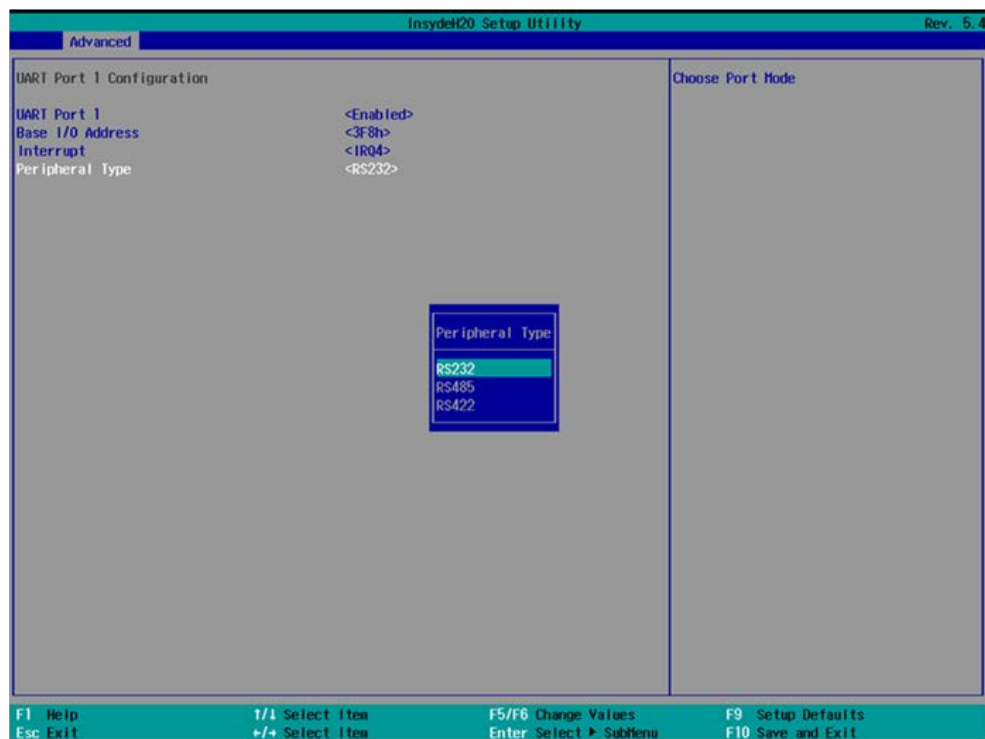
To Enable Serial port or not, default is Enabled.



Base I/O Address, default is 3F8h.

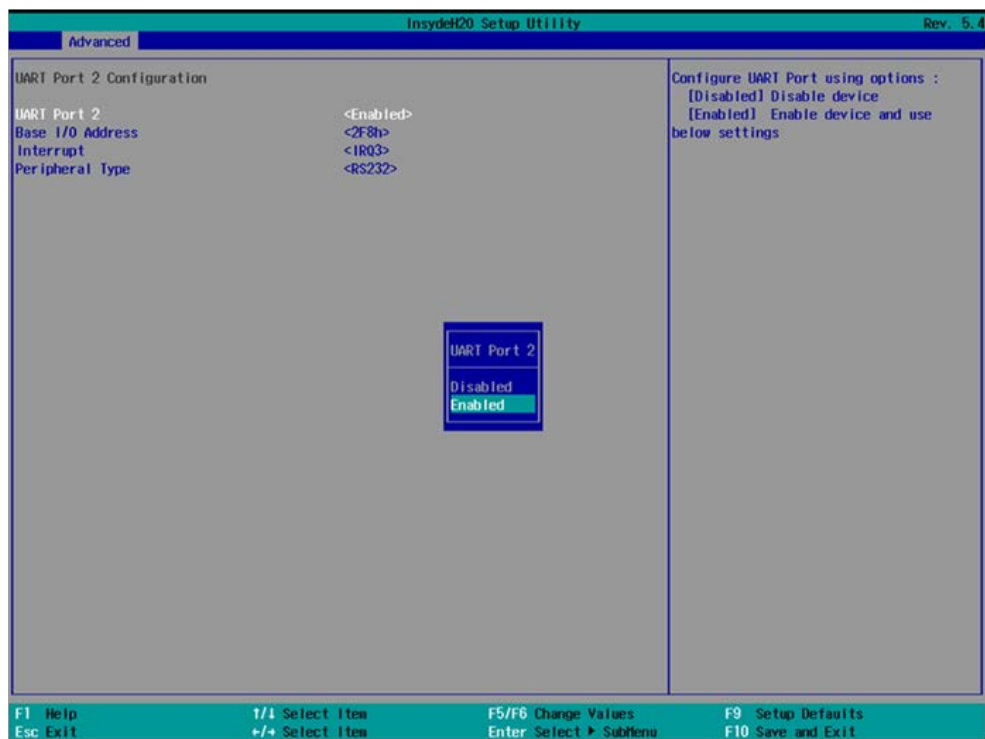


Interrupt, default is IRQ4.

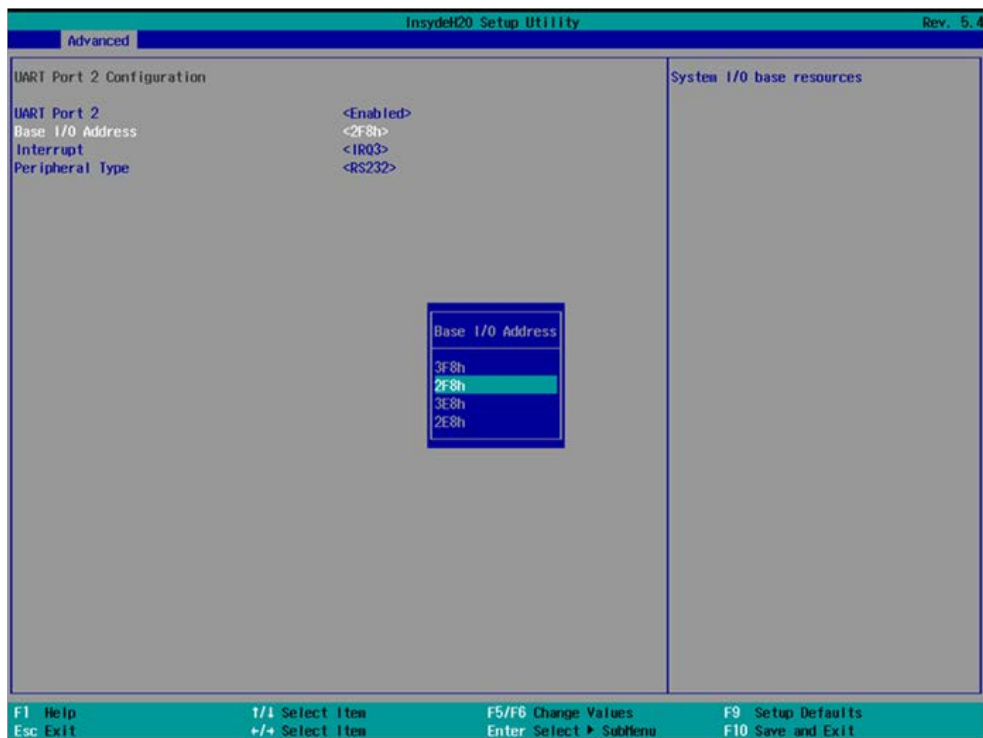


Peripheral, to select the Serial port to RS232 / RS422 / RS485, default is RS232.

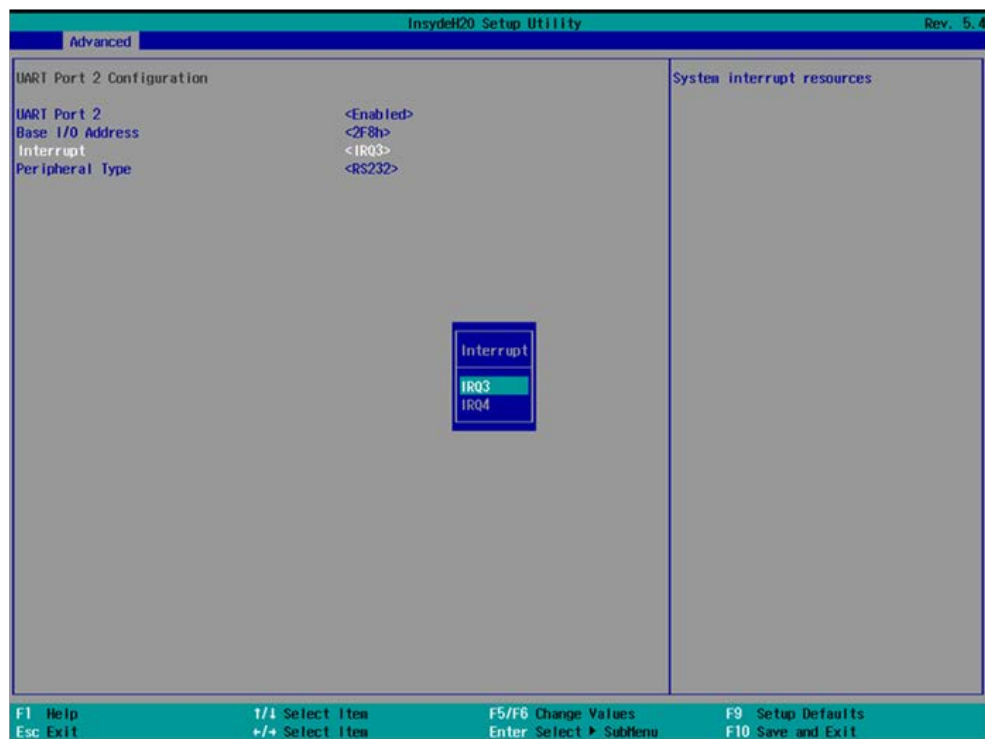
4-6-4-2 ► UART Port 2 Configuration



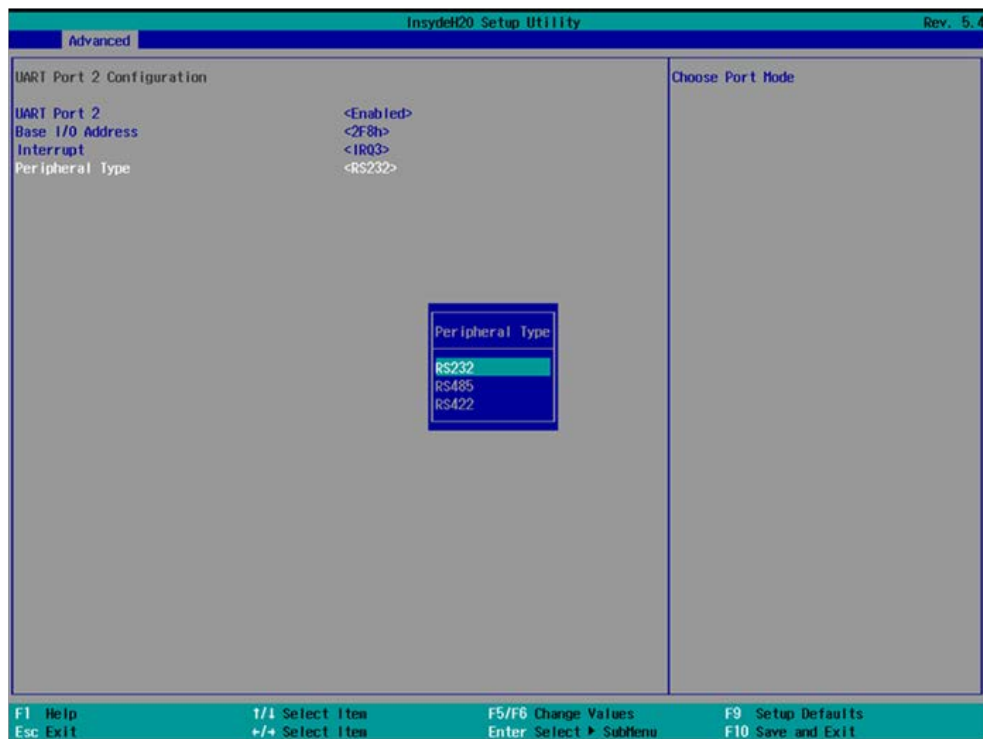
To Enable Serial port or not, default is Enabled.



Base I/O Address, default is 2F8h.

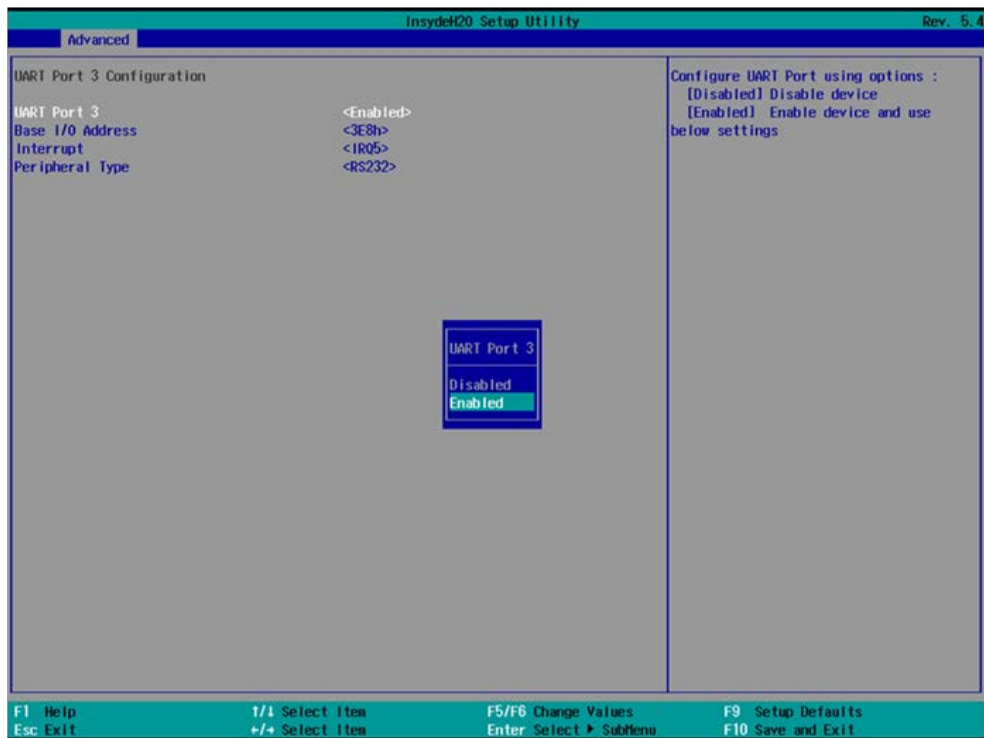


Interrupt, default is IRQ3.

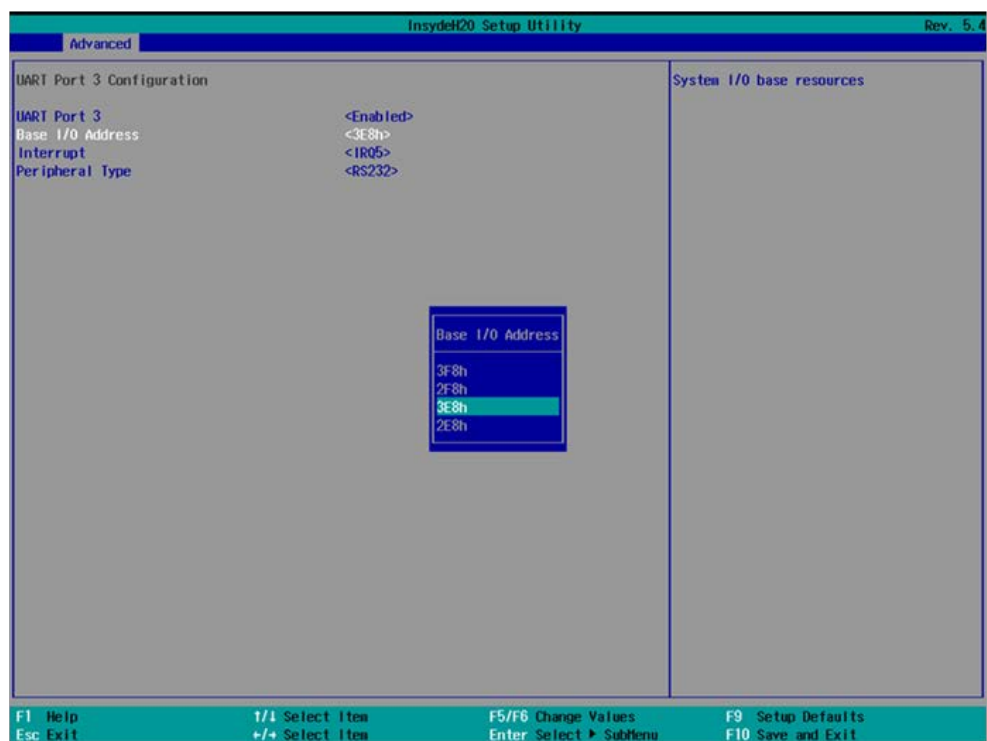


Peripheral, to select the Serial port to RS232 / RS422 / RS485, default is RS232.

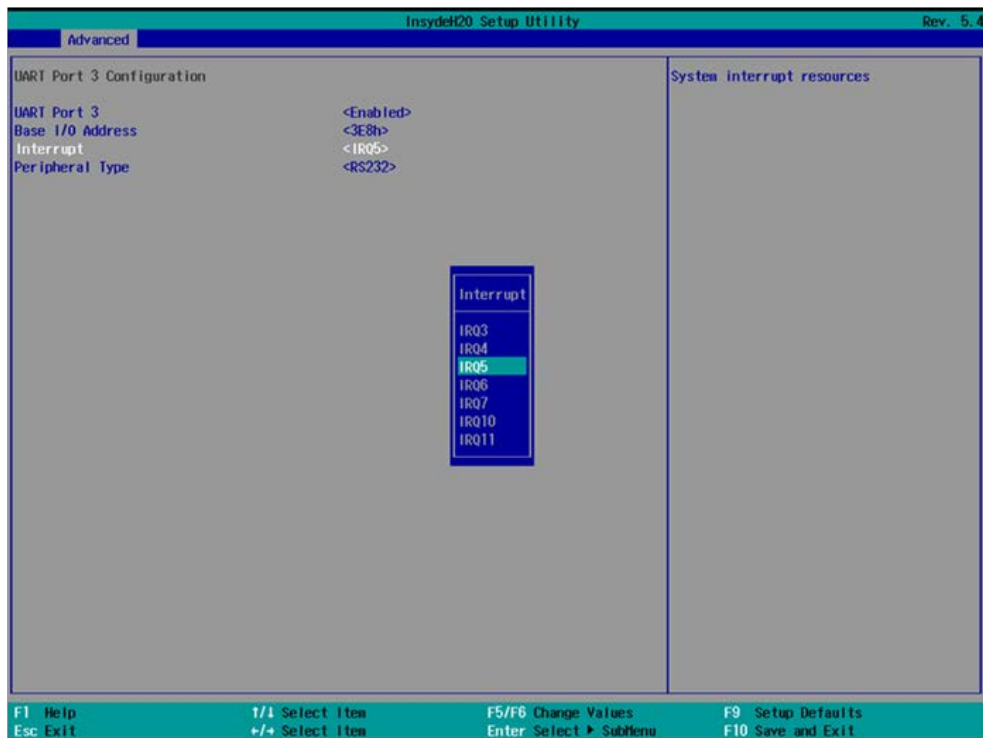
4-6-4-3 ► UART Port 3 Configuration



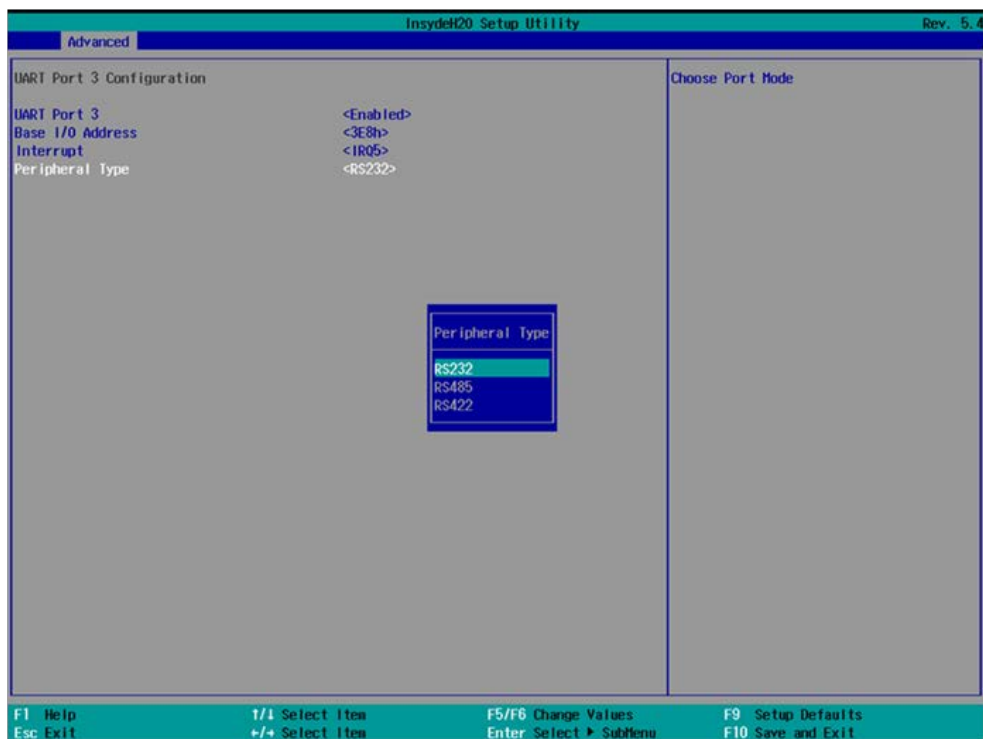
To Enable Serial port or not, default is Enabled.



Base I/O Address, default is 3E8h.

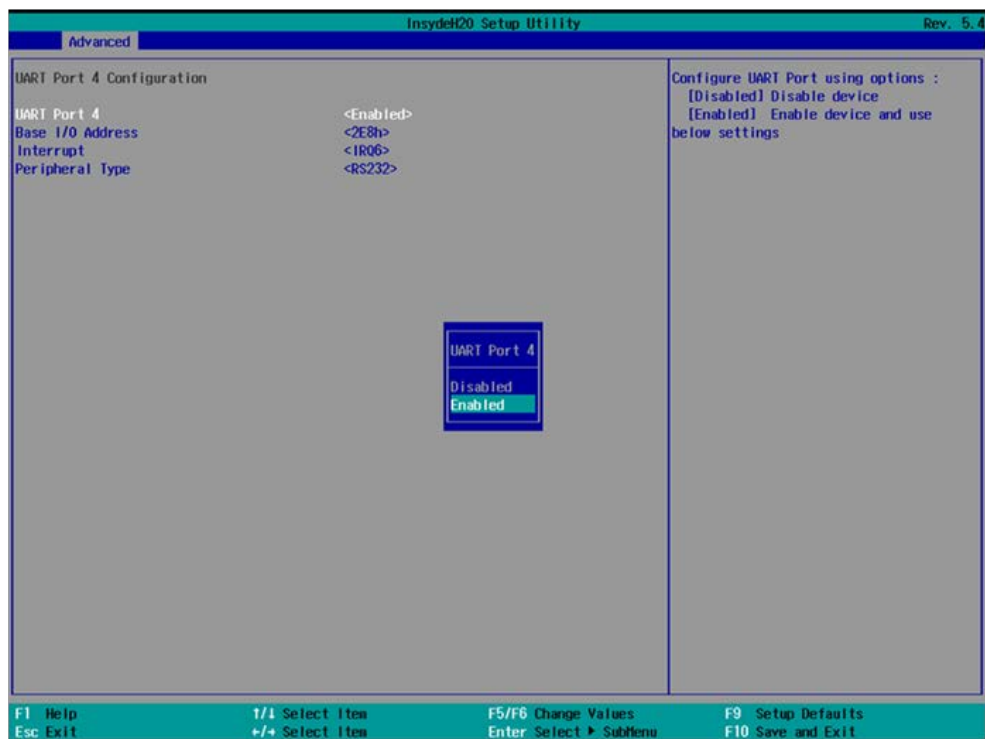


Interrupt, default is IRQ5.

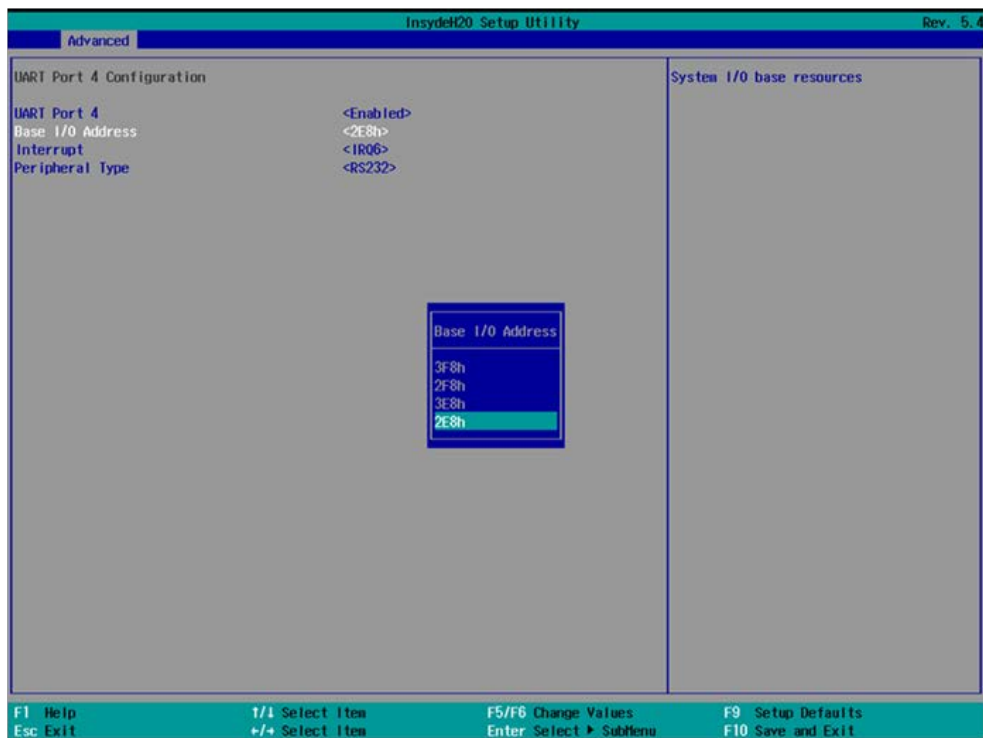


Peripheral, to select the Serial port to RS232 / RS422 / RS485, default is RS232.

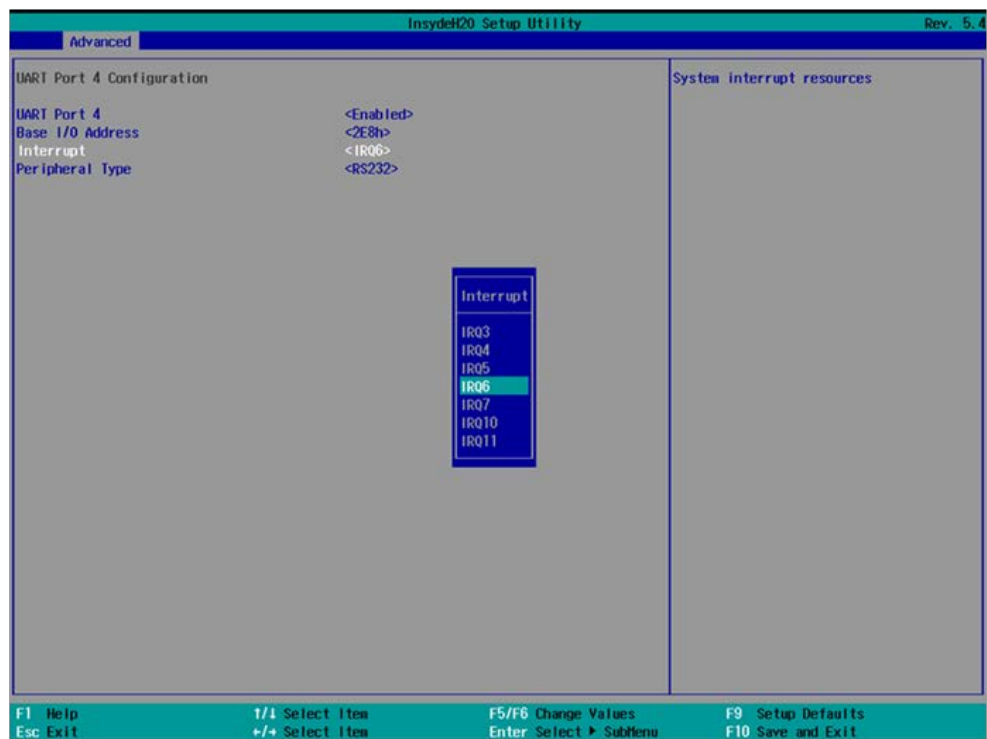
4-6-4-4 ► UART Port 4 Configuration



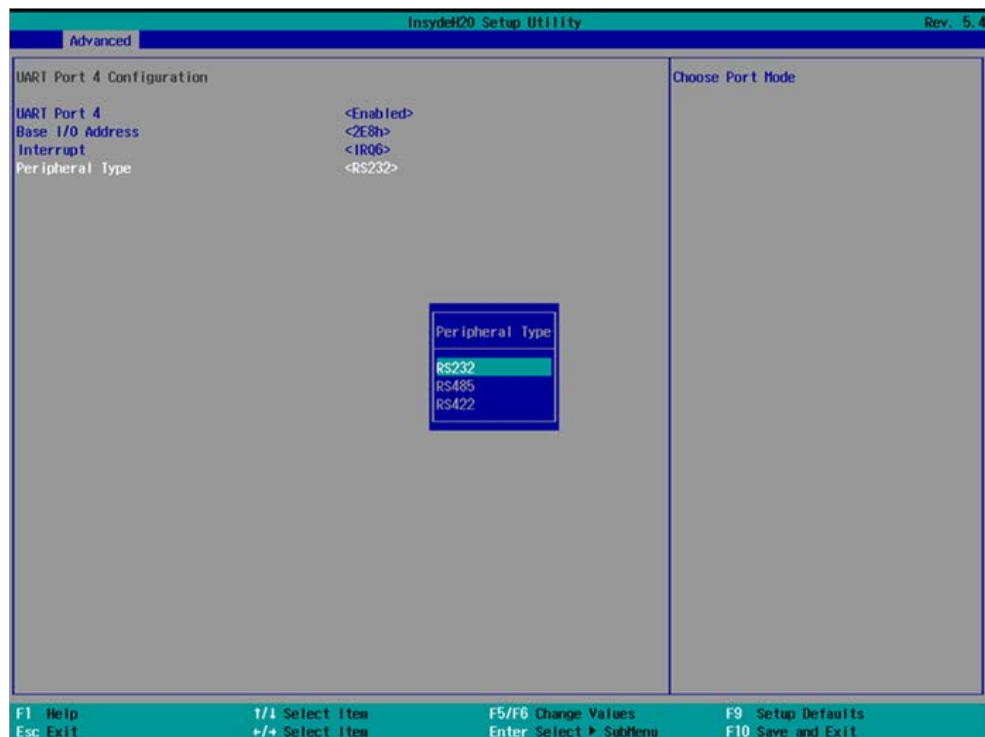
To Enable Serial port or not, default is Enabled.



Base I/O Address, default is 2E8h.

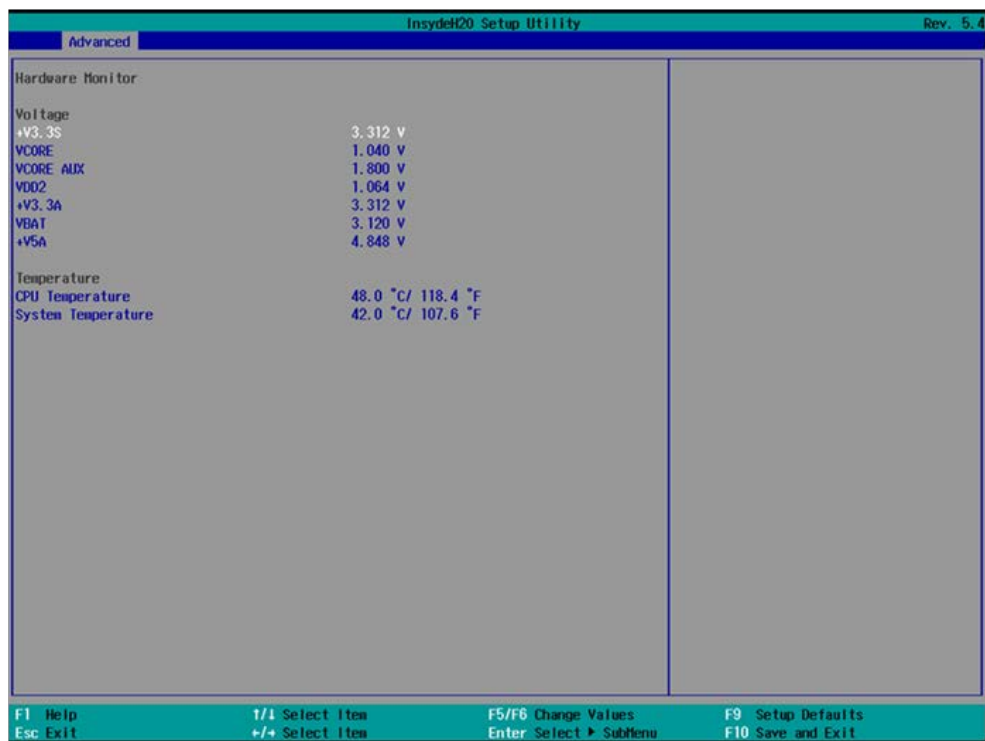


Interrupt, default is IRQ6.



Peripheral, to select the Serial port to RS232 / RS422 / RS485, default is RS232.

4-6-4-5 ► Hardware Monitor

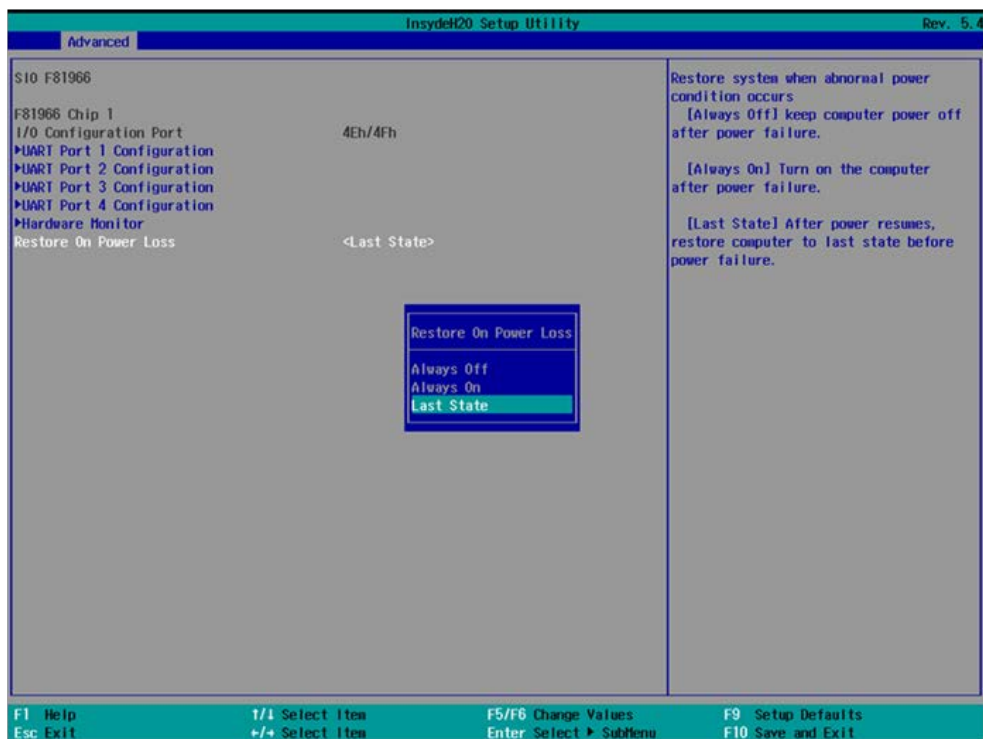


Press [Enter] to view PC health status.

This section shows the status of your CPU, Fan, and overall system.

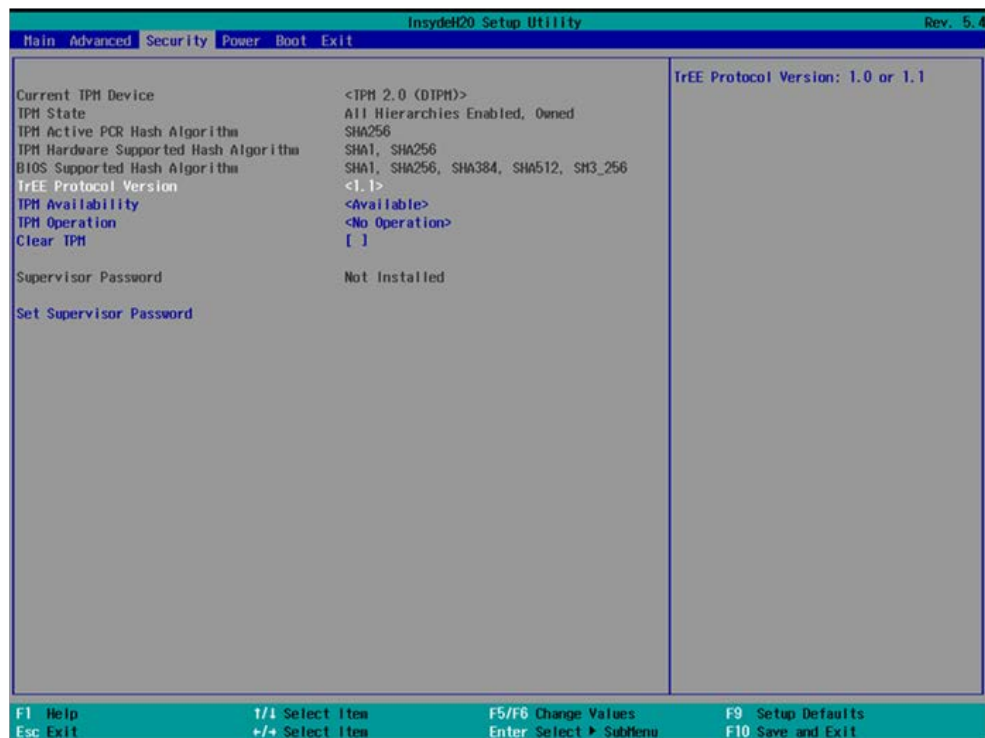
This is only available when there is Hardware Monitor function onboard.

4-6-4-6 Restore On Power Loss

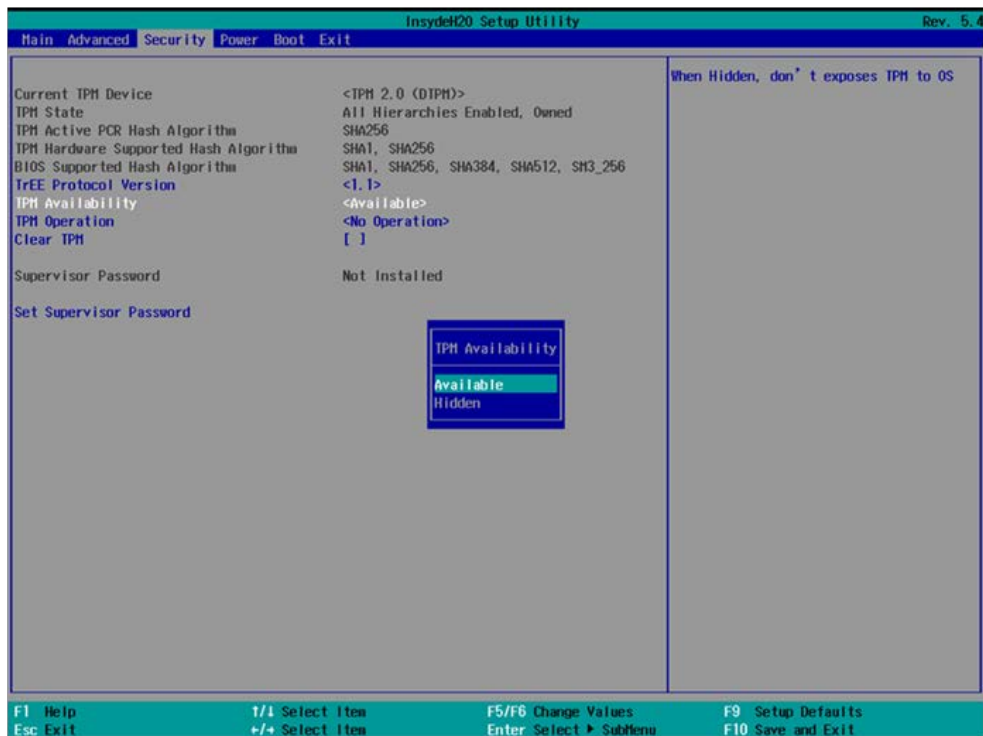


To select the power behavior after power fail, default is Always On.

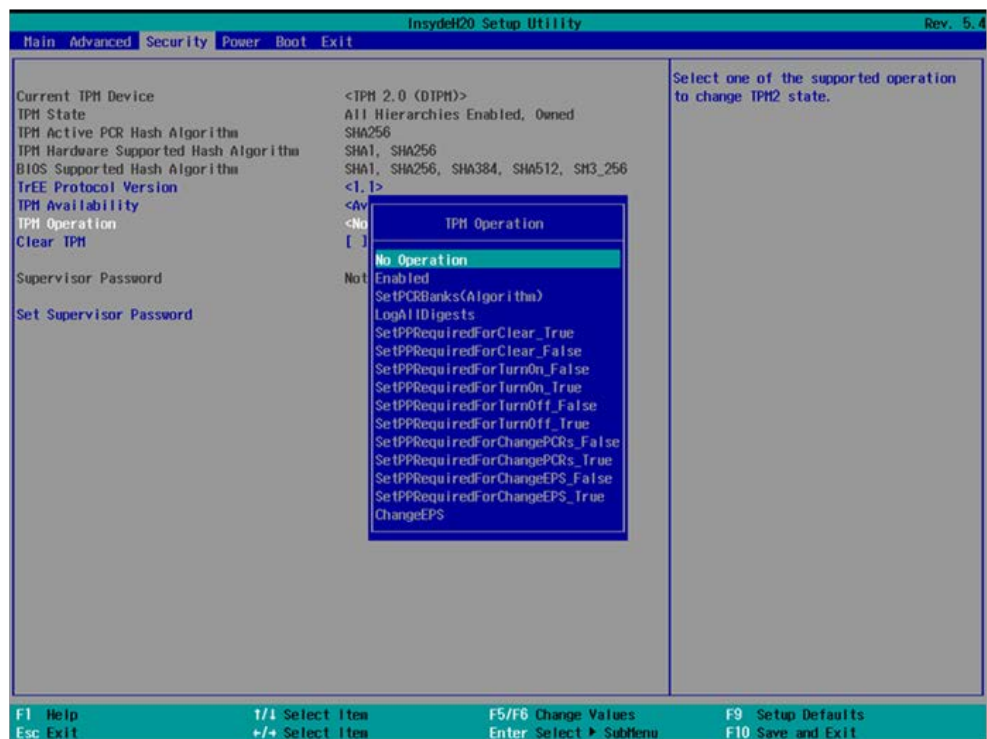
4-7 Security



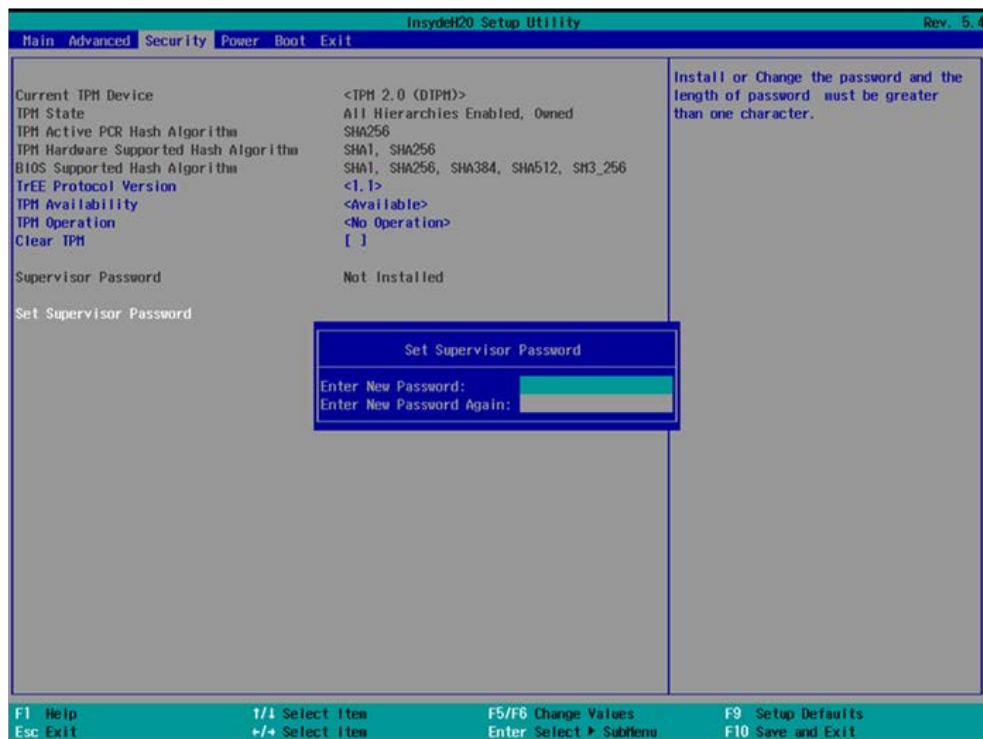
TrEE Protocol Version There are 1.0 and 1.1 versions.



TPM Availability To select TPM available or hidden

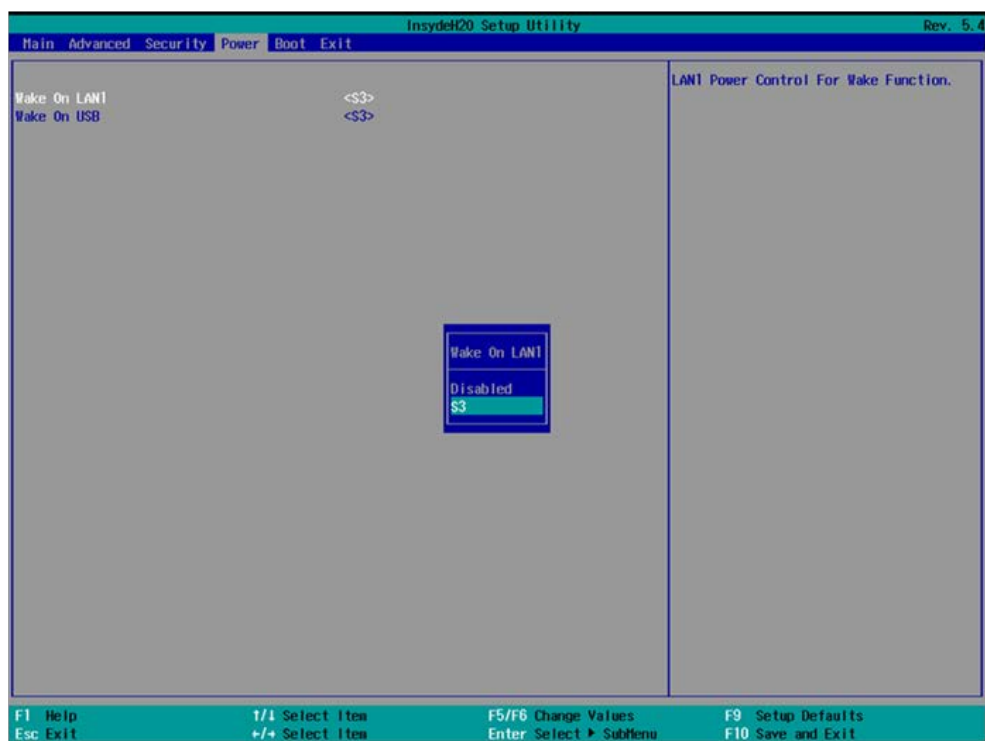


TPM Operation To select TPM operations
 Set Supervisor Password

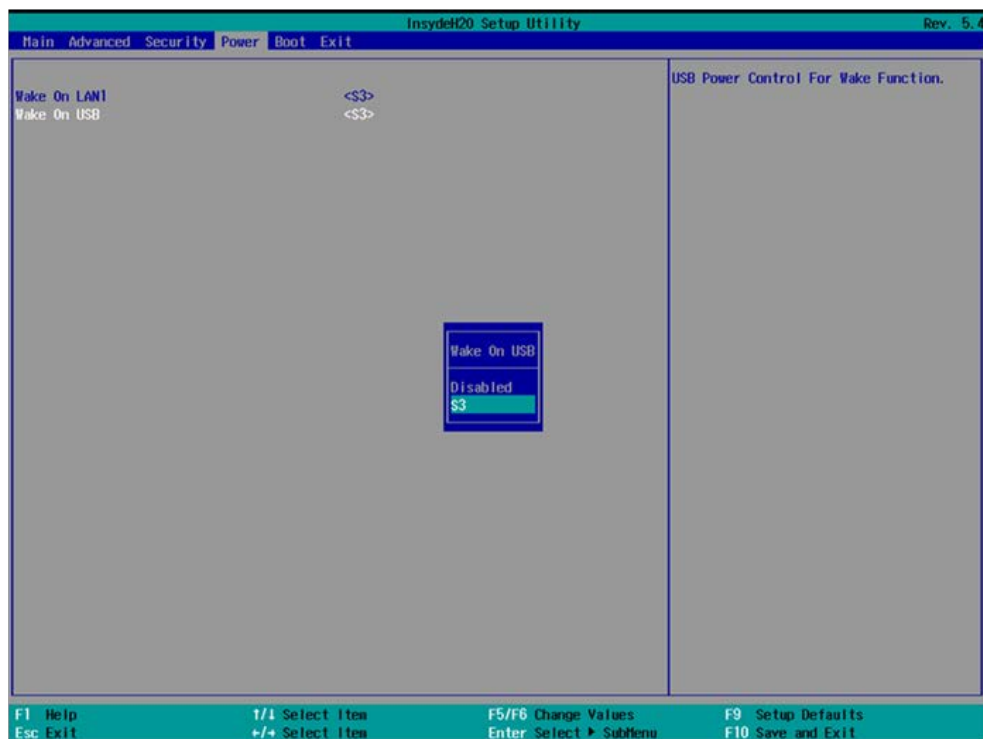


To set up the Supervisor password

4-8 Power

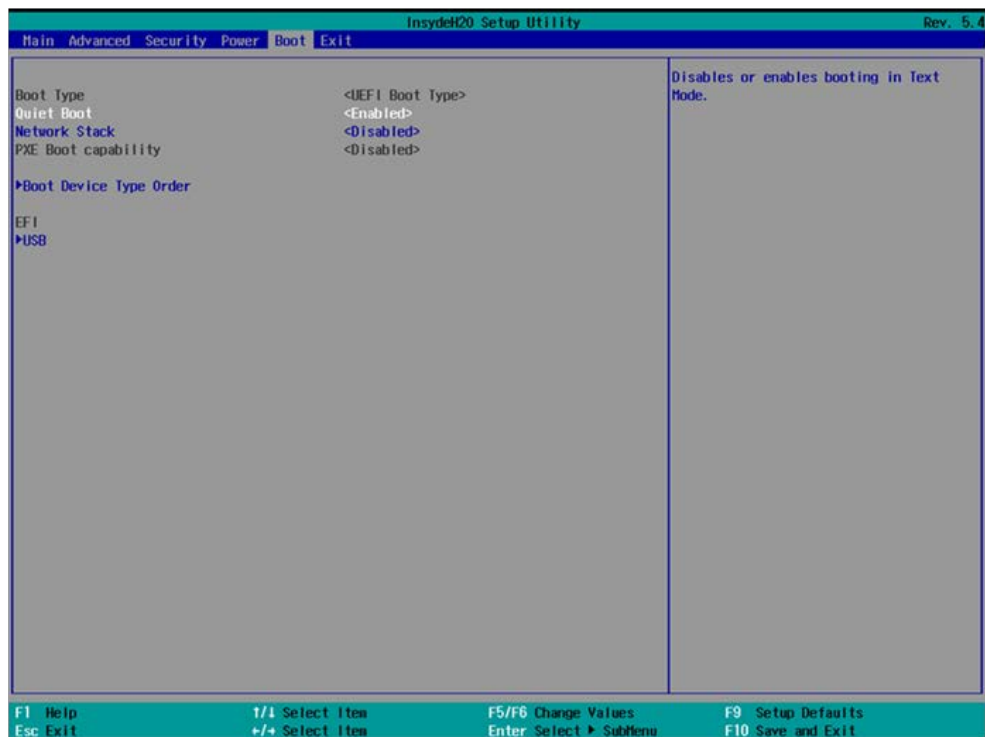


Wake On LAN1 To select S3 wake on LAN1, default is S3.



Wake On USB To select S3 wake on USB, default is S3.

4-9 Boot



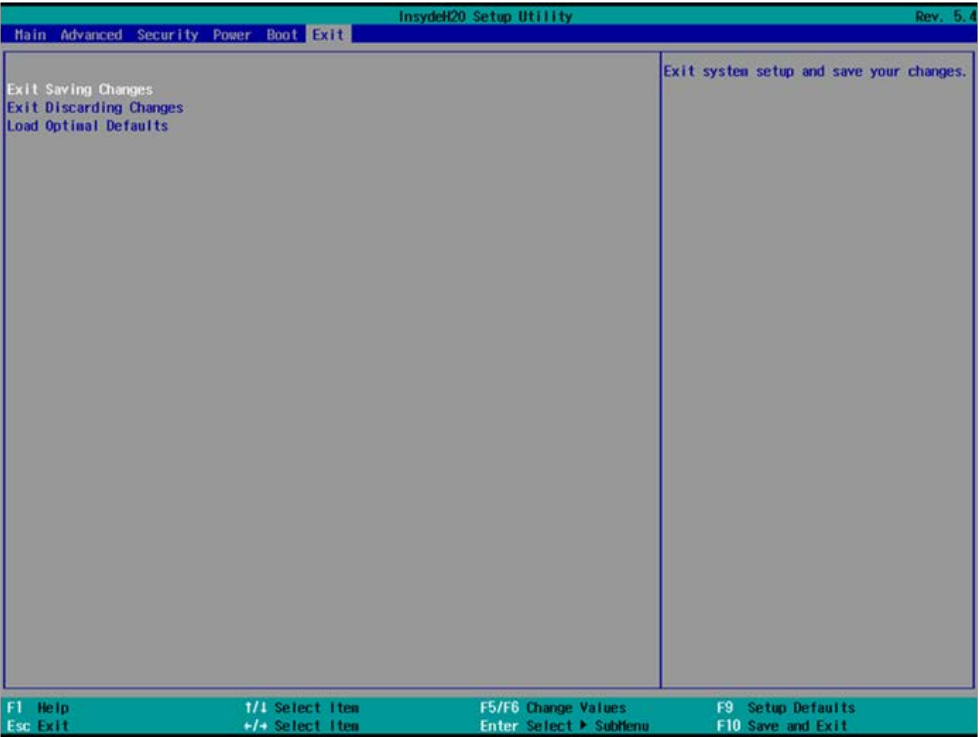
Quiet Boot

The optional settings are: Enabled (default), Disabled.

Network Stack

The optional settings are: Enabled, Disabled (default).

4-10 Save & Exit



Exit Saving Changes

Save configuration and reset

Exit Discarding Changes

Reset without saving the changes

Load Optimal Defaults

To restore the optimal default for all the setup options

4-11 How to update Insyde BIOS

Under DOS Mode

STEP 1. Prepare a bootable disc.

(Storage device could be USB FDD or USB pen drive.)

STEP 2. Copy utility program to your bootable disc. You may download it from our website.

STEP 3. Copy the latest BIOS for your LEX motherboard from our website to your bootable disc.

STEP 4. (Here take 2I740AW as an example, please enter your motherboard's name)

Insert your bootable disc into X: (X could be C:, A: or others.

It depends on which type of storage device you use.)

Start the computer and type

X:\: H2OFFT-D.EXE 2I740AWA2.ROM -BIOS -ALL

2I740AWA2.ROM is the file name of the latest BIOS.

It may be 2I740AWA1.ROM or 2I740AWA2.ROM, etc.

Please leave one space between .ROM & -BIOS -ALL

By Bay Trail series mainboard, please type

X:\: H2OFFT-D.EXE 2I740AWA2.ROM -BIOS -ALL

-BIOS : Flash BIOS region

-ALL : Flash all

STEP 5. Press ENTER and the BIOS will be updated,
Computer will restart automatically.

Appendix B: Resolution list

640 x 480 x (256 / 16bit / 32bit)
800 x 600 x (256 / 16bit / 32bit)
1024 x 768 x (256 / 16bit / 32bit)
1152 x 864 x (256 / 16bit / 32bit)
1280 x 600 x (256 / 16bit / 32bit)
1280 x 720 x (256 / 16bit / 32bit)
1280 x 768 x (256 / 16bit / 32bit)
1280 x 800 x (256 / 16bit / 32bit)
1280 x 960 x (256 / 16bit / 32bit)
1280 x 1024 x (256 / 16bit / 32bit)
1400 x 1050 x (256 / 16bit / 32bit)
1440 x 900 x (256 / 16bit / 32bit)
1600 x 900 x (256 / 16bit / 32bit)
1600 x 1200 x (256 / 16bit / 32bit)
1680 x 1050 x (256 / 16bit / 32bit)
1920 x 1080 x (256 / 16bit / 32bit)
1920 x 1200 x (256 / 16bit / 32bit)