LI1U Series

User's Manual

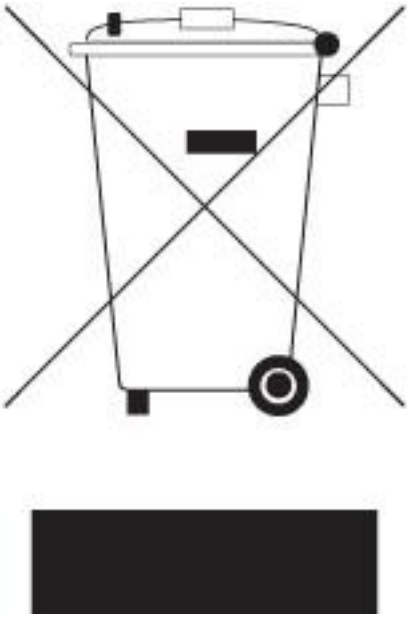
NO. G03-LI1U-F

Revision: 2.0

Release date: December 7, 2022

Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. To minimize pollution and ensure environment protection of mother earth, please recycle.



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Environmental Safety Instruction

- Avoid the dusty, humidity and temperature extremes. Do not place the product in any area where it may become wet.

- 0 to 60 centigrade is the suitable temperature. (The figure comes from the request of the main chipset)

- Generally speaking, dramatic changes in temperature may lead to contact malfunction and crackles due to constant thermal expansion and contraction from the welding spots' that connect components and PCB. Computer should go through an adaptive phase before it boots when it is moved from a cold environment to a warmer one to avoid condensation phenomenon. These water drops attached on PCB or the surface of the components can bring about phenomena as minor as computer instability resulted from corrosion and oxidation from components and PCB or as major as short circuit that can burn the components. Suggest starting the computer until the temperature goes up.

- The increasing temperature of the capacitor may decrease the life of computer. Using the close case may decrease the life of other device because the higher temperature in the inner of the case.

- Attention to the heat sink when you over-clocking. The higher temperature may decrease the life of the device and burned the capacitor.

USER'S NOTICE

Manual Revision Information

Reversion	Revision History	Date
2.0	Second Edition	December 7, 2022

Item Checklist

- ☑ Motherboard
- ☑ Cable(s)
- ☑ I/O Back panel shield

Chapter 1
Introduction of the Motherboard

1-1 Feature of Motherboard

- Onboard AMD™ RYZEN™ V1000/R1000 series Processor, with low power consumption never denies high performance
- Support 2* DDR4 2400MHz SO-DIMM, maximum capacity up to 32GB
- Integrated with 2* Realtek® RTL8111H GbE
- **LI1U-00/02 & LI1U-20/22** series support up to 4*Display Ports ***(*DP0 Co-lay eDP, DP1 Co-lay LVDS)***
- **LI1U-60/62** series support up to 3* Display Ports ***(*DP0 Co-lay eDP, DP1 Co-lay LVDS)***
- Support 2 * SATAIII device & 1* M.2 M-key 2242/2280 slot
- Support 1* M.2 B-key 3042/3052 slot along with 1*Nano SIM holder
- **LI1U-00/02 & LI1U-20/22** series support 1* M.2 E-key 2230 slot
- Support 2* RS232/422/485 COM & 4* RS422 COM
- Support up to 2* USB3.2 (Gen.1) ports & 8* USB2.0 ports
- Support CPU Smart FAN
- Compliance with ErP standard
- Support Watchdog function

1-2 Specifications

Spec	Description
Design	● Mini-ITX form factor; PCB size: 17.0 x 17.0 cm
Embedded CPU	● AMD™ RYZEN™ V1000/R1000 series: ● ***LI1U-00/02***: ***V1807B*** *Quad-Core, 3.35GHz, TDP 45W* ● ***LI1U-20/22***: ***V1605B*** *Quad-Core, 2.0GHz, TDP 15W* ● ***LI1U-60/62***: ***R1305G*** *Dual-Core, 1.5GHz, TDP 8W* **Note:** *CPU model varies from different IPC options. Please consult your dealer for more information of onboard CPU.*
Memory Slot	● 2*DDR4 SO-DIMM slot support 2* DDR4 2400MHz SO-DIMM up to 32GB ● Support dual channel function ***Note:** Memory clock supporting range is decided by specific CPU of the model. For more memory compatibility information please consults your local dealer.*
Storage	● **SATA1/2:** 2* SATAIII port (6 Gb/s, **SATA1** supports SATA DOM) ● **NVM2M:** M.2 M-key 2242/2280 (PCIe x2) slot
Expansion Slot	● **M2B:**M.2 B-key 3042/3052 slot supports 4G/5G module; *co-function with* ***SIMCARD***) ***Note:** **LI1U-00/02 & LI1U-20/22** series support* USB3.1/USB2.0/PCIex1; ***LI1U-60/62** series support* USB3.1/USB2.0 only. ● **SIMCARD:** Nano-SIM card slot;co-function with **M2B slot** ● ***M2E*:** M.2 E-key 2230 slot supports WiFi/BT module ***Note:** **M2E** slot is only available to **LI1U-00/02 & LI1U-20/22** series* ● **J4:** *1* PCIE x 8 interface slot for **LI1U-00/02 & LI1U-20/22** series* *1* PCIE x 4 interface slot for **LI1U-60/62** series*
LAN Chip	● Integrated with 2* Realtek RTL8111H Gigabit LAN chips ● Support Fast Ethernet LAN function of providing 10/100/1000Mbps Ethernet data transfer rate
Audio Chip	● Integrated with Realtek HD audio chip ● Support 3W Amplifier
BIOS	● AMI 64Mb Flash ROM
Rear I/O	● 1* 12V~28V DC-in power jack ● 4* Display ports for ***LI1U-00/02 & LI1U-20/22*** *series*

	● 3* Display ports for ***LI1U-60/62*** *series* ● 2* RJ-45 LAN ports ● 2* USB 3.2 (Gen.1) ports ● 2* USB 2.0 ports ● 2* RS232 Serial ports **(COM12)** ● 1*3-phone audio jack(Line-In + Line-Out +MIC)
Internal I/O	***Connectors*** ● 1*4-pin internal 12V~28V DC-in power connector ● 1*4-pin SATA power connector ● 1* Internal vertical USB 2.0 port **(FP_USB2)** ● 1* CPU fan connector ● 1* System fan connector ● 1* EDP connector(****EDP; by order***) ***Headers & Wafers:*** ● 1* Front panel header**(JW_FP)** ● 1* PS2 KB/MS header ● 1* Front panel audio header ● 1* 3W amplifier wafer**(SPEAK_CON)** ● 2* 9-pin USB 2.0 header for 4* USB 2.0 ports **(FP_USB1/3)** ● 1* 4-pin USB 2.0 wafer for 1* USB 2.0 port **(FP_USB4)** ● 4* RS232 serial port header ● 2* TX_RXCOM header ● 1*16-bit GPIO header ● 1*24-bit Dual Channel LVDS header(****LVDS1; by order***) ● 1* LVDS inverter wafer(****INVERTER1; by order***) ● 1*LVDS panel brightness adjustment wafer ***(*JP6; by order I)***
TPM 2.0	● *Optional to* ***LI1U-02/ LI1U-22/LI1U-62*** *series*

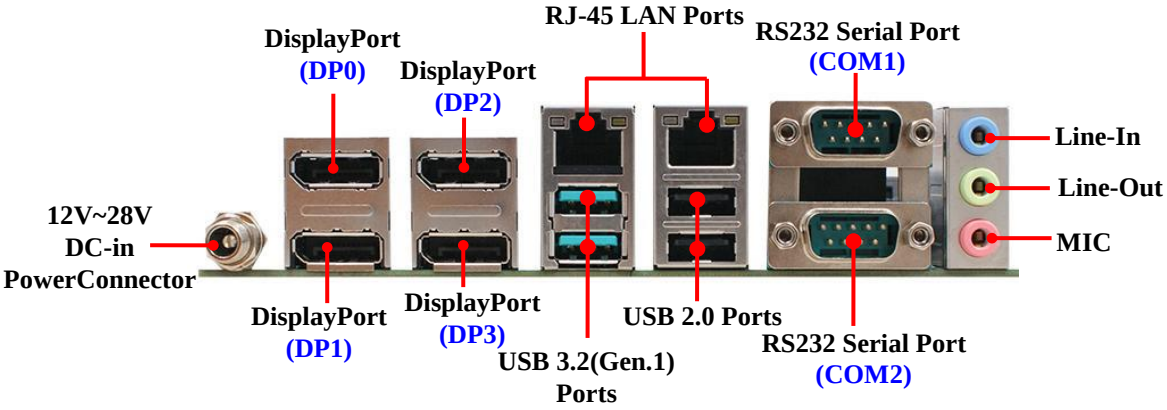
Note:** This manual serves as a general manual for **LI1U** series, which include different models. **Their main differences are listed as below:

Model	***CPU***	***Rear I/O DP support***	***Multi-Display Support***	***M2E Slot***	***J4: PCIEX8 Slot***
LI1U-00/02	*V1807B*	*4* DP*	*4*	*Yes*	*PCIe x8 interface*
LI1U-20/22	*V1605B*	*4* DP*	*4*	*Yes*	*PCIe x8 interface*
LI1U-60/62	*R1305G*	***3* DP***	***3***	***N/A***	***PCIe x4** interface*

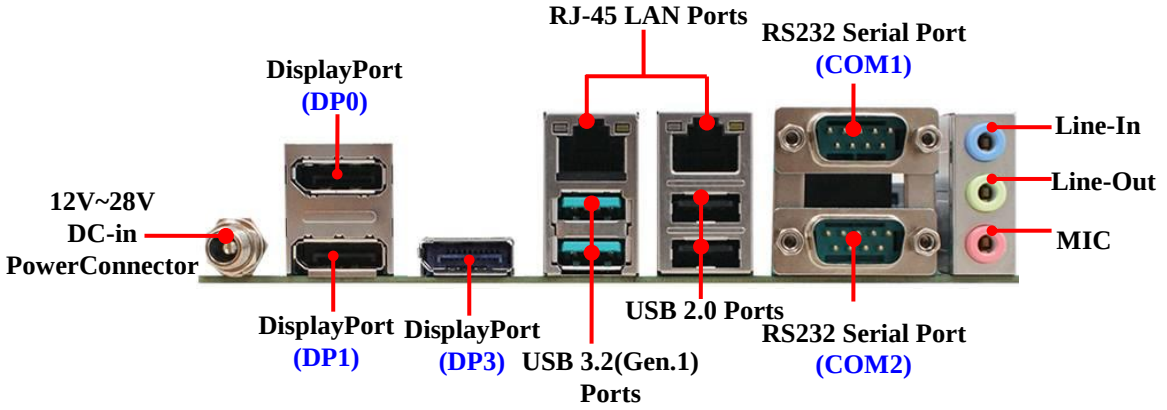
1-3 Layout Diagram

Rear IO Diagram

For LI1U-00/02 &LI1U-20/22 Series:



For LI1U-60/62 Series:

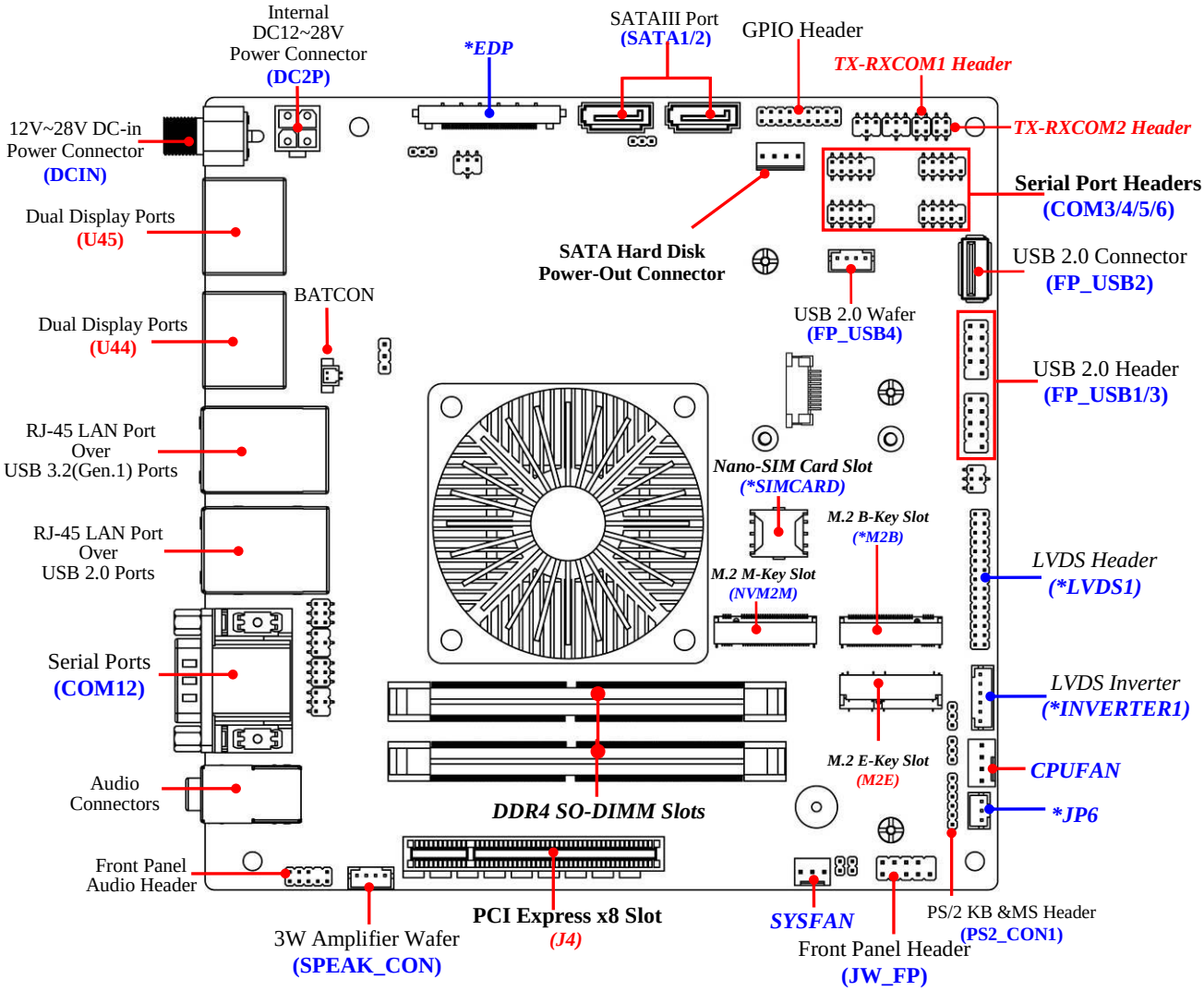


Warning!!

The board has a 12~28V DC-in power connector **(DCIN)** in I/O back panel and an internal 12~28V power connector **(DC2P).** User can **only** connect one type of compatible power supply to one of them to power the system.

Motherboard Internal Diagram-1

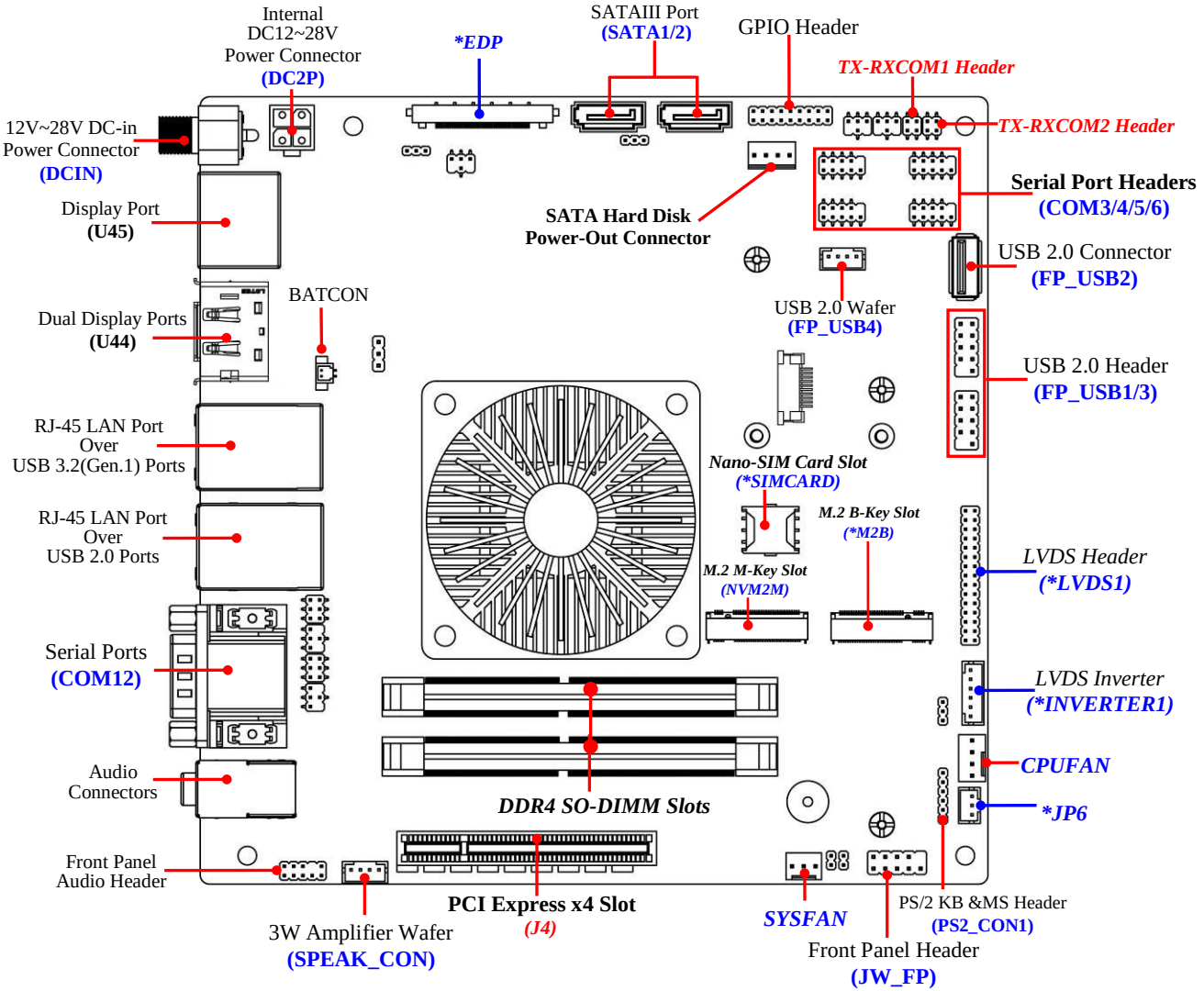
For LI1U-00/20 Series:



***Note:** **EDP** and **LVDS1, INVERTER1 & JP6** are only optional by order; please refer to product you purchased for actual specifications.*

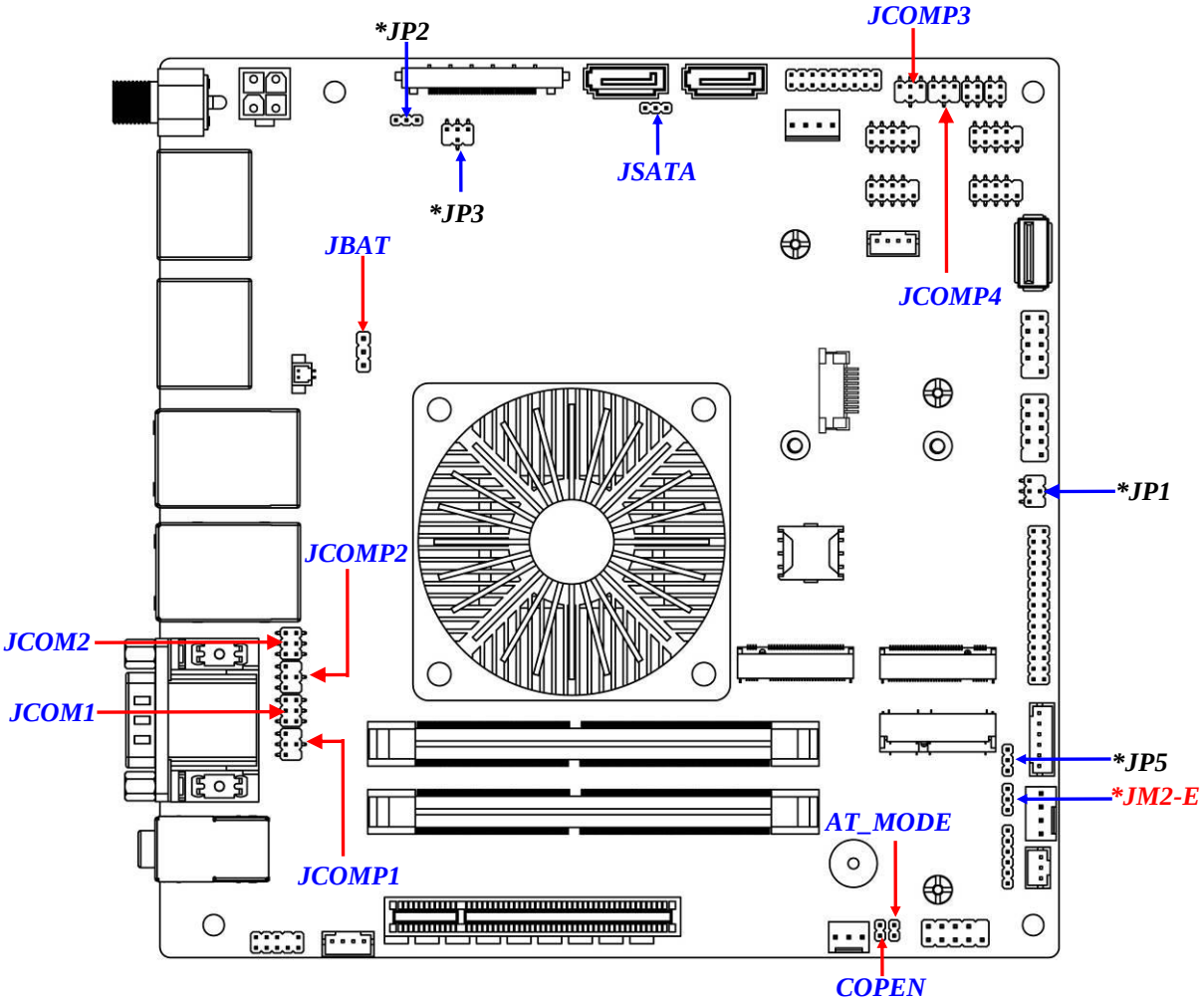
Motherboard Internal Diagram-2

For LI1U-60 Series:



***Note:** **SIMCARD** slot only work when compatible Nano-SIM card installed & 4G/5G LAN card installed in **M2B** slot.*

Motherboard Jumper Locations



***Note:** **1.**The other diagrams for illustration in this common manual is the same as the above diagram (for **LI1U-00** series), unless otherwise stated. **2. JM2-E, JP5 & JP1** and **JP2 & JP3** are only optional by order; please refer to product you purchased for actual specifications.*

Jumper

Jumper	Name	Description	Pitch
JCOMP1	COM1 Port Pin9 Function Select	4-Pin Block	2.0mm
JCOMP2	COM2 Port Pin9 Function Select	4-Pin Block	2.0mm
JCOMP3	COM3 Header Pin9 Function Select	4-Pin Block	2.0mm
JCOMP4	COM4 Header Pin9 Function Select	4-Pin Block	2.0mm
JCOM1	COM1 Port RS232/RS485/RS422 Select	6-Pin Block	2.0mm
JCOM2	COM2 Port RS232/RS485/RS422 Select	6-Pin Block	2.0mm
JBAT	CMOS RAM Clear Function Setting	3-Pin Block	2.54mm
JSATA	SATA1 DOM/SATA Select	3-Pin Block	2.0mm
***JM2-E**	M.2 E-key Slot Power VCC Select	3-Pin Block	2.0mm
COPEN	Case Open Message Display Function	2-Pin Block	2.0mm
AT_MODE	ATX/AT Mode Select	2-Pin Block	2.0mm
***JP5**	LVDS Backlight Power VCC Select	3-Pin Block	2.0mm
***JP1**	LVDS Power VCC Select	4-Pin Block	2.0mm
***JP2**	EDP Backlight VCC Select	3-Pin Block	2.0mm
***JP3**	EDP LCD_VCC Select	4-Pin Block	2.0mm

Note:

1. ***JM2-E** is only optional to **LI1U-00/02 & LI1U-20/22** series with **M2E** slot.*
2. ***JP5 & JP1** and **JP2 & JP3** are only optional to customized models; please refer to product you purchased for actual specifications.*

Connectors

P/N	Name
DCIN	12V~28V DC–in Power Jack
U45	*Dual Display Ports*
U44 for LI1U-00/20 Series	*Dual Display Ports*
U44 for LI1U-60 Series	*Single Display Port*
UL1	***Top:** RJ-45 LAN Port* ***Middle & Bottom:*** USB 3.2(Gen.1) Port

LAN_USB20	***Top:*** *RJ-45 LAN Port* ***Middle & Bottom:*** USB 2.0 Port
COM12	***RS232 Serial Port***
AUDIO	***Top:*** *Line-in Connector* ***Middle:*** *Line-out Connector* ***Bottom:*** *MIC Connector*
DC2P	Internal 12V~28V DC–in Power Connector
SATA1/2	SATAIII 6G/s Connectors
SATAPW	SATA Power Out Connector
SYSFAN	System Fan Connector
CPUFAN	CPU Fan Connector
FP_USB2	Internal Vertical USB 2.0 port Connector
****EDP***	EDP Connector

Headers & Wafers

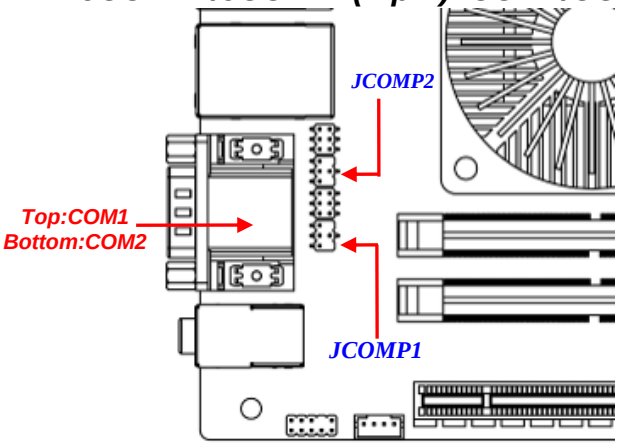
P/N	Name	Description	Pitch
JW_FP	Front Panel Header(PWR LED/ HD LED/Power Button /Reset)	9-pin Block	2.54mm
PS2_CON1	PS2 Keyboard & Mouse Header	6-pin Block	2.0mm
FP_AUDIO	Front Panel Audio Header	9-pin Block	2.0mm
SPEAK_CON	3W Amplifier Wafer	4-pin Block	2.0mm
FP_USB1/FP_USB3	USB 2.0 Port Headers	9-pin Block	2.54mm
F_USB4	USB 2.0 Port Wafer	4-pin Block	2.0mm
TX-RXCOM1/ TX-RXCOM2	RS422/RS485 Headers	4-pin Block	2.0mm
COM3/4/5/6	Serial Port Headers	9-pin Block	2.54mm
GPIO_CON	16-bit GPIO Header	18-pin block	2.0mm
****LVDS1***	LVDS Port Header	30-pin Block	2.0mm
****INVERTER1***	LVDS Inverter Wafer	6-pin Block	2.0mm
****JP6***	LVDS Panel Brightness Adjustment Wafer	3-pin Block	2.0mm

***Note:** **EDP** and **LVDS1, INVERTER1 & JP6** are only optional to customized models; please refer to product you purchased for actual specifications.*

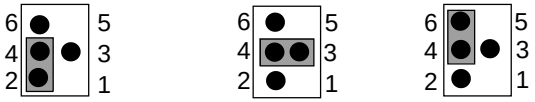
Chapter 2
Hardware Installation

2-1 Jumper Settings

JCOMP1/JCOMP2(4-pin): COM1/COM2 Port Pin9 Function Select(pitch 2.0mm)

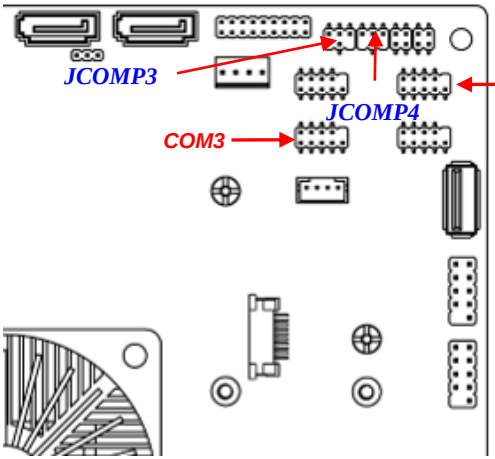


JCOMP1→COM1 Port Pin9 Function Select
JCOMP2→COM2 Port Pin9 Function Select

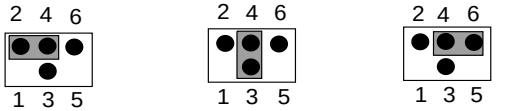


2-4 Closed:	3-4 Closed:	6-4 Closed:
RI=RS232;	RI= +5V;	RI = +12V.

JCOMP3/JCOMP4(4-pin):COM3/COM4 Header Pin9 Function Select(pitch 2.0mm)

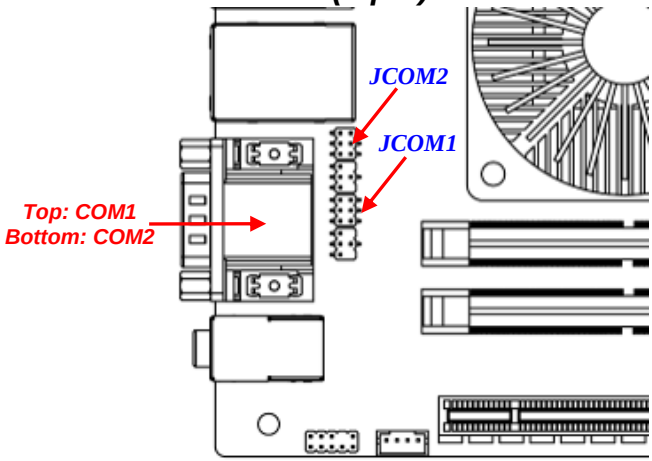


JCOMP3 → COM3 Header Pin-9
JCOMP4 → COM4 Header Pin-9

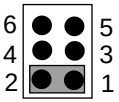


2-4 Closed:	3-4 Closed:	4-6 Closed:
PIN9=RS232;	PIN9=+5V;	PIN9=+12V

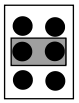
JCOM1/JCOM2 (6-pin):COM1/2 Port RS232/485/422 Function Select(pitch 2.0mm)



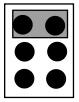
JCOM1→COM1 RS232/422/485 Select
JCOM2→COM2 RS232/422/485 Select



1-2 Closed: RS232;



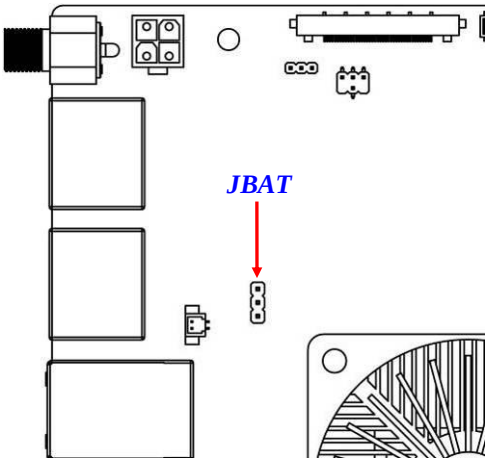
3-4 Closed: RS485;



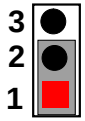
6-4 Closed: RS422.

***Note:** **COM1** RS485/RS422 function is extended on **TX_RXCOM1** header and realized by **JCOM1** jumper selection and **BIOS settings**; after **JCOM1** selection made, user also needs to enter BIOS settings '**Advanced Menu'** → '**Serial Port 1 Configuration**'→ '**Transmission Mode Select**' and set it as **[RS232], [RS232] or [RS485]** mode.*
***COM2** RS485/RS422 function is extended on **TX_RXCOM2** header (refer to **Page-25**), function setting procedures are basically the same.*

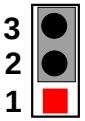
JBAT (2-pin): Clear CMOS setting (pitch 2.54mm)



JBAT→Clear CMOS

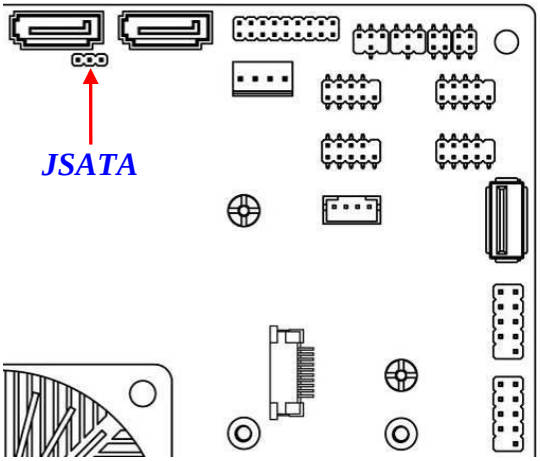


1-2 Closed: Normal(Default);

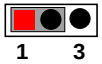


2-3 Closed: Clear CMOS.

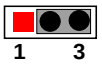
JSATA (3-pin): SATA1 DOM Select (pitch 2.0mm)



JSATA →SATA1 Function Select

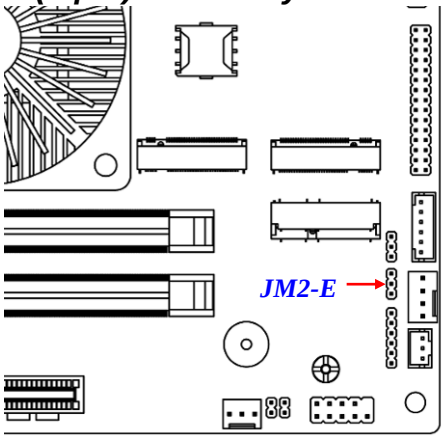


1-2 Closed: SATA1=VCC5 (SATA DOM);



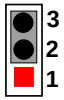
2-3 Closed: SATA1=GND(SATA).

JM2-E (3-pin): M.2 E-key Power Voltage Select (pitch 2.0mm)



JM2-E →M.2 E-key Voltage Select

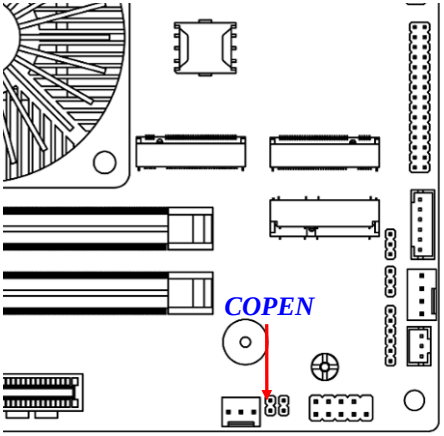
1-2 Closed: VCC= VCC3;



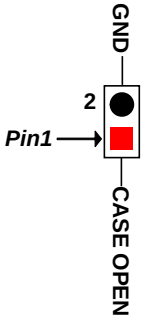
2-3 Closed: VCC= 3VSB.

***Note:** **JM2-E** is only optional to **LI1U-00/02 & LI1U-20/22** series with **M2E** slot.*

COPEN(2-pin): Case Open Message Display Function Select (pitch 2.0mm)

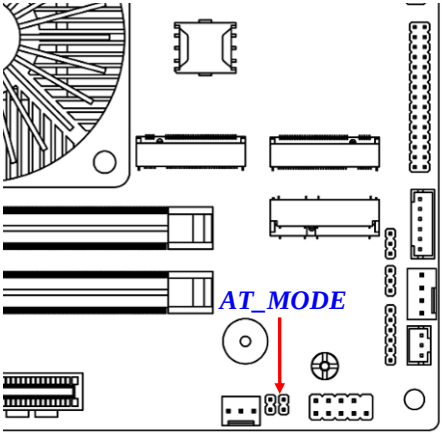


COPEN → Case Open Detection

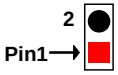


Pin (1-2) Short: *When Case open function pin short to GND, the Case open function was detected. When used, needs to enter BIOS and enable '**Case Open Detect**' function. In this case if your case is removed, next time when you restart your computer, a message will be displayed on screen to inform you of this.*

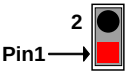
AT_MODE (2-pin): ATX Mode/AT Mode Select *(pitch 2.0mm)*



AT_MODE
→ ATX/AT Mode Select



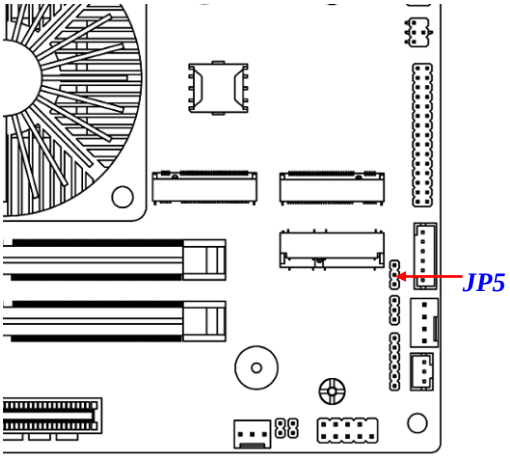
1-2 Open: ATX Mode Selected(Default);



1-2 Closed: AT Mode Selected.

- ***ATX Mode Selected**: Press power button to power on after power input ready;*
- ***AT Mode Selected:** Directly power on as power input ready.*

*JP5 (3-pin): LVDS Backlight VCC Select (pitch 2.0mm)

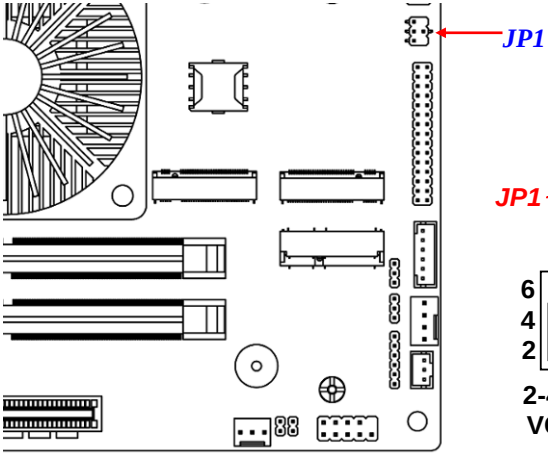


JP5→LVDS Inverter Backlight VCC Select

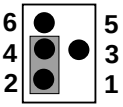
1-2 Closed:
VCC= +5V;

2-3 Closed:
VCC= +12V.

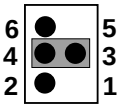
*JP1 (4-pin): LVDS Power VCC Select (pitch 2.0mm)



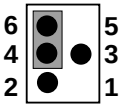
JP1→LVDS Power VCC Select



2-4 Closed:
VCC=3.3V;



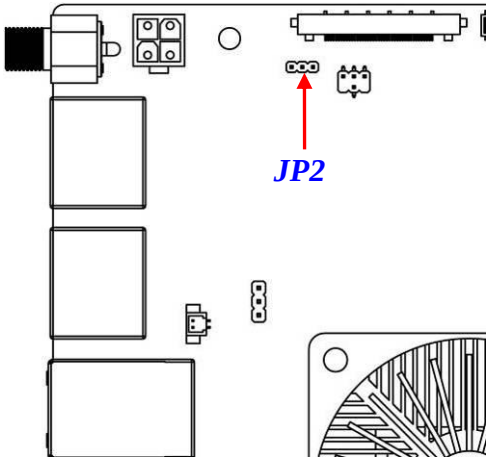
3-4 Closed:
VCC=5V;



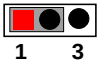
6-4 Closed:
VCC=12V.

*Note: **JP5 & JP1** are only optional to customized models with **LVDS & INVERTER**.*

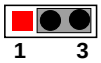
*JP2 (3-pin): EDP Backlight VCC Select (pitch 2.0mm)



JP2→EDP Backlight VCC Select

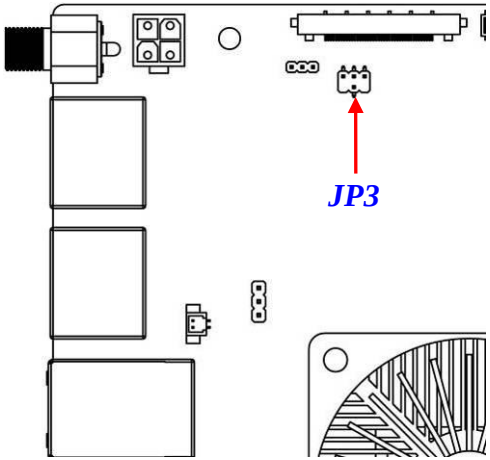


1-2 Closed: VCC=+5V;

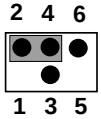


2-3 Closed: VCC=+12V.

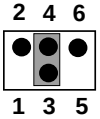
*JP3 (4-pin): EDP LCD_VCC Select (pitch 2.0mm)



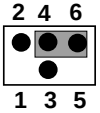
JP3→ EDP LCD_VCC Select



2-4 Closed: VCC=3.3V;



3-4 Closed: VCC=5V;



4-6 Closed: VCC=12V.

***Note:** **JP2 & JP3** are only optional to customized models with **EDP** connector.*

2-2 Connectors, Wafers and Headers

2-2-1 Connectors

(1) Rear I/O Panel Connectors

**** Refer to Page-4 Rear IO Diagram.***

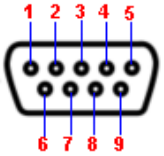
Icon	Name	Function
	**12~28V DC-in Power Jack**	For user to connect compatible power adapter to provide power supply for the system.
	**Display Port**	To the system to corresponding display device with compatible display port cable.
	**RJ-45 LAN Port**	This connector is standard RJ-45 LAN jack for Network connection.
	**USB 3.2 (Gen.1) Port**	To connect USB keyboard, mouse or other devices compatible with USB specification. USB 3.2 (Gen.1) port supports up to 5Gbps data transfer rate.
	**USB 2.0 Port**	To connect USB keyboard, mouse or other devices compatible with USB 2.0 specification.
	**RS232 Serial Port**	Mainly for user to connect external MODEM or other devices that supports Serial Communications Interface.
	**Audio Connector**	**BLUE:** Line-in Connector **GREEN**: Line-out Connector **PINK :** MIC Connector

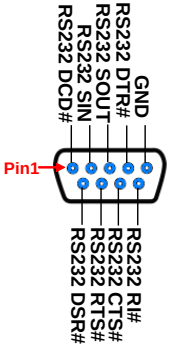
(2) COM12 (9-pin block): COM1 & COM2 Serial Port

In normal settings COM1/COM2 functions as RS232 port. With compatible COM cable they can function as RS422 or RS 485 port.

The pin assignment for **COM1 & COM2** RS232 function is listed as follows:

RS232 Mode:

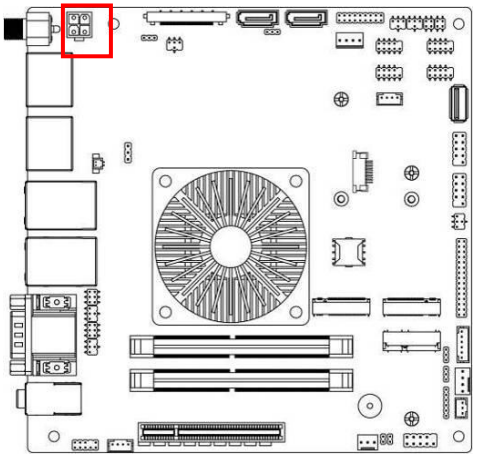


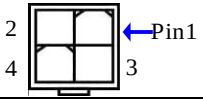


***Note:** **COM1** RS485/RS422 function is extended on **TX_RXCOM1** header and realized by **JCOM1** jumper selection and **BIOS settings**; after **JCOM1** selection made, user also needs to enter BIOS settings '**Advanced Menu**' → '**Serial Port 1 Configuration**'→ '**Transmission Mode Select**' and set it as **[RS232], [RS232] or [RS485]** mode.*

***COM2** RS485/RS422 function is extended on **TX_RXCOM2** header (refer to **P-25**), function setting procedures are basically the same.*

(3) DC2P(4-pin block): Internal 12~28V DC-IN Power Connector

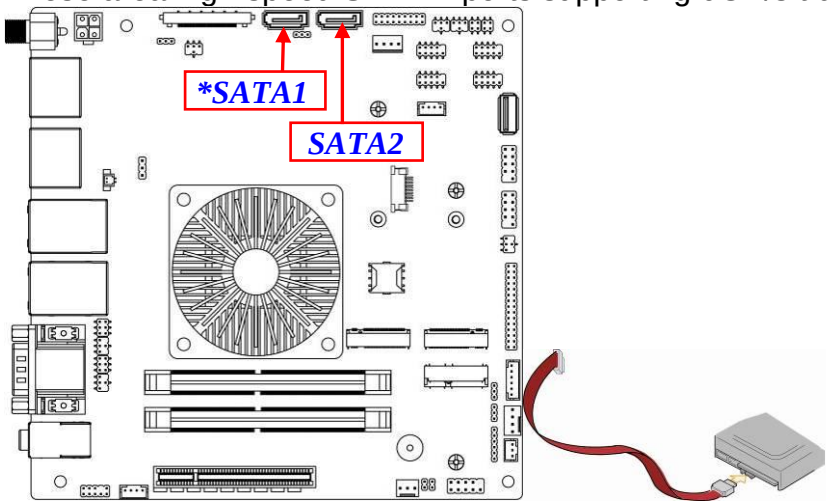




Pin No.	Definition
1	GND
2	GND
3	+12~28 V
4	+12~28 V

(4) SATA1/SATA2 (7-pin block):SATAIII Port connector

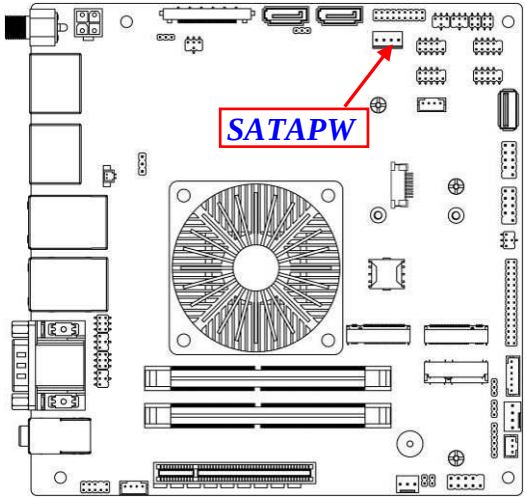
These area high-speed SATAIII ports supporting 6GB/s transfer rate.

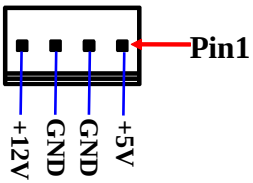


Pin No.	Definition
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

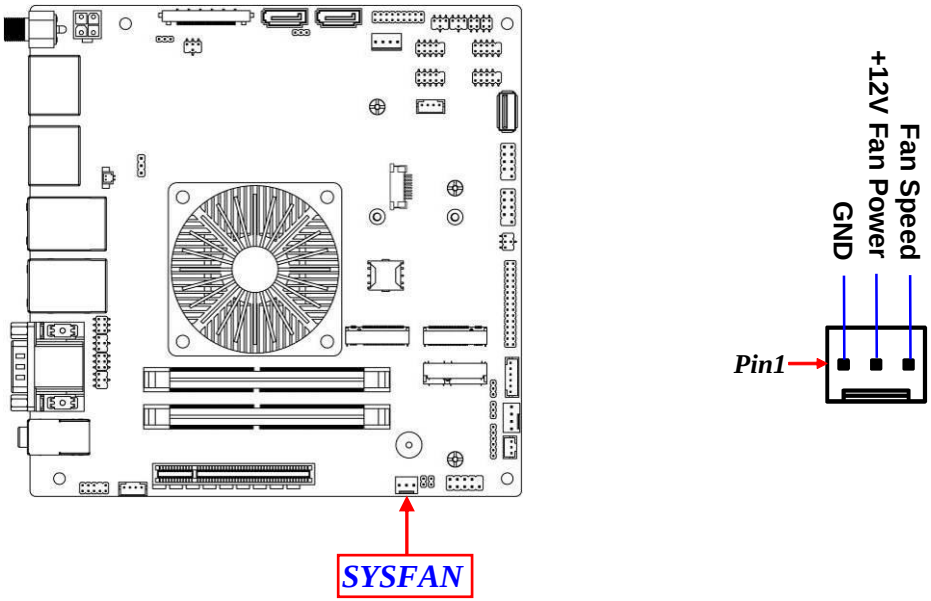
***Note:** **SATA1** port supports SATA DOM via **JSATA** jumper settings.*

(5) SATAPW (4-pin): SATA HDD Power-out Connector *(pitch 2.54mm)*

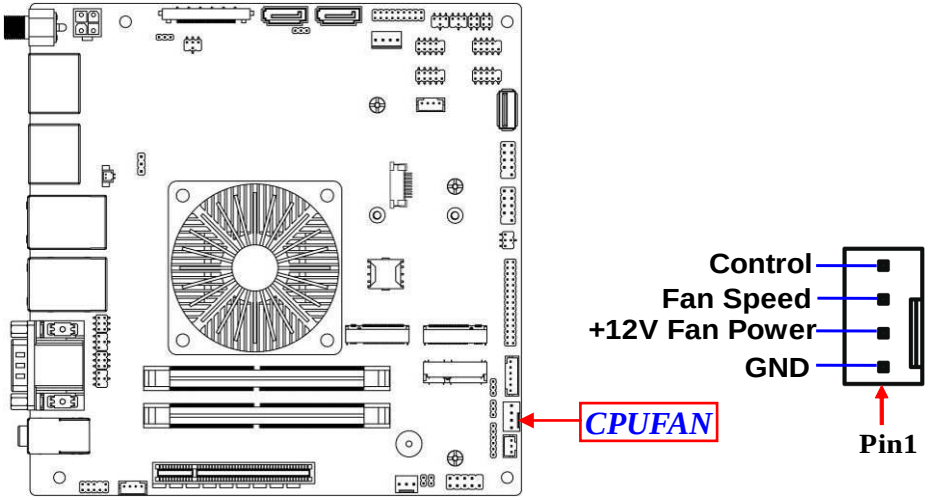




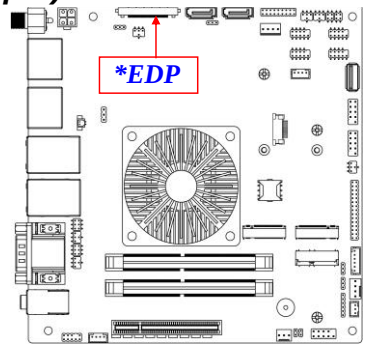
SYSFAN (3-pin): System FAN Connector *(pitch 2.54mm)*

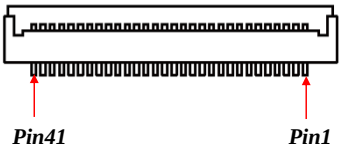


(6) CPUFAN (4-pin) (3-pin): CPU FAN Connector *(pitch 2.54mm)*



(7) *EDP(41-pin): EDP Connector





Pin No.	Pin Define
Pin 1	NC
Pin 2	GND
Pin 3	EDP_LANE3N
Pin 4	EDP_ LANE3P
Pin 5	GND
Pin 6	EDP_LANE2N
Pin 7	EDP_ LANE2P
Pin 8	GND
Pin 9	E DP_LANE1N
Pin 10	EDP_LANE1P
Pin 11	GND
Pin 12	EDP_LANE0N
Pin 13	EDP_LANE0P
Pin 14	GND
Pin 15	EDP_AUXP
Pin 16	EDP_AUXN
Pin 17	GND
Pin 18	LCD_VCC
Pin 19	LCD_VCC
Pin 20	LCD_VCC
Pin 21	LCD_VCC

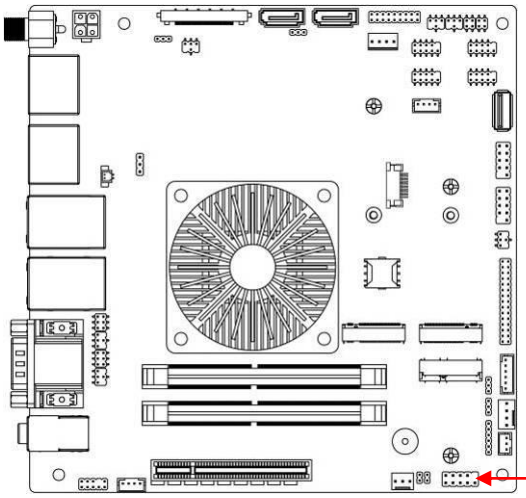
Pin 22	NC
Pin 23	GND
Pin 24	GND
Pin 25	GND
Pin 26	GND
Pin 27	EDP_HPD
Pin 28	GND
Pin 29	GND
Pin 30	GND
Pin 31	GND
Pin 32	EDP_BKLT_EN
Pin 33	EDP _BKLT_CTL
Pin 34	NC
Pin 35	NC
Pin 36	LCD_BKLT_PWR VCC
Pin 37	LCD_BKLT_PWR VCC
Pin 38	LCD_BKLT_PWR VCC
Pin 39	LCD_BKLT_PWR VCC
Pin 40	NC
Pin 41	NC

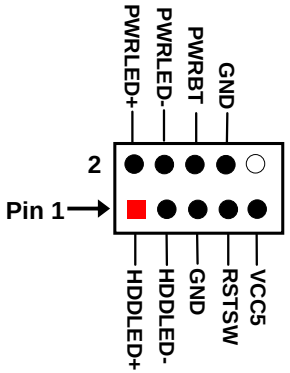
***Note:** **EDP (with JP2 & JP3)** is only optional to customized model. Please refer to product you purchased for actual specifications.*

(8) *BATCON (2-pin): Battery Connector*

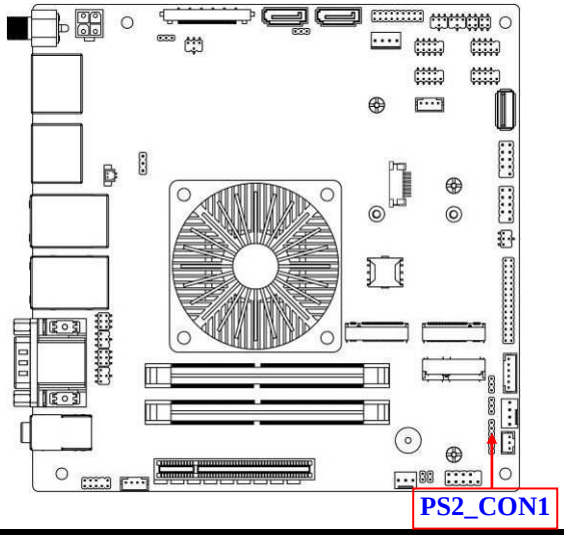
2-2-2 Wafers and Headers

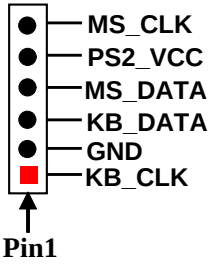
JW_FP (9-pin): Front Panel Header *(pitch 2.54mm)*





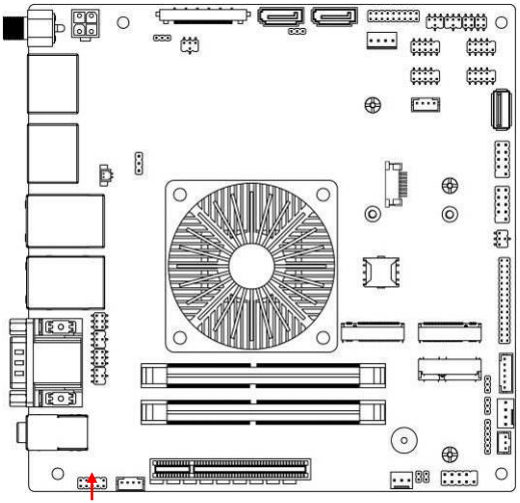
PS2_CON1 (6-pin): PS/2 Keyboard & Mouse Header *(pitch 2.0mm)*

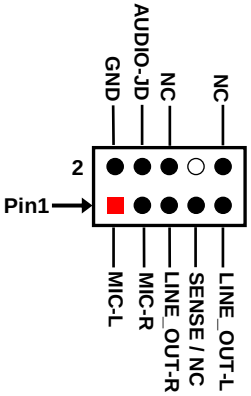




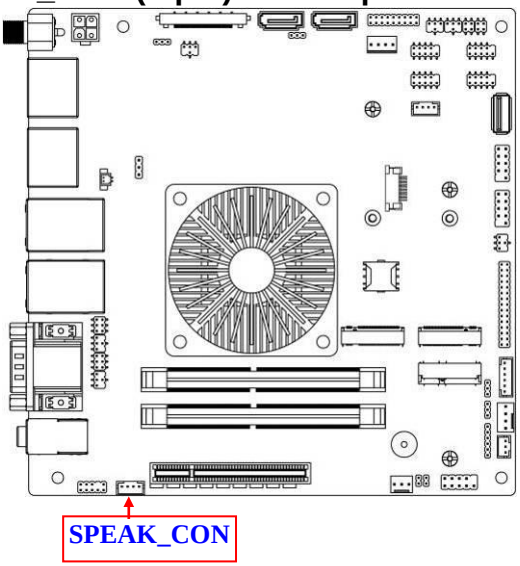
FP_AUDIO (9-pin): Line-Out, MIC-In Header *(pitch 2.0mm)*

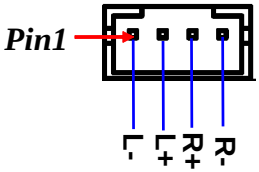
This header connects to Front Panel Line-out, MIC-In connector with cable.



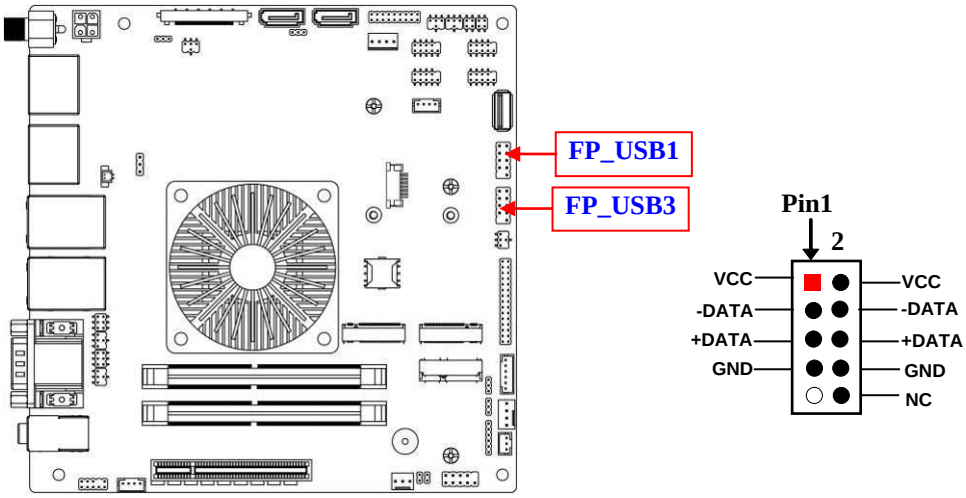


SPEAK_CON (4-pin): 3W Amplifier Wafer *(pitch 2.0mm)*

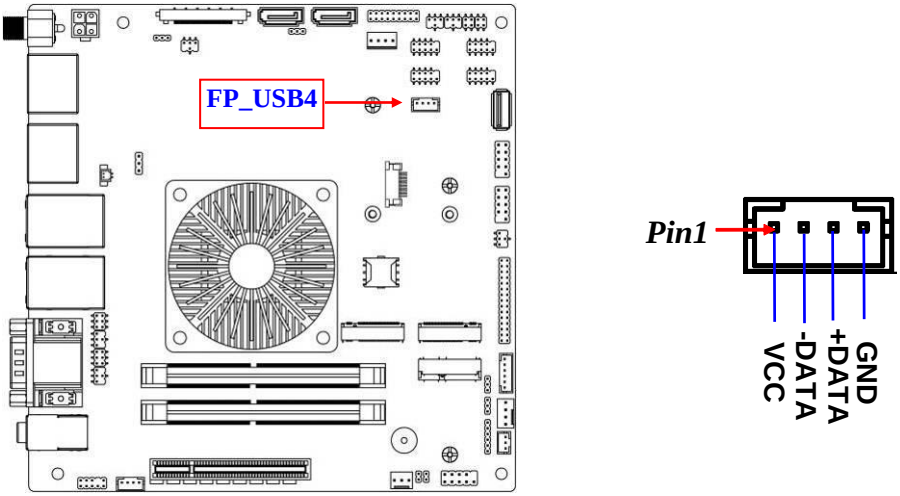




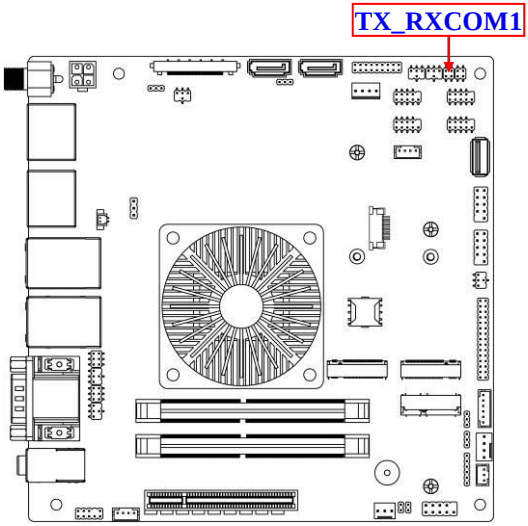
FP_USB1/FP_USB3 (9-pin): USB 2.0 Port Headers *(pitch 2.54mm)*

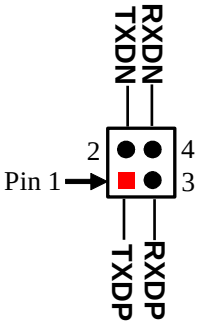


FP_USB4 (4-pin): USB 2.0 Wafer *(pitch 2.0mm)*



TX-RXCOM1 (4-Pin): RS422/485 Header *(pitch 2.0mm)*



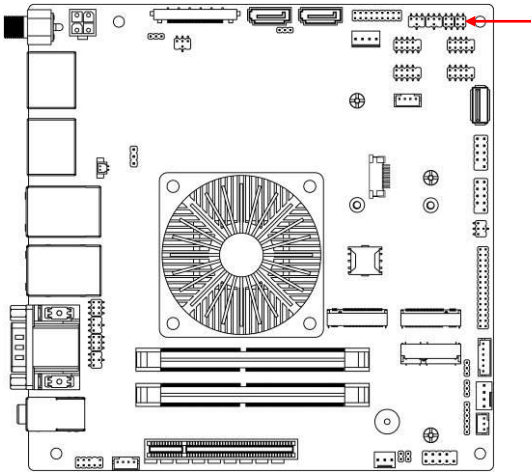


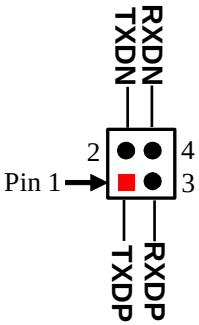
TX-RXCOM1

RS422	RS485
1: TXDP	*1: TXDP*
2: TXDN	*2: TXDN*
3: RXDP	
4: RXDN	

Note:** **COM1** RS485/RS422 function is extended on **TX_RXCOM1** header and realized by **JCOM1** jumper selection and **BIOS settings**; after **JCOM1** selection made, user needs to go to BIOS to set '**Transmission Mode Select**' as **[RS422] or [RS485]** for **COM1** as well **(refer to Page-36).

TX-RXCOM2 (4-Pin): RS422/485 Header *(pitch 2.0mm)*



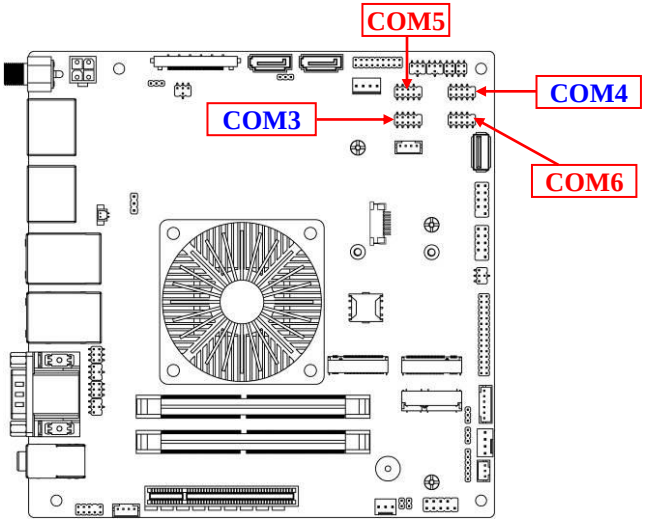


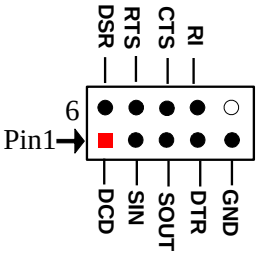
TX-RXCOM2

RS422	RS485
1: TXDP	*1: TXDP*
2: TXDN	*2: TXDN*
3: RXDP	
4: RXDN	

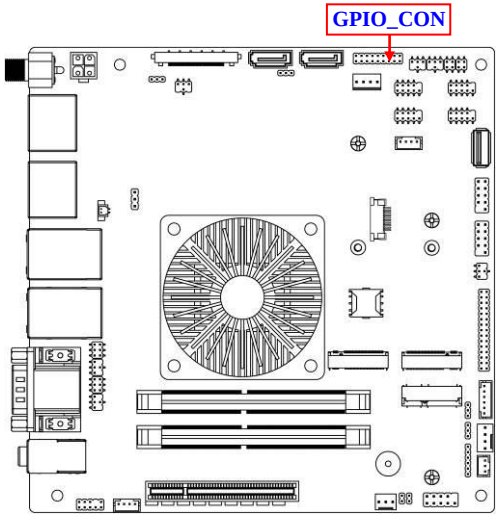
Note:** **COM2** RS485/RS422 function is extended on **TX_RXCOM2** header and realized by **JCOM2** jumper selection and **BIOS settings**; after **JCOM2** selection made, user needs to go to BIOS to set '**Transmission Mode Select**' as **[RS422] or [RS485]** for **COM2** as well **(refer to Page-37).

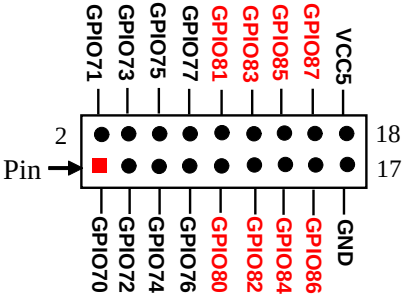
COM3/4/5/6 (9-Pin): RS232 Serial Port Headers *(pitch 2.54mm)*



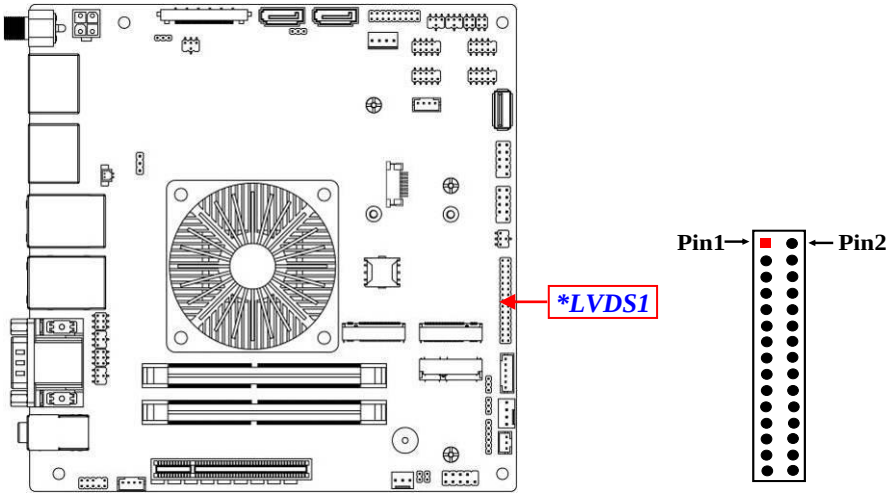


GPIO_CON (18-pin): 16-bit GPIO Header *(pitch 2.0mm)*



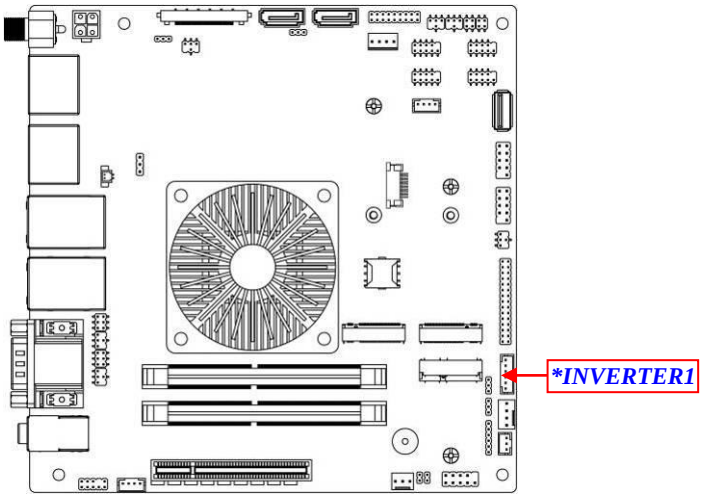


*LVDS1 (30-Pin): 24-bit dual channel LVDS Header (pitch 2.0mm)



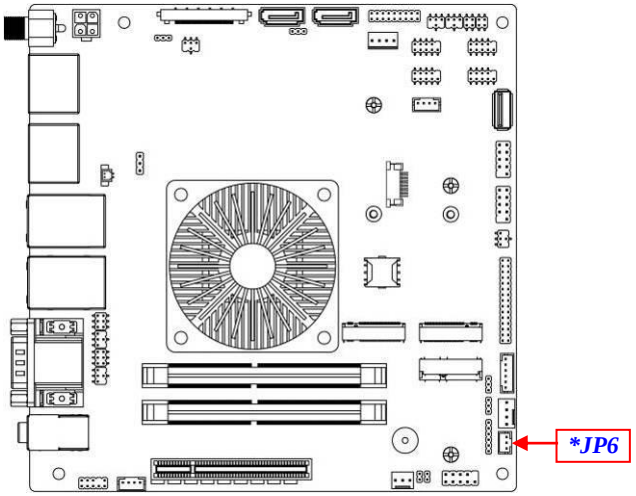
Pin Define	Pin NO.	Pin NO.	Pin Define
LCD_VCC	**Pin 1**	**Pin 2**	LCD_VCC
LCD_VCC	**Pin 3**	**Pin 4**	GND
GND	**Pin 5**	**Pin 6**	GND
LVDSA_DATAN0	**Pin 7**	**Pin 8**	LVDSA_DATAP0
LVDSA_DATAN1	**Pin 9**	**Pin 10**	LVDSA_DATAP1
LVDSA_DATAN2	**Pin 11**	**Pin 12**	LVDSA_DATAP2
GND	**Pin 13**	**Pin 14**	GND
LVDS_CLKAN	**Pin 15**	**Pin 16**	LVDS_CLKAP
LVDSA_DATAN3	**Pin 17**	**Pin 18**	LVDSA_DATAP3
LVDSB_DATAN0	**Pin 19**	**Pin 20**	LVDSB_DATAP0
LVDSB_DATAN1	**Pin 21**	**Pin 22**	LVDSB_DATAP1
LVDSB_DATAN2	**Pin 23**	**Pin 24**	LVDSB_DATAP2
GND	**Pin 25**	**Pin 26**	GND
LVDS_CLKBN	**Pin 27**	**Pin 28**	LVDS_CLKBP
LVDSB_DATAN3	**Pin 29**	**Pin 30**	LVDSB_DATAP3

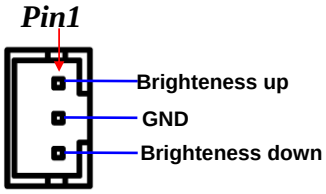
*INVERTER1 6-Pin): LVDS1 Inverter Wafer (pitch 2.0mm)



Pin No.	Definition
1	BKLT_PWR1
2	BKLT_PWR2
3	BKLT_EN
4	BKLT_PWM
5	GND1
6	GND2

*JP6 (3-pin): LVDS Panel Brightness Adjustment Wafer (pitch2.0 mm)





***Note:** **LVDS1 (with JP1 & JP5), INVERTER1 and JP6** are only optional to customized model. Please refer to product you purchased for actual specifications.*

Chapter 3
Introducing BIOS

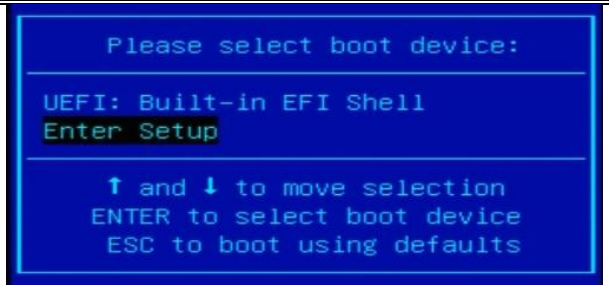
Notice!	The BIOS options in this manual are for reference only. Different configurations may lead to difference in BIOS screen and BIOS screens in manuals are usually the first BIOS version when the board is released and may be different from your purchased motherboard. Users are welcome to download the latest BIOS version form our official website.

The BIOS is a program located on a Flash Memory on the motherboard. This program is a bridge between motherboard and operating system. When you start the computer, the BIOS program will gain 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 device and configures the parameters of the hardware synchronization. Only when these tasks are completed done it gives up control of the computer to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate, it is the key factor for system stability, and in ensuring that your system performance as its best.

3-1 Entering Setup

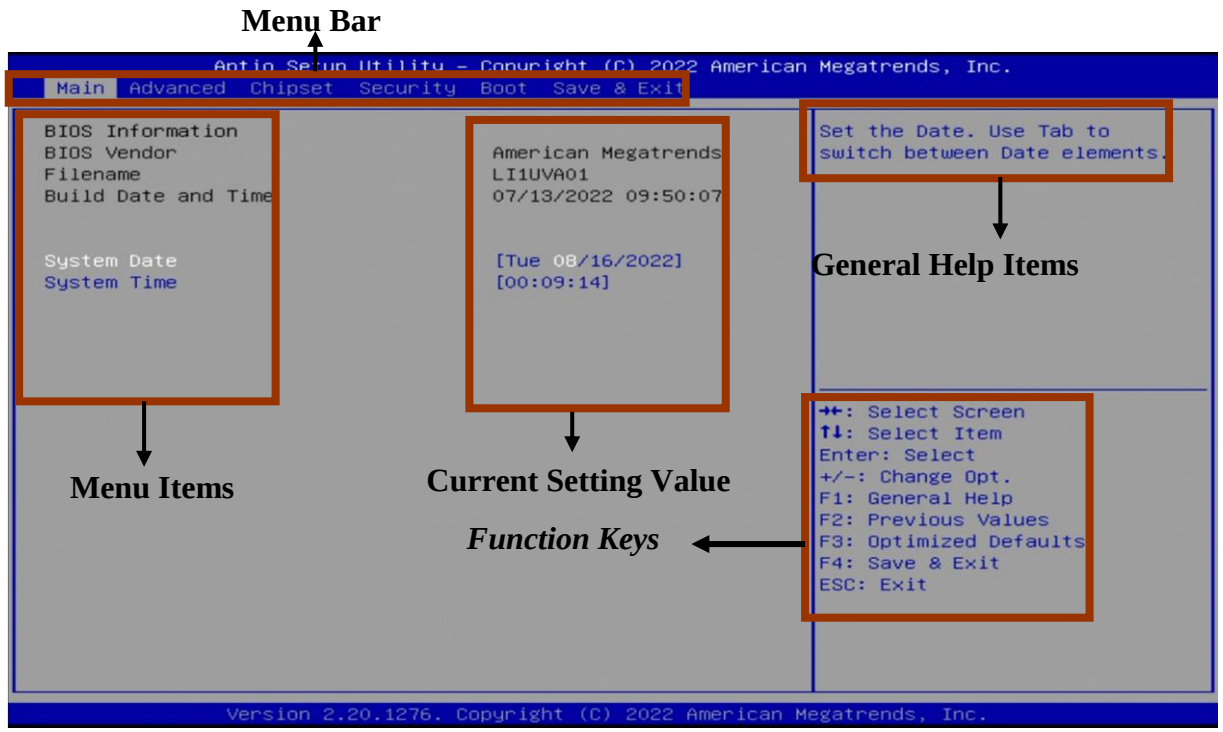
Power on the computer and by pressing <Del> immediately allows you to enter Setup. If the message disappears before your respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the “RESET” button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to

Press **<Del>** to enter Setup; press < **F7**> for Pop Menu.



3-2 BIOS Menu Screen

The following diagram show a general BIOS menu screen:



BIOS Menu Screen

3-3 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←→ (left, right) 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 **<+>/<–>** keys when you want to modify the BIOS parameters for the active option.
- **[F1]:** General help.
- **[F2]:** Previous value.
- **[F3]:** Optimized defaults.
- **[F4]:** Save & Exit.
- Press **<Esc>** to quit the BIOS Setup.

3-4 Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the top right corner the screen.

Status Page Setup Menu/Option Page Setup Menu

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

3-5 Menu Bars

There are six menu bars on top of BIOS screen:

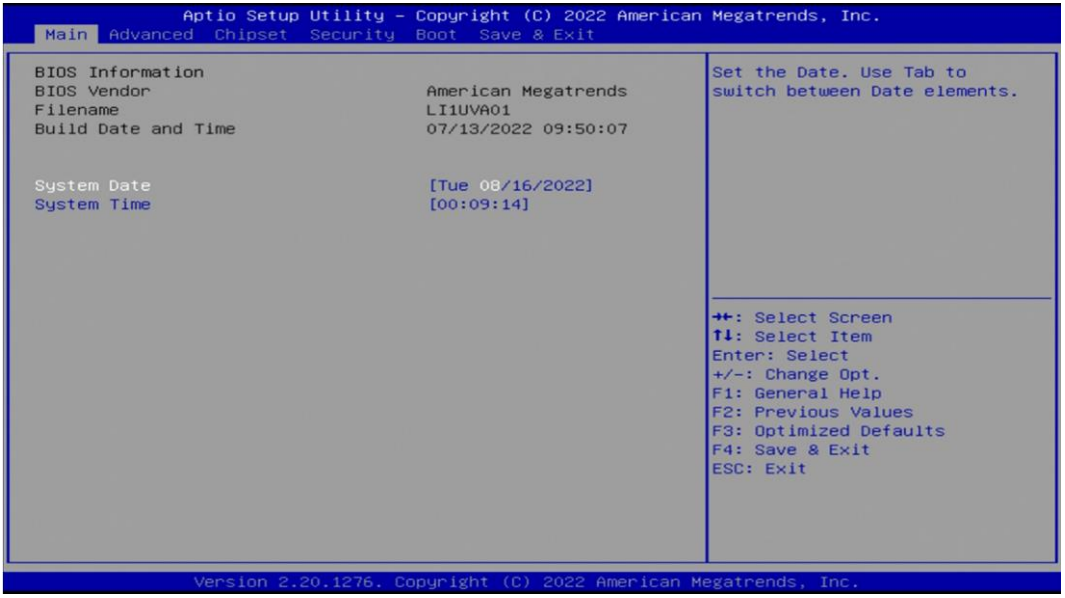
Main	To change system basic configuration
Advanced	To change system advanced configuration
Chipset	To change chipset configuration

Boot	To change boot settings
Security	Password settings
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.

3-6 Main Menu

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.



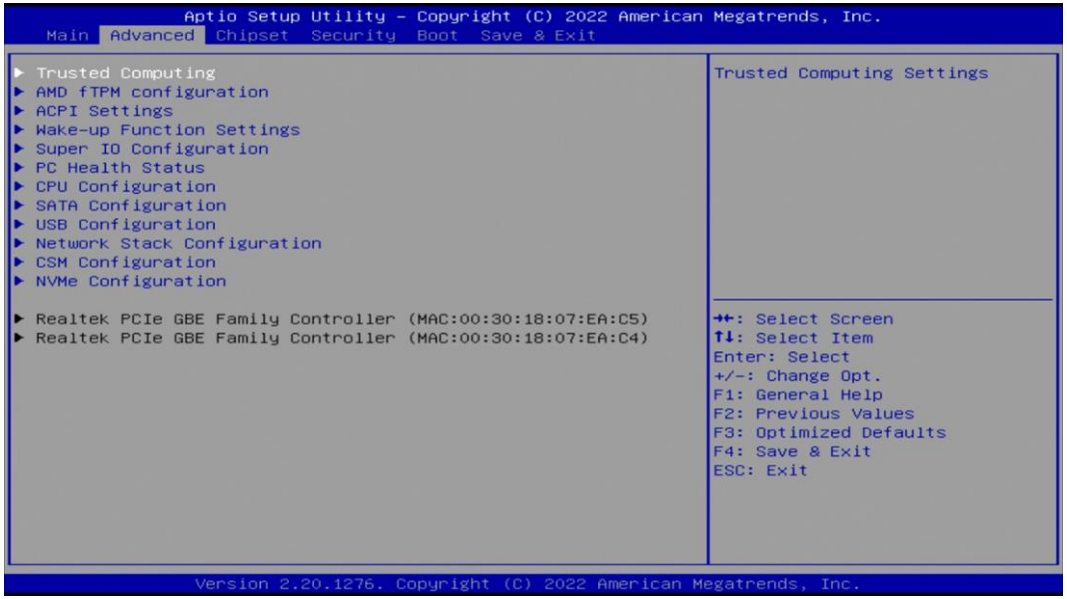
System Date

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

System Time

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

3-7 Advanced Menu



- **Trusted Computing**

  Press [Enter] to make settings for the following sub-item:

  Security Device Support

  Use this item to enable or disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.

  The optional settings are: [Disabled]; [Enabled].

  When set as **[Enabled]**, the following sub-items shall appear:

  Avtive PCR banks

  Available PCR banks

  SHA-1 PCR Bank

  Use this item to enable or disable SHA-1 PCR Bank

  The optional settings are: [Disabled]; [Enabled].

  SHA256 PCR Bank

  Use this item to enable or disable SHA256 PCR Bank

  The optional settings are: [Disabled]; [Enabled].

SHA384 PCR Bank
Use this item to enable or disable SHA384 PCR Bank
The optional settings are: [Disabled]; [Enabled].
Pending operation
Use this item to schedule an operation for the security device.
**Note: Your computer will reboot during restart in order to change state of security device*
The optional settings are: [None]; [TPM Clear].

- **AMD fTPM .configuration**
  Press [Enter] to make settings for the following sub-item:
  TPM Swith
  Use this item to select.0: Auto (Depend on Tcg modudle).1: Disabled fTPM. 2: OnBoard SPI TPM2.0
  The optional settings are: [fTPM]; [dTPM].
  Erase fTPM NV for factory reset
  Use this item to when new CPU is installed, select “Enabled” to reset fTPM, if you have BitLocker or encryption-enabled system, the system will not boot without a “Disabled” to keep previous fTPM record and continue system boot, fTPM will NOT be enabled witch new CPU unless fTPM is rest (reinitialized), you could swap back to the old CPU to recover TPM related keys and data.
  The optional settings are: [Disabled]; [Enabled].

- **ACPI Settings**
  Press [Enter] to make settings for the following sub-item:
  ACPI Settings

  ACPI Sleep State
  Use this item to select the highest ACPI sleep state the system will enter when the suspend button is pressed.
  The optional settings are: [Suspend Disabled]; [S3 only (Suspend to RAM)].

- **Wake-up Function Settings**
  Press [Enter] to make settings for the following sub-item:
  Wake-up System With Fixed Time
  Use this item to enable or disable system wake on alarm event. When enabled,

system will wake on the hr: min: sec specified
The optional settings are: [Disabled]; [Enabled].
When set as **[Enabled]**, the following sub-items shall appear:

Wake-up Hour
Use this item to select 0-23 for example enter 3 for 3am and 15 for 3pm

Wake-up Minute
Use this item to 0-59

Wake-up Second
Use this item to 0-59
This item should be set as [Disabled] if you wish to have all active wake-up functions.

Wake-up System With Dynamic Time
Use this item to enable or disable system wake on alarm event. When enabled, system will wake on the current time + Increase minute(s).
The optional settings are: [Disabled]; [Enabled].
When set as **[Enabled]**, the following sub-items shall appear:

Wake-up Minute Increase
Use this item to 1-60

PS2 KB/MS Wake-up
Use this item enable or disable PS2 KB/MS Wake-up from (S3/S4/S5) Support Only disable ERP Function
The optional settings are: [Disabled]; [Enabled].

USB S3/S4 Wake-up
Use this item enable or disable USB S3/S4 Wake-up support only disable ERP Function.
The optional settings are: [Disabled]; [Enabled]

USB S5 Power
Use this item USB Power after system shutdown support only disable ERP Function.
The optional settings are: [Disabled]; [Enabled]

- **Super IO Configuration**
  Press [Enter] to make settings for the following sub-item:

Super IO Configuration

ERP Support

Use this to energy-related products function. Disable ERP to active all wake-up functions.

The optional settings are: [Disabled]; [Enabled]

► **Serial Port 1 Configuration**

Press [Enter] to make settings for the following sub-item:

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=3F8h; IRQ=4;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;]

Transmission Mode Select

The optional settings are: [RS422]; [RS232] ; [RS485]

► **Serial Port 2 Configuration**

Press [Enter] to make settings for the following sub-item:

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear*:*

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=2F8h; IRQ=3;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;]

Transmission Mode Select

The optional settings are: [RS422]; [RS232] ; [RS485]

► **Serial Port 3 Configuration**

Press [Enter] to make settings for the following sub-item:

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=3E8h; IRQ=11;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;] ; [IO=3E0h; IRQ=3,4,5,7,10,11;] ; [IO=2E0h; IRQ=3,4,5,7,10,11;].

► **Serial Port 4 Configuration**

Press [Enter] to make settings for the following sub-item:

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=2E8h; IRQ=11;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;] ; [IO=3E0h; IRQ=3,4,5,7,10,11;] ; [IO=2E0h; IRQ=3,4,5,7,10,11;].

► **Serial Port 5 Configuration**

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=3E0h; IRQ=10;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;] ; [IO=3E0h; IRQ=3,4,5,7,10,11;] ; [IO=2E0h; IRQ=3,4,5,7,10,11;].

► **Serial Port 6 Configuration**

Serial Port

Use this item to enable or disable Serial Port (COM)

The optional settings are: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Device Settings

Change Settings

Use this item to Select an optimal settings for Super IO Device

The optional settings are: [IO=2E0h; IRQ=10;]; [IO=3F8h; IRQ=3,4,5,7,10,11;] ; [IO=2F8h; IRQ=3,4,5,7,10,11;] ; [IO=3E8h; IRQ=3,4,5,7,10,11;] ; [IO=2E8h; IRQ=3,4,5,7,10,11;] ; [IO=3E0h; IRQ=3,4,5,7,10,11;] ; [IO=2E0h; IRQ=3,4,5,7,10,11;].

WatchDog Reset Timer

Use this item to enable or disable WDT reset function.

The optional settings: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

WatchDog Reset Timer Value

User can select a value in the range of [10] to [255] seconds when '**WatchDog Reset Timer Unit**' set as [Sec]; or in the range of [1] to [255] minutes when '**WatchDog Reset Timer Unit**' set as [Min].

WatchDog Reset Timer Unit

The optional settings: [Sec.]; [Min.].

Case Open Detect

Use this item to detect case has already open or not, show message in POST.

The optional settings: [Disabled]; [Enabled].

When set as [Enabled], system will detect if COPEN has been short or not (*refer to **COPEN** jumper setting for Case Open Detection*); if Pin 1&2 of ***COPEN*** are short,

system will show Case Open Message during POST.

- **PC Health Status**

Press [Enter] to make settings for the following sub-items:

PC Health Status

- SmartFAN Configuration

Press [Enter] to make settings for the following sub-items:

CPUFAN Smart Mode

The optional settings: [Disabled]; [Enabled].

When set as [Enabled], the following sub-items shall appear:

CPUFAN Full-Speed Temperature

Use this item to set CPUFAN full speed temperature. Fan will run at full speed when above this pre-set temperature.

CPUFAN Full-Speed Duty

Use this item to set CPUFAN full speed duty. Fan will run at full speed when above the pre-set duty.

CPUFAN Idle-Speed Temperature

Use this item to set CPUFAN idle speed temperature. Fan will run at idle speed when below this temperature.

CPUFAN Idle-Speed Duty

Use this item to set CPUFAN idle speed duty. Fan will run at idle speed when below the pre-set duty.

- **CPU Configuration**

Press [Enter] to view current CPU configuration and make settings for the following sub-items:

SVM Mode

Use this item to enable/disable CPU Virtualization

The optional settings: [Disabled]; [Enabled].

Cool 'n' Quiet

Use this item to enable/disable Cool 'n' Quite Core Performance Boost Will Disable When Cool 'n' Quite Disable.

The optional settings: [Disable]; [Enabled]

When set as **[Enabled]**, the following sub-items shall appear:

Core Performance Boost
Use this item to enable/disable CPB.
The optional settings: [Disabled]; [Enabled]

- **SATA Configuration**
  Press [Enter] to make settings for the following sub-items:
  SATA1
  SATA Port
  Use this item to SATA Port Power enabled/disabled
  The optional settings: [Disabled]; [Enabled].
  When set as **[Enabled]**, the following sub-items shall appear:
  Hotplug
  Use this item to SATA Port X Support ESATA Enabled/Disabled
  The optional settings: [Disabled]; [Enabled]; [Auto]
  SATA2
  SATA Port
  Use this item to SATA Port Power enabled/disabled
  The optional settings: [Disabled]; [Enabled].
  When set as **[Enabled]**, the following sub-items shall appear:
  Hotplug
  Use this item to SATA Port X Support ESATA Enabled/Disabled
  The optional settings: [Disabled]; [Enabled]; [Auto]

- **USB Configuration**
  Press [Enter] to make settings for the following sub-items:
  Legacy USB Support
  The optional settings are: [Disabled]; [Enabled]; [Auto].
  [Enabled] : Enables legacy USB support.
  [Disabled]: To keep USB devices available only for EFI specification,
  [Auto]: To disable legacy support if no USB devices are connected.
  XHCI Hand-off
  This is a workaround for OSes without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.
  The optional settings are: [Enabled]; [Disabled].

USB Mass Storage Driver Support

Use this item to Enable/Disable USB Mass Storage Driver Support

The optional settings are: [Disabled]; [Enabled].

USB Hardware Delays and Time-outs:

USB Transfer time-out

Use this item to set the time-out value for control, bulk, and interrupt transfers.

The optional settings are: [1 sec]; [5 sec]; [10 sec]; [20 sec].

Device reset time-out

Use this item to set USB mass storage device start unit command time-out.

The optional settings are: [10 sec]; [20 sec]; [30 sec]; [40 sec].

Device power-up delay

Use this item to set maximum time the device will take before it properly reports itself to the host controller. 'Auto' uses default value: for a root port it is 100 ms, for a hub port the delay is taken from hub descriptor.

The optional settings: [Auto]; [Manual].

Select [Manual] you can set value for the following sub-item: **'Device Power-up delay in seconds'.**

Device Power-up delay in seconds

The delay range is from 1 to 40 seconds, in one second increments

- **Network Stack Configuration**

  Press [Enter] to make settings for the following sub-items:

  Network stack

  Use this item to Enable/Disable UEFI Network Stack

  The optional settings: [Disabled]; [Enabled].

When set as **[Enabled]**, the following sub-items shall appear:

Ipv4 PXE Support

Use this item to Enable/Disable Ipv4 PXE Boot Support If disabled IPv4 PXE boot support will not be available.

The optional settings are: [Disabled]; [Enabled].

Ipv6 PXE Support

Use this item to Enable Ipv6 PXE Boot Support If disabled IPv6 PXE boot option will not be created

The optional settings are: [Disabled]; [Enabled].

PXE Boot Wait Time

Use this item to Wait time to press ESC key to abort the PXE boot

Use either [+] / [-] or numeric keys to set the value.

Media detect count

Use this item to number of times the presence of media will be checked. Use either +/- or numeric keys to set the value.

- **CSM Configuration**

Use this item to Enable/Disable, Option ROM execution settings,etc

Press [Enter] to make settings for the following sub-items:

Compatibility Support Module Configuration

CSM Support

Use this item to enable/disable CSM Support

The option settings are: [Disabled]; [Enabled]

Boot Option Filter

This option controls Legacy/UEFI ROMs priority

The optional settings are: [UEFI and Legacy]; [Legacy Only]; [UEFI Only].

Option ROM execution

Network

Use this item to Controls the execution of UEFI and Legacy PXE OpROM.

The optional settings are: [Do Not launch]; [Legacy]

Storage

Use this item to Controls the execution of UEFI and Legacy Storage OpROM.

The optional settings are: [Do Not Launch]; [UEFI]; [Legacy].

Video

Use this item to controls the execution of UEFI and Legacy Video OpROM

The optional settings are: [UEFI]; [Legacy]

Other PCI Devices

Use this item to Determines OpROM execution policy for devices other than Network, Storage, or Video

The optional settings are: [Do not launch]; [UEFI]; [Legacy]

- **NVMe Configuration**

Press [Enter] to make settings for the following sub-items

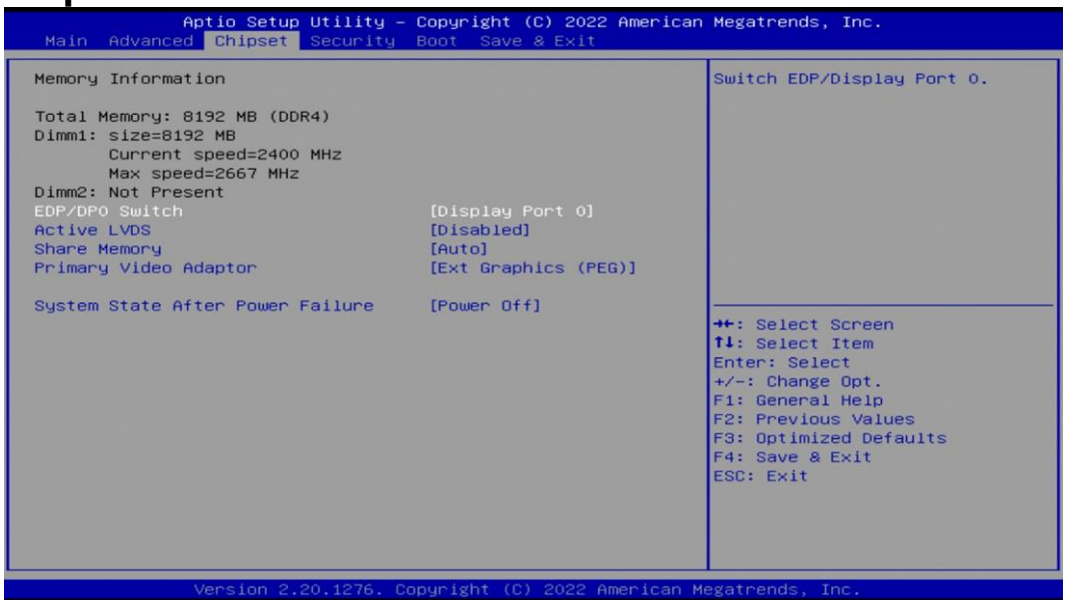
No NVME Device Found

- ***Realtek PCIe GBE Family Controller (Mac: XX:XX:XX:XX:XX:XX)***
- ***Realtek PCIe GBE Family Controller (Mac: XX:XX:XX:XX:XX:XX)***

These items show current network brief information.

***Note**:The secondary Realtek PCIe GBE Family Controller shows up based on actual configuration of the actual product.*

3-8 Chipset Menu



EDP/DP0 Switch

Use this item to Switch EDP/Display Port 0.

The optional settings are: [Display Port 0]; [Edp Port]

When set as **[**Edp Port**]**, the following sub-items shall appear:

EDP Brightness Level

Use this item to Range 0-255.

Active LVDS

The optional settings are: [Disabled]; [Enabled].
When set as **[Enabled]**, the following sub-items shall appear:

Panel Type

The optional settings are: [640*480 18bit Single]; [800*600 18bit Single]; [1024*600 18bit Single]; [1024*768 24bit Single]; [1280*720 18bit Single]; [800*480 18bit Single]; [1366*768 18bit Single]; [1440*900 18bit Dual]; [1366*768 24bit Single]; [1440*900 24bit Dual]; [1280*1024 24bit Dual]; [1440*1050 24bit Dual]; [1600*900 24bit Dual]; [1680*1050 24bit Dual]; [1680*1050 24bit Dual]; [1600*1200 24bit Dual][1920*1080@60Hz 24Bit];

Share Memory

Use this item to Onboard VGA Share Memory
The optional settings are: [Auto]; [64M]: [128M]; [256M]; [512M]; [1G]

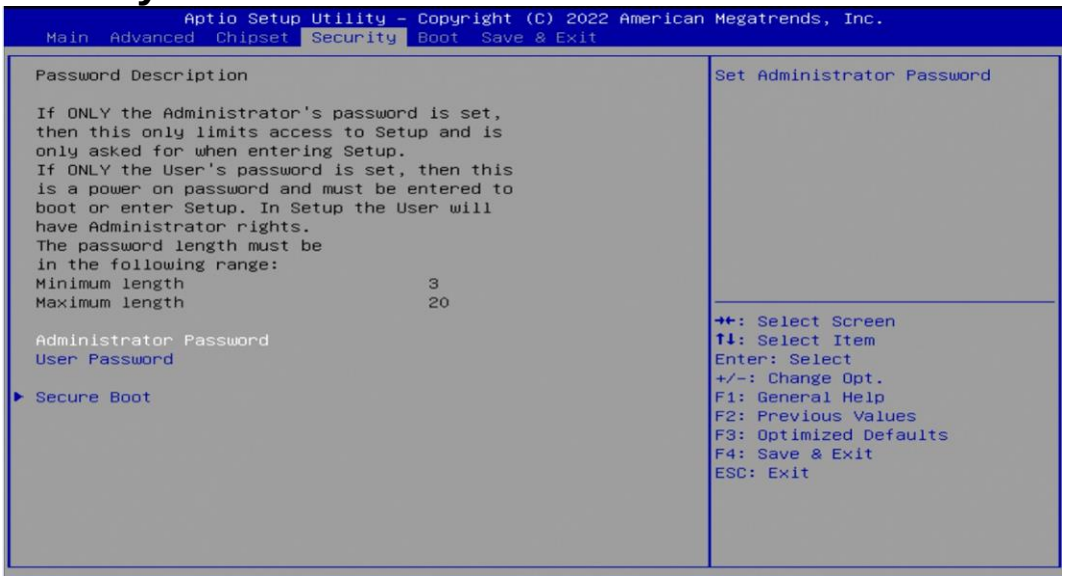
Primary Video Adaptor

Use this item to select internal/external graphics
The optional settings are: [Int Graphics (IGD)]; [Ext Graphics (PEG)]

System state after Power Failure

Use this item to restore status on AC Power LOSS
The optional settings are: [Always Off]; [Always On] ; [Former State]

3-9 Security Menu



Security menu allow users to change administrator password and user password settings.

Administrator Password

If there is no password present on system, please press [Enter] to create new administrator password. If password is present on system, please press [Enter] to verify old password then to clear/change password. Press again to confirm the new administrator password.

User Password

If there is no password present on system, please press [Enter] to create new user password. If password is present on system, please press [Enter] to verify old password then to clear/change password. Press again to confirm the new user password.

- **Secure Boot**

  Press [Enter] to make settings for the following sub-items:

  System Mode

Secure Boot

Use this item to secure boot feature is active if secure boot is enabled and the system is in user mode the mode change requires platform reset

The optional settings are: [Disabled]; [Enabled].

Secure Boot Mode

Set UEFI Secure Boot Mode to Standard mode or Custom mode. This change is effective after save. After reset, this mode will return to Standard mode.

In Custom mode, Secure Boot Policy variables can be configured by a physically present user without full authentication.

The optional settings: [Standard]; [Custom].

When set as [**Custom**], user can make further settings in the following items that show up:

- **Restore Factory Keys**

Use this item to force system to User Mode, to install factory default Secure Boot key databases.

Reset To Setup Mode

- **Key Management**

This item enables expert users to modify Secure Boot Policy variables without full authentication, which includes the following items:

Factory Key Provision

This item is for user to install factory default Secure Boot keys after the platform reset and while the System is in Setup mode.

The optional settings: [Disabled]; [Enabled].

- **Restore Factory Keys**

Use this item to force system into User Mode. Install factory default Secure Boot key databases.

- **Reset To Setup Mode**

Use this item to delete all Secure Boot key databases from NVRAM.

- **Export Secure Boot variables**

Use this item to copy NVRAM content of Secure Boot variables to files in a root folder on a file system device.

- **Enroll Efi Image**

This item allows the image to run in Secure Boot mode.

Enroll SHA256 Hash certificate of a PE image into Authorized Signature Database (db).

Device Guard Ready

- **Remove 'UEFI CA' from DB**
- **Restore DB defaults**

Use this item to restore DB variable to factory defaults.

Secure Boot variable/Size/Keys/Key Source

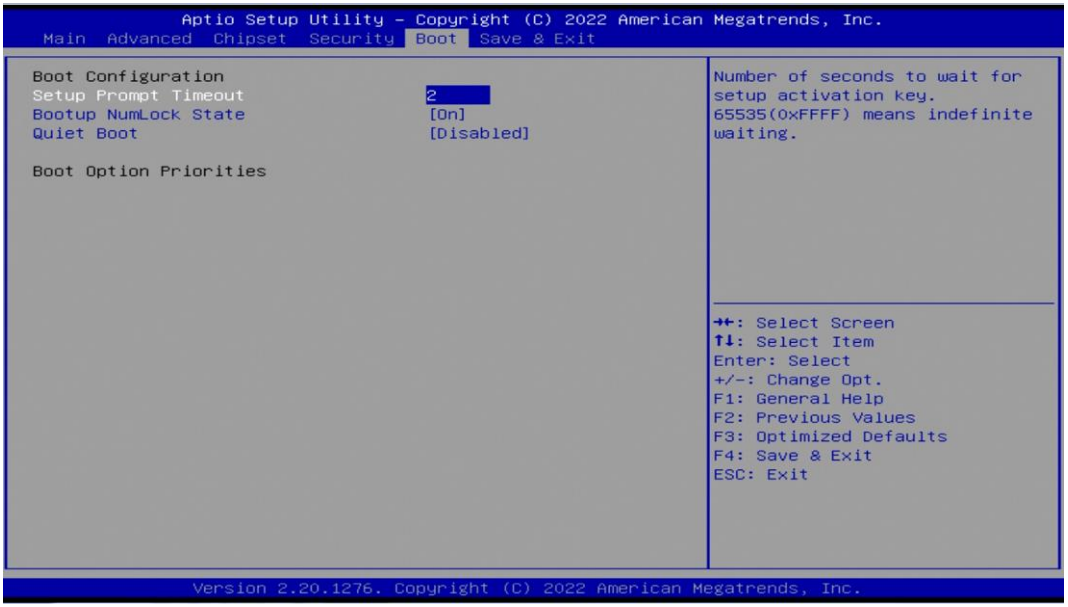
- **Platform Key(PK)/Key Exchange Keys/Authorized Signatures/Forbidden Signatures/ Authorized TimeStamps/OsRecovery Signatures**

Use this item to enroll Factory Defaults or load certificates from a file:

1. Public Key Certificate:
   a) EFI_SIGNATURE_LIST
   b) EFI_ CERT_X509 (DER)
   c) EFI_ CERT_RSA2048 (bin)
   d) EFI_ CERT_SHAXXX
2. Authenticated UEFI Variable
3. EFI PE/COFF Image (SHA256)

Key Source: Factory, External, Mixed

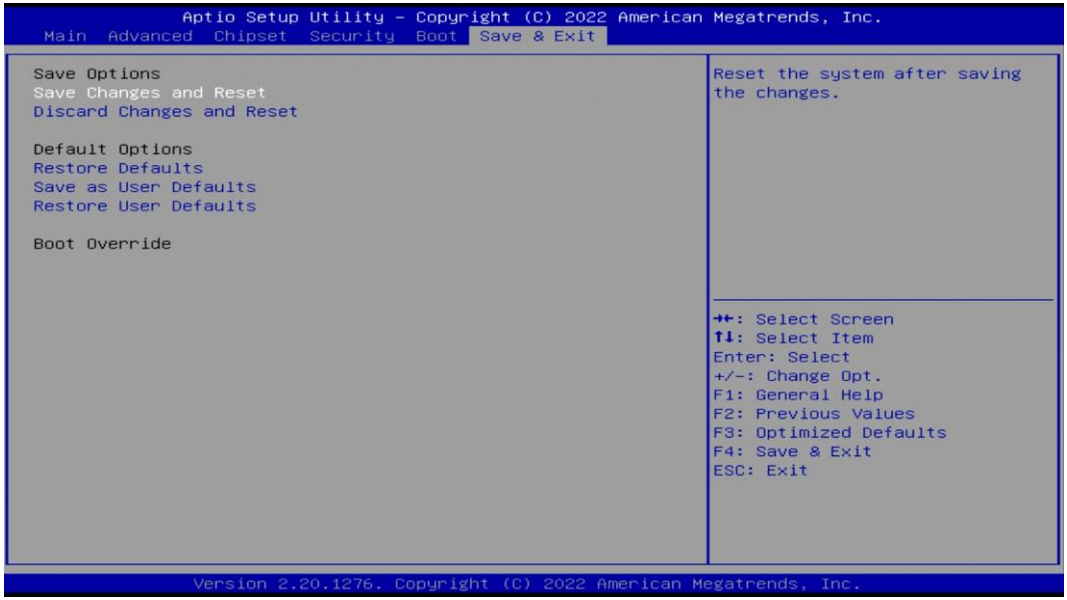
3-10 Boot Menu



Setup Prompt Timeout
Use this item to set number of seconds to wait for setup activation key.
Bootup Numlock State
Use this item to select keyboard numlock state.
The optional settings are: [On]; [Off].
Quiet Boot
The optional settings are: [Disabled]; [Enabled].
Boot Option Priorities

.

3-11 Save & Exit Menu



Save Options

Save Changes and Reset

This item allows user to reset the system after saving the changes.

Discard Changes and Reset

This item allows user to reset the system without saving any changes.

Default Options

Restore Defaults

Use this item to restore /load default values for all the setup options.

Save as User Defaults

Use this item to save the changes done so far as user defaults.

Restore User Defaults

Use this item to restore defaults to all the setup options.

Boot Override