

SYM86603VGGA-H310

V1.0

Manual

Contents

1.	Models and Attentions	2
1.1	Models.....	2
1.2	Attentions	2
2.	Specification	3
3.	Functional Block Diagram.....	5
4.	Mechanical Drawing	6
5.	Jumpers / Headers and Connectors	7
6.	Definition of Jumpers /Headers and Connectors	10
1)	SYS_FAN1 (System FAN Header1 4*1 Pin 2.54mm).....	10
2)	SYS_FAN2 (System FAN Header2 4*1 Pin 2.54mm).....	10
3)	J_GPIO1 (GPIO Header 6*2 Pin 2.00mm).....	10
4)	F_USB2_2* (Front USB2.0 Header2 5*2 Pin 2.54mm)	10
5)	F_USB2_1 (Front USB2.0 Header1 5*2 Pin 2.54mm).....	11
6)	F_PANEL1 (Front Panel Header 5*2 Pin 2.54mm).....	11
7)	JC_COM2 (COM2 DCD/RI Select Jumper 3*2 Pin 2.54mm)	11
8)	J_COM2-6 (COM2/3/4/5/6 Header 5*2 Pin 2.54mm)	12
9)	JC_COM3 (COM3 DCD/RI Select Jumper 3*2 Pin 2.54mm)	13
10)	J_DBG1 (Port80 Debug Header 9*1 Pin 2.00mm)	13
11)	J_COPEN1 (Case Open Header 2*1 Pin 2.54mm)	13
12)	JM_COM4 (COM4 RS232/RS485 Select Jumper 3*2 Pin 2.54mm)	13
13)	JC_COM4 (COM4 DCD/RI Select Jumper 3*2 Pin 2.54 mm)	14
14)	J_AT/ATX1 (AT or ATX Select Jumper 3*1 Pin 2.54mm)	14
15)	JC_COM5 (COM5 DCD/RI Select Jumper 3*2 Pin 2.54 mm)	14
16)	JC_COM6 (COM6 DCD/RI Select Jumper 3*2 Pin 2.54 mm)	14
17)	SMBUS1 (SMBUS Header 4*1 Pin 1.25mm).....	14
18)	JM_COM3 (COM3 RS232/RS485 Select Jumper 3*2 Pin 2.54mm)	15
19)	CLR_CMOS1 (CMOS Clear Jumper 3*1 Pin 2.54mm).....	15
20)	F_USB3_1* (Front USB3.0 Header 10*2 Pin 2.00mm)	16
21)	CPU_FAN1 (CPU FAN Header 4*1 Pin 2.54mm)	16
22)	EDP_P1 (eDP Backlight Control Header 6*1 Pin 2.00mm)	16
23)	JC_EDP1 (eDP VDD Select Jumper 3*1 Pin 2.54mm)	16
24)	EDP1 (eDP Signal Header 15*2 Pin 2.00mm)	17
25)	JC_COM1 (COM1 DCD/RI Select Jumper 3*2 Pin 2.54mm)	17
26)	F_AUDIO1 (Front Audio Header (Line-Out + MIC) 5*2 Pin 2.54mm)	17
27)	J_SPDIF1 (SPDIF Out Header 4*1 Pin 2.54mm).....	18
28)	J_PCICLK1 (PCI Clock Select Jumper 3*1 Pin 2.54mm)	18
47)	COM1 (COM1 DB9/M Connector).....	18
48)	RJ45_USB2 (RJ45) * (GBE LAN RJ45 Connector2 8Pin).....	18
49)	RJ45_USB1 (RJ45) * (GBE LAN RJ45 Connector1 8Pin).....	19
59)	AUDIO1 (Line-Out + MIC + Line-In 3.5mm Jack)	19
7.	BIOS setup	20

1. Models and Attentions

1.1 Models

This manual is applied to following models:

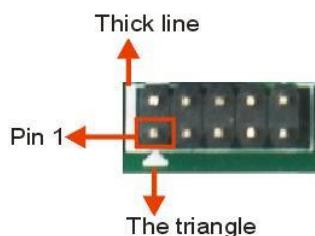
Model	Chipset	COM	LAN	USB	PCIE	PCI	Mini-P PCIe	DVI	HDMI	VGA	eDP	SATA 3.0
SYM86603V GGA-H310	H310	6	2	9	1*16X 1*2X 1*1X	4	2	1	1	1	1	3

1.2 Attentions

1) Notes under a table or figure indicate the difference of models, or alternative definition of specific pin of the header (jumper/connector).

2) How to identify the first pin of a header or jumper

- Usually, there is a thick line or a triangle near the header's or jumper's pin 1.



- Square pad, which you can find on the back of the motherboard, is usually used for pin 1.



2. Specification

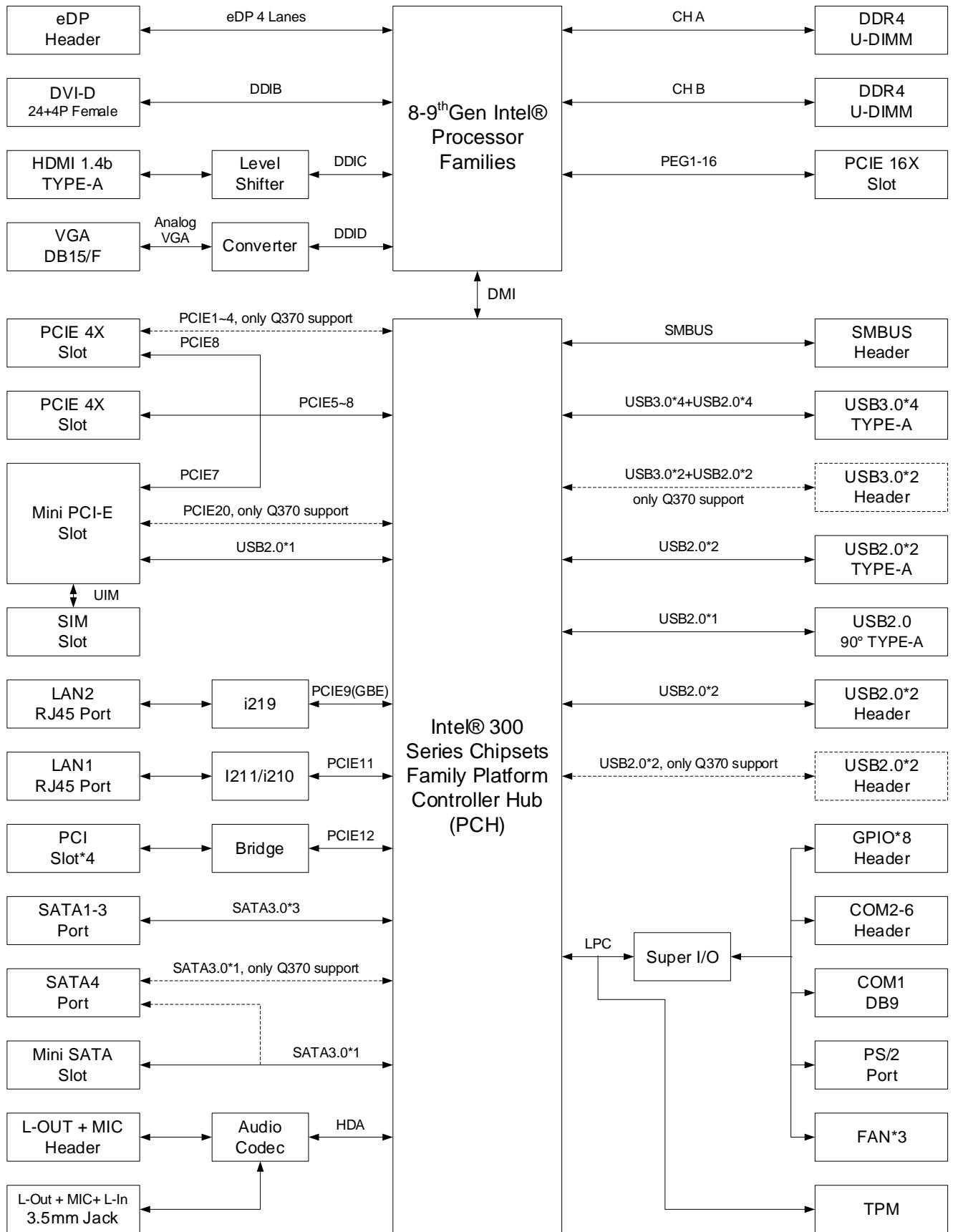
Model	SYM86603VGGA-H310
CPU	Support 8-9th Generation Intel® Core /Pentium/Celeron Processors, LGA1151 Support MAX CPU TDP: Hexa-Core 95W (Do not support Octa-Core 65W/95W CPU)
Chipset	Intel® H310, TDP 6W
Display ^[1]	1 * DVI-D(DVI-I): Support DVI-D with max resolution up to 1920x1200@60Hz 1 * HDMI 1.4b (TYPE-A): Support max resolution up to 4096x2160@30Hz 1 * VGA (DB15/F): Support max resolution up to 1920x1200@60Hz 1 * eDP: Support max resolution up to 1920x1200@60Hz
Memory ^[2]	Support DDR4 2400/2666 MHz, 2 * U-DIMM Slot, up to 32GB (Q370 can support up to 64G with 4*U-DIMM Slot)
Storage	4 * SATA 3.0 Connector ^[3] , support RST RAID 0,1,5,10 1 * Mini SATA Slot (mSATA) ^[3]
Ethernet	1 * I219 GBE LAN Chip (RJ45, 10/100/1000 Mbps) ^[4] 1 * I211 GBE LAN Chip (RJ45, 10/100/1000 Mbps) ^[5]
Audio	Realtek ALC662 5.1 Channel HDA Codec, 1 * Line-Out + MIC + Line-In 3.5mm Jack 1 * Front Audio Header (Line-Out + MIC) 1 * SPDIF Out Header
Expansion Slots	1 * PCI-E 16X (PCI-E 3.0, 16X Slot) 1 * PCI-E 2X (PCI-E 2.0, 4X Slot, Q370 support PCI-E 3.0 4X) ^[6] 1 * PCI-E 1X (PCI-E 2.0, 4X Slot, Q370 support PCI-E 3.0 4X) ^[6] 4 * PCI Slot 1 * Mini PCI-E Slot (WIFI+4G/3G, with 1* SIM Card Slot) ^[6]
COM	1 * RS232 (COM1, DB9/M) 3 * RS232 (COM2/5/6, Header) 2 * RS232/RS485 (COM3/4, Header)
USB ^[7]	4 * USB3.0 (Rear I/O, TYPE-A) 2 * USB2.0 (Rear I/O, TYPE-A) 1 * USB2.0 (Internal, Vertical TYPE-A) 2 * USB2.0 (Internal, Header)
Other Ports	8 * GPIO 1 * PS/2 Connector (Keyboard & Mouse) 1 * Front Panel Header 2 * System FAN Header 1 * CPU FAN Header 1 * SMBUS Header 1 * Case Open Header 1 * AT or ATX Select Jumper
TPM	Supports onboard TPM 1.2/2.0 (optional, onboard by default)
System	Windows 10, Linux
Temperature	Storage: -20~80°C Operating: -10~60°C
BIOS	AMI UEFI BIOS (Support Watchdog Timer)

Power Supply	ATX Standard (24P + 8P) 1 * ATX 8P CPU Power Input Connector 1 * ATX 24P Power Input Connector
Factor	ATX Standard (305mm * 244mm)

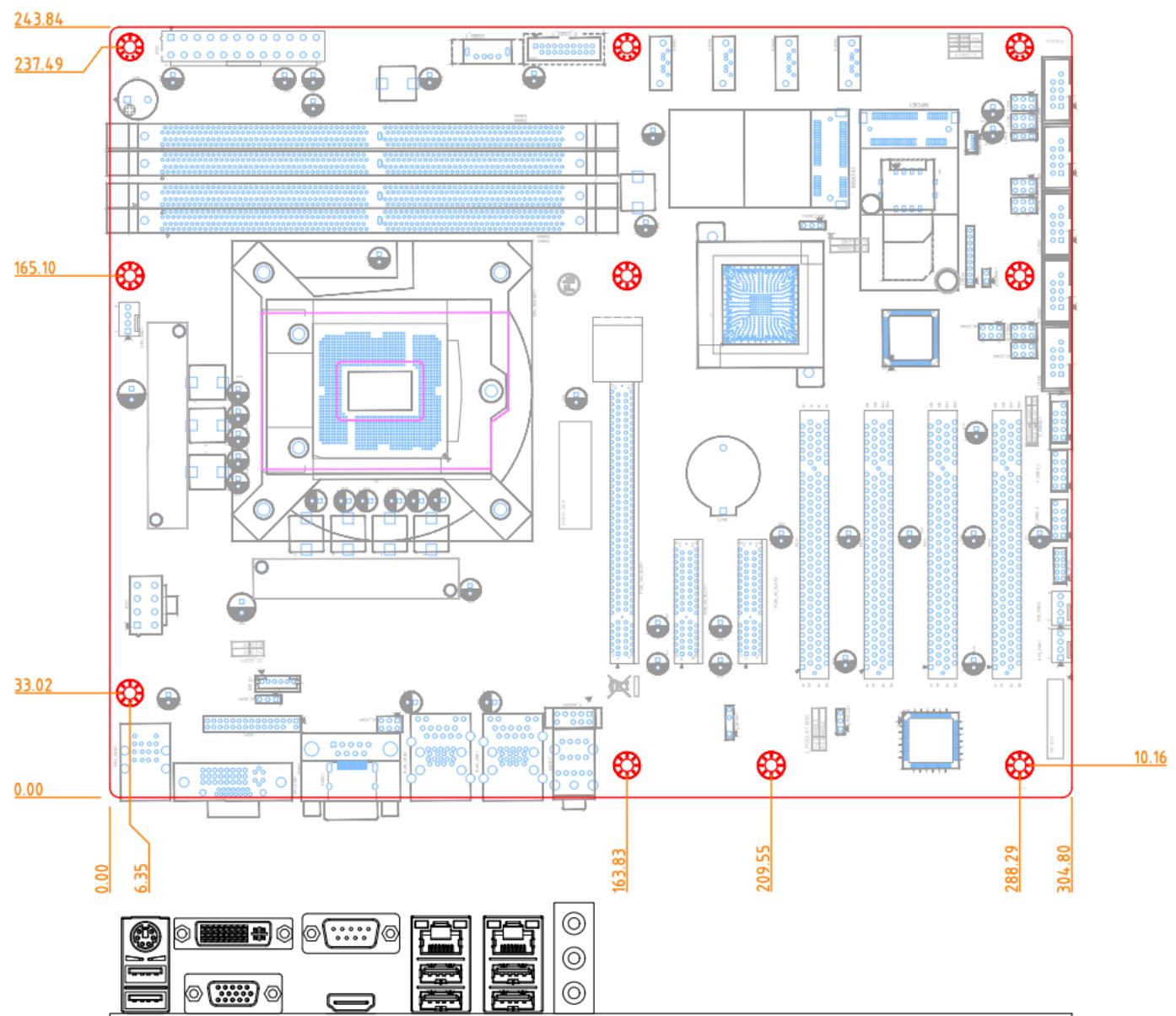
Notes:

- [1]: Intel® H310 supports two independent displays. Intel® Q370 support three independent displays.
- [2]: The maximum memory frequency depends on CPU.
- [3]: MSATA1 and SATA4 share the same SATA3.0 signal, they can't be accessed simultaneously (support MSATA1 by default). And Q370 can support them both.
- [4]: I219 supports Intel AMT 12.0 and Intel vPro competent.
- [5]: RJ45_USB2 Support I211 by default and can support I210 if specified.
- [6]: MPCIE1 and PCIE_4X_SLOT1 share PCIE7 signal, they can't be accessed simultaneously (support MPCIE1 by default). PCIE_4X_SLOT2 and PCIE_4X_SLOT1 share PCIE8 signal (support PCIE_4X_SLOT2 PCIE-x1 by default). PCIE_4X_SLOT1 can still support PCIE-2x (Need to match the corresponding BIOS). Q370 can support MPCIE1 and PCIE_4X_SLOT1/2(PCIE-x4) both.
- [7]: H310 not support F_USB3_1and F_USB2_2 by default.

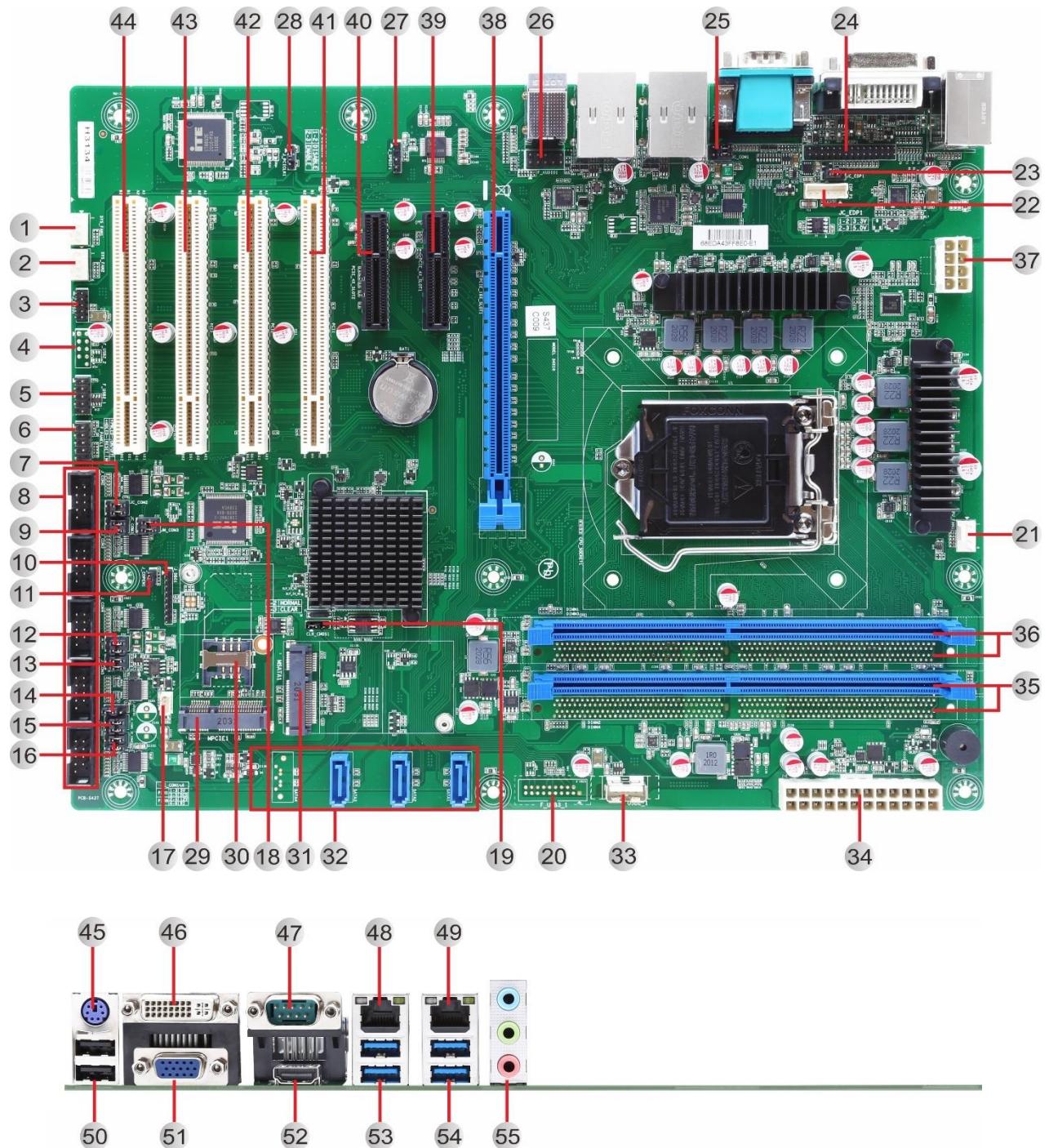
3. Functional Block Diagram

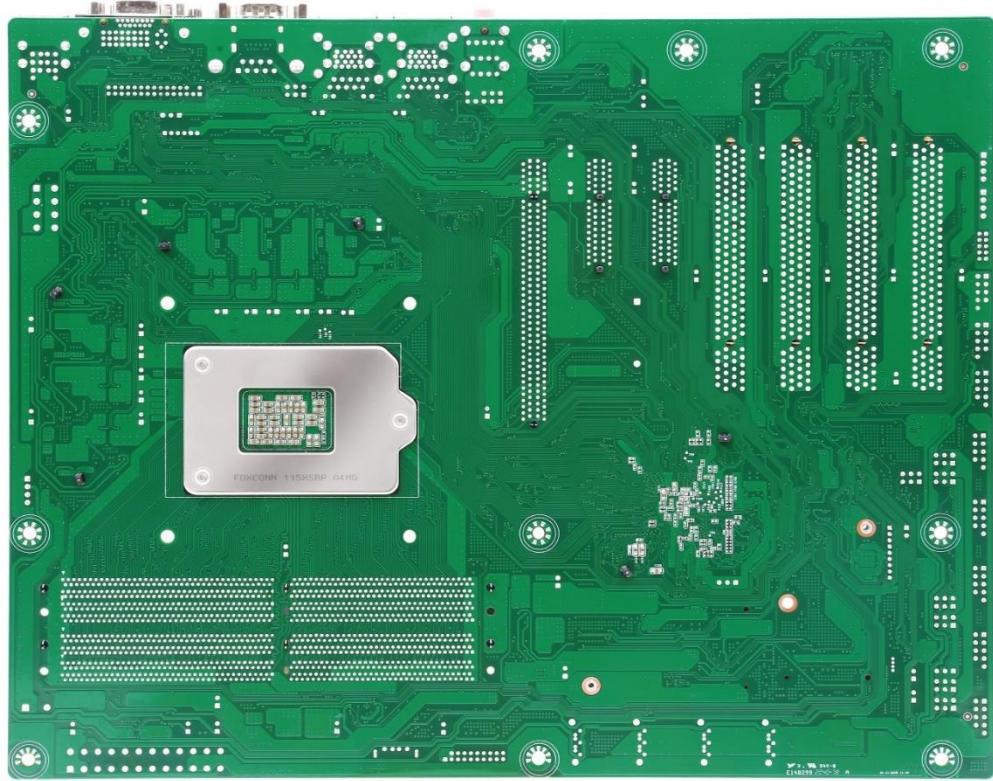


4. Mechanical Drawing



5. Jumpers / Headers and Connectors





Jumpers / Headers and Connectors

1	SYS_FAN1	System FAN Header1
2	SYS_FAN2	System FAN Header2
3	J_GPIO1	GPIO Header
4	F_USB2_2	Front USB2.0 Header2 (Only support by Q370, H310 cannot support)
5	F_USB2_1	Front USB2.0 Header1
6	F_PANEL1	Front Panel Header
7	JC_COM2	COM2 DCD/RI Select Jumper
8	J_COM2-6	COM2/3/4/5/6 Header
9	JC_COM3	COM3 DCD/RI Select Jumper
10	J_DBG1	Port80 Debug Header
11	J_COPEN1	Case Open Header
12	JM_COM4	COM4 RS232/RS485 Select Jumper
13	JC_COM4	COM4 DCD/RI Select Jumper
14	J_AT/ATX1	AT or ATX Select Jumper
15	JC_COM5	COM5 DCD/RI Select Jumper
16	JC_COM6	COM6 DCD/RI Select Jumper
17	SMBUS1	SMBUS Header
18	JM_COM3	COM3 RS232/RS485 Select Jumper
19	CLR_CMOS1	CMOS Clear Jumper
20	F_USB3_1	Front USB3.0 Header (Only support by Q370, H310 cannot support)

21	CPU_FAN1	CPU FAN Header
22	EDP_P1	eDP Backlight Control Header
23	JC_EDP1	eDP VDD Select Jumper
24	EDP1	eDP Signal Header
25	JC_COM1	COM1 DCD/RI Select Jumper
26	F_AUDIO1	Front Audio Header (Line-Out + MIC)
27	J_SPDIF1	SPDIF Out Header
28	J_PCICLK1	PCI Clock Select Jumper
29	MPCIE1	Mini PCI-E Slot (WIFI+4G/3G)
30	SIM1	Full-Size SIM Card Slot
31	MSATA1	Mini PCI-E Slot (mSATA, SATA3.0) (H310: SATA4 Colay with MSATA1, not support SATA4 default Q370: Support SATA4 + MSATA1)
32	SATA1-4	SATA3.0 7P Connector1/2/3/4 (H310: SATA4 Colay with MSATA1, not support SATA4 default Q370: Support SATA4 + MSATA1)
33	USB2_1	USB2.0 Internal Vertical TYPE-A Connector
34	ATX2	ATX 24P Power Input Connector
35	DIMM2, DIMM4	DDR4 CHB U-DIMM Slot2/4 (H310 only support DIMM2)
36	DIMM1, DIMM3	DDR4 CHA U-DIMM Slot1/3 (H310 only support DIMM1)
37	ATX1	ATX 8P CPU Power Input Connector
38	PCIE_16X_SLOT1	PCI-E 16x Slot (PCIe 16X GEN3)
39	PCIE_4X_SLOT1	PCI-E 4x Slot1 (PCIe 2X/4X GEN3) (H310 support PCIe 2X; Q370 support PCIe 4X)
40	PCIE_4X_SLOT2	PCI-E 4x Slot2 (PCIe 1X/4X GEN3) (H310 support PCIe 1X; Q370 support PCIe 4X)
41	PCI1	PCI Slot1
42	PCI2	PCI Slot2
43	PCI3	PCI Slot3
44	PCI4	PCI Slot4
45	PS/2_USB1(PS/2)	PS/2 Connector (Keyboard & Mouse)
46	DVI_VGA1(DVI-D)	DVI-I 24+4P/F Connector (Support DVI-D)
47	COM1	COM1 DB9/M Connector
48	RJ45_USB2 (RJ45)	GBE LAN RJ45 Connector2
49	RJ45_USB1 (RJ45)	GBE LAN RJ45 Connector1
50	PS/2_USB1(USB)	Dual USB2.0 TYPE-A Connector
51	DVI_VGA1(VGA)	VGA DB15/F Connector
52	HDMI1	HDMI TYPE-A Connector
53	RJ45_USB2 (USB)	Dual USB3.0 TYPE-A Connector2
54	RJ45_USB1 (USB)	Dual USB3.0 TYPE-A Connector1
55	AUDIO1	Line-Out + MIC + Line-In 3.5mm Jack

6. Definition of Jumpers /Headers and Connectors

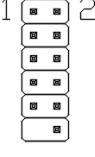
1) SYS_FAN1 (System FAN Header1 4*1 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	GND	3	FAN Speed Detection2
	2	+ 12V	4	FAN Speed Control2

2) SYS_FAN2 (System FAN Header2 4*1 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	GND	3	FAN Speed Detection3
	2	+ 12V	4	FAN Speed Control3

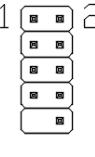
3) J_GPIO1 (GPIO Header 6*2 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition
	1	SIO_GPO74 (0xA06 Bit4, H [1])	2	SIO_GPI70 (0xA06 Bit0, H [1])
	3	SIO_GPO75 (0xA06 Bit5, H [1])	4	SIO_GPI71 (0xA06 Bit1, H [1])
	5	SIO_GPO76 (0xA06 Bit6, H [1])	6	SIO_GPI72 (0xA06 Bit2, H [1])
	7	SIO_GPO77 (0xA06 Bit7, H [1])	8	SIO_GPI73 (0xA06 Bit3, H [1])
	9	GND	10	GND

Notes:

[1]: "H" or "L" means the default voltage is High or Low level. (5V GPIO)

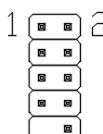
4) F_USB2_2* (Front USB2.0 Header2 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	+ 5V	2	+ 5V
	3	USB2_12-	4	USB2_13-
	5	USB2_12+	6	USB2_13+
	7	GND	8	GND
			10	N/C

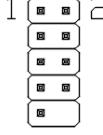
Notes:

[*]: Only support by Q370, H310 cannot support.

5) F_USB2_1 (Front USB2.0 Header1 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
1  2	1	+ 5V	2	+ 5V
	3	USB2_7-	4	USB2_8-
	5	USB2_7+	6	USB2_8+
	7	GND	8	GND
			10	N/C

6) F_PANEL1 (Front Panel Header 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
1  2	1	HDD 3.3V LED+	2	POWER 3.3V LED+
	3	HDD 3.3V LED-	4	POWER 3.3V LED-
	5	RESET-	6	POWER+
	7	RESET+	8	POWER-
	9	N/C		

7) JC_COM2 (COM2 DCD/RI Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
1  2	1-3, 2-4	COM2_PIN1: + 5V COM2_PIN8: + 12V
	3-5, 4-6(Default)	COM2_PIN1: DCD# COM2_PIN8: RI#

8) J_COM2-6 (COM2/3/4/5/6 Header 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
J_COM2	1	COM2_PIN1 [1]	2	COM2_DSR#
	3	COM2_RXD	4	COM2_RTS#
	5	COM2_TXD	6	COM2_CTS#
	7	COM2_DTR#	8	COM2_PIN8 [1]
	9	GND		
J_COM3	1	COM3_PIN1 [2]	2	COM3_DSR#
	3	COM3_PIN3 [3]	4	COM3_RTS#
	5	COM3_TXD [3]	6	COM3_CTS#
	7	COM3_DTR# [3]	8	COM3_PIN8 [2] [3]
	9	GND		
J_COM4	1	COM4_PIN1 [4] [5]	2	COM4_DSR#
	3	COM4_PIN3 [5]	4	COM4_RTS#
	5	COM4_TXD	6	COM4_CTS#
	7	COM4_DTR#	8	COM4_PIN8 [4]
	9	GND		
J_COM5	1	COM5_PIN1 [6]	2	COM5_DSR#
	3	COM5_RXD	4	COM5_RTS#
	5	COM5_TXD	6	COM5_CTS#
	7	COM5_DTR#	8	COM5_PIN8 [6]
	9	GND		
J_COM6	1	COM6_PIN1 [7]	2	COM6_DSR#
	3	COM6_RXD	4	COM6_RTS#
	5	COM6_TXD	6	COM6_CTS#
	7	COM6_DTR#	8	COM6_PIN8 [7]
	9	GND		

Notes:

- [1]: PIN1 of COM2 can be DCD# (default) /5V and Pin8 of COM2 can be RI# (Default) / 12V, selectable by "COM2 DCD/RI Select Jumper". (JC_COM2, Location 7)
- [2]: PIN1 of COM3 can be DCD# (default) /5V and Pin8 of COM3 can be RI# (Default) / 12V, selectable by "COM3 DCD/RI Select Jumper". (JC_COM3, Location 9)
- [3]: COM3 can be RS232 (default) / RS485 selecting by "COM3 RS232/RS485 Select Jumper". (JM_COM3, Location 18).
- [4]: PIN1 of COM4 can be DCD (default) /5V and Pin8 of COM4 can be RI(Default) / 12V, selectable by "COM4 DCD/RI Select Jumper". (JC_COM4, Location 13)
- [5]: COM4 can be RS232 (default) / RS485 selecting by "COM4 RS232/RS485 Select Jumper". (JM_COM4, Location 12).

- [6]: PIN1 of COM5 can be DCD (default) /5V and Pin8 of COM5 can be RI(Default) / 12V, selectable by "COM5 DCD/RI Select Jumper". (JC_COM5, Location 15)
- [7]: PIN1 of COM6 can be DCD (default) /5V and Pin8 of COM6 can be RI(Default) / 12V, selectable by "COM6 DCD/RI Select Jumper". (JC_COM6, Location 16)

9) JC_COM3 (COM3 DCD/RI Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
	1-3, 2-4	COM3_PIN1: + 5V COM3_PIN8: + 12V
	3-5, 4-6(Default)	COM3_PIN1: DCD# COM3_PIN8: RI#

10) J_DBG1 (Port80 Debug Header 9*1 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition
	1	LFRAME_N	6	GND
	2	LPC_AD3	7	RST#
	3	LPC_AD2	8	LPC_CLK
	4	LPC_AD1	9	+ 3.3V
	5	LPC_AD0		

11) J_COPEN1 (Case Open Header 2*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2: Connected	Active Case Open
	1-2: Open	Normal

12) JM_COM4 (COM4 RS232/RS485 Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
	1-3, 2-4	RS485 (COM4_PIN1: RS485- COM4_PIN3: RS485+)
	3-5, 4-6(Default)	RS232 (COM4_PIN1: DCD# COM4_PIN3: RXD)

13) JC_COM4 (COM4 DCD/RI Select Jumper 3*2 Pin 2.54 mm)

Graphic	Setting	Function
	1-3, 2-4	COM4_PIN1: + 5V COM4_PIN8: + 12V
	3-5, 4-6(Default)	COM4_PIN1: DCD# COM4_PIN8: RI#

14) J_AT/ATX1 (AT or ATX Select Jumper 3*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2 (Default)	ATX Mode
	2-3	AT Mode

15) JC_COM5 (COM5 DCD/RI Select Jumper 3*2 Pin 2.54 mm)

Graphic	Setting	Function
	1-3, 2-4	COM5_PIN1: + 5V COM5_PIN8: + 12V
	3-5, 4-6(Default)	COM5_PIN1: DCD# COM5_PIN8: RI#

16) JC_COM6 (COM6 DCD/RI Select Jumper 3*2 Pin 2.54 mm)

Graphic	Setting	Function
	1-3, 2-4	COM6_PIN1: + 5V COM6_PIN8: + 12V
	3-5, 4-6(Default)	COM6_PIN1: DCD# COM6_PIN8: RI#

17) SMBUS1 (SMBUS Header 4*1 Pin 1.25mm)

Graphic	Pin	Definition	Pin	Definition
	1	+ 5V [1]	3	SMB_DATA_MAIN
	2	SMB_CLK_MAIN	4	GND

Notes:

[1]: Pin1 of SMBUS Header is 5V by default and can be 3.3V if specified (resistor selectable).

18) JM_COM3 (COM3 RS232/RS485 Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
	1-3, 2-4	RS485 (COM3_PIN1: RS485- COM3_PIN3: RS485+)
	3-5, 4-6(Default)	RS232 (COM3_PIN1: DCD# COM3_PIN3: RXD)

19) CLR_CMOS1 (CMOS Clear Jumper 3*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2 (Default)	Normal
	2-3	Clear CMOS

20) F_USB3_1* (Front USB3.0 Header 10*2 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition
			1	+ 5V
	19	+ 5V	2	USB3_RX5-
	18	USB3_RX6-	3	USB3_RX5+
	17	USB3_RX6+	4	GND
	16	GND	5	USB3_TX5-
	15	USB3_TX6-	6	USB3_TX5+
	14	USB3_TX6+	7	GND
	13	GND	8	USB2_11-
	12	USB2_10-	9	USB2_11+
	11	USB2_10+	10	N/C

Notes:

[*]: Only support by Q370, H310 cannot support.

21) CPU_FAN1 (CPU FAN Header 4*1 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	GND	3	FAN Speed Detection1
	2	+ 12V	4	FAN Speed Control1

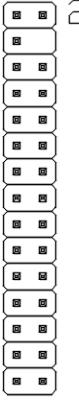
22) EDP_P1 (eDP Backlight Control Header 6*1 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition
	1	GND	4	EDP_BKLT_EN
	2	GND	5	+ 12V
	3	EDP_BKLT_CTL	6	+ 12V

23) JC_EDP1 (eDP VDD Select Jumper 3*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2 (Default)	+ 3.3V
	2-3	+ 5V

24) EDP1 (eDP Signal Header 15*2 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition	
1  2	1	VDD_PANEL [1]	2	VDD_PANEL [1]	
	3	VDD_PANEL [1]			
	5	HPDET_DPD	6	HPDET_DPD	
	7	N/C	8	N/C	
	9	N/C	10	N/C	
	11	N/C	12	N/C	
	13	GND	14	GND	
	15	N/C	16	N/C	
	17	EDP_TX3-	18	EDP_TX3+	
	19	EDP_TX0-	20	EDP_TX0+	
	21	EDP_TX1-	22	EDP_TX1+	
	23	EDP_TX2-	24	EDP_TX2+	
	25	GND	26	GND	
	27	N/C	28	N/C	
	29	EDP_AUX-	30	EDP_AUX+	

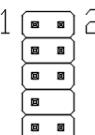
Notes:

[1]: Panel Power VDD can be 3.3V (default) /5V selectable by “eDP VDD Select Jumper” (JC_EDP1, Location 23).

25) JC_COM1 (COM1 DCD/RI Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
1  2	1-3, 2-4	COM1_PIN1: + 5V COM1_PIN9: + 12V
	3-5, 4-6(Default)	COM1_PIN1: DCD# COM1_PIN9: RI#

26) F_AUDIO1 (Front Audio Header (Line-Out + MIC) 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
1  2	1	MIC_IN_L	2	GND
	3	MIC_IN_R	4	+ 3.3V
	5	LINE_OUT_R	6	MIC_IN_RET
	7	GND		
	9	LINE_OUT_L	10	LINE_OUT_RET

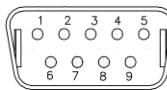
27) J_SPDIF1 (SPDIF Out Header 4*1 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	+ 5V	3	SPDIF_OUT
			4	GND

28) J_PCICLK1 (PCI Clock Select Jumper 3*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2 (Default)	Disable PCI CLK 66MHz
	2-3	Enable PCI CLK 66MHz

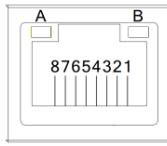
47) COM1 (COM1 DB9/M Connector)

Graphic	Pin	Definition	Pin	Definition
	1	COM1_PIN1 [1]	6	COM1_DSR#
	2	COM1_RXD	7	COM1_RTS#
	3	COM1_TXD	8	COM1_CTS#
	4	COM1_DTR#	9	COM1_PIN9 [1]
	5	GND		

Notes:

[1]: PIN1 of COM1 can be DCD# (default) /5V and Pin9 of COM1 can be RI# (Default) / 12V, selectable by "COM1 DCD/RI Select Jumper". (JC_COM1, Location 25)

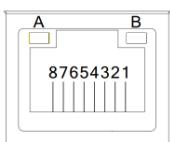
48) RJ45_USB2 (RJ45) * (GBE LAN RJ45 Connector2 8Pin)

Graphic	Pin	Definition	Pin	Definition
	1	MDI0_2+	5	MDI2_2+
	2	MDI0_2-	6	MDI2_2-
	3	MDI1_2+	7	MDI3_2+
	4	MDI1_2-	8	MDI3_2-
	A	Speed LED	B	Active LED

Notes:

[*]: GBE LAN RJ45 Connector2 supports Wake-On-LAN.

49) RJ45_USB1 (RJ45) * (GBE LAN RJ45 Connector1 8Pin)

Graphic	Pin	Definition		Pin	Definition	
	1	MDI0_1+		5	MDI2_1+	
	2	MDI0_1-		6	MDI2_1-	
	3	MDI1_1+		7	MDI3_1+	
	4	MDI1_1-		8	MDI3_1-	
	A	Speed LED	1000M: Turn Orange	B	Active LED	ACT: Twinkling Yellow
			100M: Turn Green			Only LINK: Lights On
			10M: Lights Off			Stop: Lights Off

Notes:

[*]: GBE LAN RJ45 Connector1 can supports AMT and Wake-On-LAN.

59) AUDIO1 (Line-Out + MIC + Line-In 3.5mm Jack)

Graphic	Setting	Function
	Blue	Line-In
	Green	Line-Out
	Pink	MIC-In

7.BIOS setup

See “BIOS Spec for SYM86603VGGA-H310 Series” for detail information of BIOS setup.

【End】