

SYM86803VGGA-Q470

User's Manual

Contents

1.	Models and Attentions	3
1.1	Models.....	3
1.2	Attentions	3
2.	Specification	4
3.	Functional Block Diagram.....	6
4.	Mechanical Drawing	7
5.	Jumpers / Headers and Connectors	8
6.	Definition of Jumpers /Headers and Connectors	12
1)	SYS_FAN1 (System FAN Header1 4*1 Pin 2.54mm).....	12
2)	SYS_FAN2 (System FAN Header2 4*1 Pin 2.54mm).....	12
3)	J_GPIO1 (GPIO Header 6*2 Pin 2.00mm).....	12
4)	F_USB2_2 (Front USB2.0 Header2 5*2 Pin 2.54mm).....	12
5)	F_USB2_1 (Front USB2.0 Header1 5*2 Pin 2.54mm).....	13
6)	F_PANEL1 (Front Panel Header 5*2 Pin 2.54mm).....	13
7)	JP12 (COM2 DCD/RI Select Jumper 3*2 Pin 2.54mm).....	13
8)	COM2/3/4/5/6 (COM2/3/4/5/6 Header 5*2 Pin 2.54mm)	14
9)	JP8 (COM3 DCD/RI Select Jumper 3*2 Pin 2.54mm)	15
10)	J_LPC1 (Port80 Debug Header 9*1 Pin 2.00mm)	15
11)	J_ME1 (ME Flash Jumper 2*1 Pin2.54mm).....	15
12)	JP9 (COM4 DCD/RI Select Jumper 3*2 Pin 2.54mm)	15
13)	JP7 (COM4 RS232/485 Select Jumper 3*2 Pin 2.54mm)	16
14)	J_AT/ATX1 (AT or ATX Select Jumper 3*1 Pin 2.54mm)	16
15)	JP10 (COM5 DCD/RI Select Jumper 3*2 Pin 2.54mm)	16
16)	JP11 (COM6 DCD/RI Select Jumper 3*2 Pin 2.54mm)	16
17)	SMBUS1 (SMBUS Header 4*1 Pin 1.25mm).....	16
18)	22)23) JP6/JP5/JP4 (COM3 RS232/422/485 Select Jumpers 3*2 Pin 2.54mm)	17
19)	JP1 (CMOS Clear Jumper 3*1 Pin 2.54mm).....	17
20)	J_COPEN1 (Case Open Header 2*1 Pin 2.54mm)	17
21)	J2 (Data Burning Header 3*1 Pin 2.54mm).....	17
24)	F_USB3_1 (Front USB3.0 Header 10*2 Pin 2.00mm).....	18
25)	CPU_FAN1 (CPU FAN Header 4*1 Pin 2.54mm)	18
26)	EDP_P1 (eDP Backlight Control Header 6*1 Pin 2.00mm)	18
27)	JP2 (eDP VDD Select Jumper 3*1 Pin 2.54mm)	18
28)	EDP1 (eDP Signal Header 15*2 Pin 2.00mm)	19
29)	JP3 (COM1 DCD/RI Select Jumper 3*2 Pin 2.54mm)	19
30)	F_AUDIO1 (Front Audio Header (Line-Out + MIC) 5*2 Pin 2.54mm)	19
31)	JP13 (SPDIF Out Header 4*1 Pin 2.54mm).....	20
32)	JP14 (PCI CLK 66MHz Enable/Disable Select Jumper 3*1 Pin 2.54mm)	20
33)	J_PEG_CFG1 (PCI-E Signal Select Jumper 3*1 Pin 2.54mm)	20
53)	COM1 (COM1 DB9/M Connector).....	20
54)	RJ45_USB2 (RJ45) * (GBE LAN RJ45 Connector2 8Pin).....	21
55)	RJ45_USB1 (RJ45) * (GBE LAN RJ45 Connector1 8Pin).....	21
61)	AUDIO1 (Line-Out + MIC + Line-In 3.5mm Jack)	21

1. Models and Attentions

1.1 Models

This manual is applied to following models:

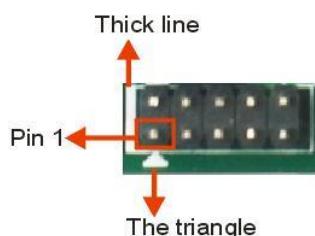
Model	Chipset	COM	LAN	USB	PCIe	PCI	DVI	HDMI	VGA	eDP	Mini-PCIe	M.2 Key-M	SATA 3.0
86803	Q470	6	2	13	1*16X 1*8X 3*4X	2	1	1	1	1	WIFI+ 4G/3G	NVMe /SATA SSD	4

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

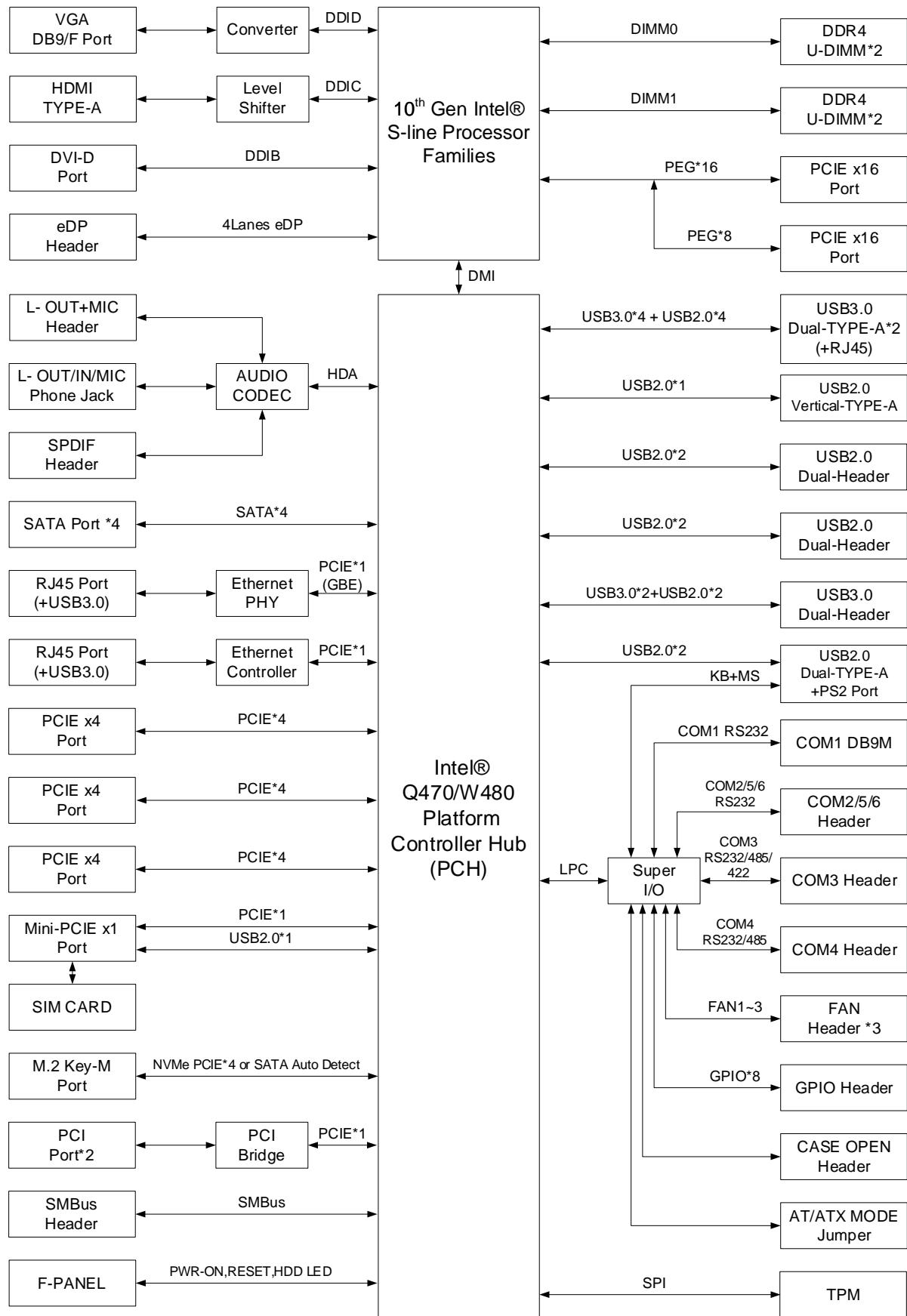
Model	SYM86803VGGA-Q470
CPU	Support Intel® 10/11th Generation Core / Pentium/ Celeron Desktop CPU LGA1200 Support MAX CPU TDP: Deca-Core 125W Follow-up support Intel® 11th Rocket Lake Desktop CPU, TDP Octa-Core 125W
Chipset [1]	Intel® Comet Lake PCH-H, Q470, TDP 6W
Display [2]	1 * DVI-D (DVI-I): Support DVI-D, max resolution up to 1920x1200@60Hz 1 * HDMI 1.4b (TYPE-A): up to 4096x2160@30Hz 1 * VGA (DB15/F): max resolution up to 1920x1200@60Hz 1 * eDP (Header): max resolution up to 4096x2304@60Hz
Memory [3]	Support DDR4-2400/2666/2933MHz, 4 * Non-ECC U-DIMM Slot, Up to 128GB
Storage	Supports RST RAID 0,1,5,10, 4 * SATA3.0 7P Connector 1 * M.2 (NGFF) Key-M Slot (PCIe x4 NVMe/ SATA SSD Auto Detect, 2242/2280)
Ethernet [4]	RJ45_USB1(RJ45): 1 * I219-LM GBE LAN Chip (10/100/1000 Mbps, RJ45) RJ45_USB2(RJ45): 1 * I211 GBE LAN Chip (10/100/1000 Mbps, RJ45)
Audio	Realtek HDA Codec, 1 * Front Audio Header (Line-Out + MIC) 1 * SPDIF Out Header 1 * Line-out + Line-in + MIC 3.5mm Jack
Expansion Slots	1 * PCI-E 16x Slot (PCIe 16X GEN3) ^[5] 1 * PCI-E 16x Slot (PCIe 8X GEN3) ^[5] 3 * PCI-E 4x Slot (PCIe 4X GEN3) 2 * PCI Slot 1 * Mini PCI-E Slot (WIFI+4G/3G, with 1 * Full-Size SIM Card Slot) 1 * PCI CLK 66MHz Enable/Disable Select Jumper 1 * PCI-E Signal Select Jumper
COM	1 * RS232 (COM1, DB9/M) 3 * RS232 (COM2/5/6, Header) 1 * RS232/RS422/RS485 (COM3, Header) 1 * RS232/RS485 (COM4, Header)
USB	4 * USB3.0 (TYPE-A, Rear IO) 2 * USB3.0 (Header, Internal) 2 * USB2.0 (TYPE-A, Rear IO) 1 * USB2.0 (Vertical TYPE-A, Internal) 4 * USB2.0 (Header, Internal))
Other Ports	8 * GPIO 1 * PS/2 Connector (Keyboard & Mouse) 1 * Front Panel Header (HDD LED+PWR LED+PWR ON+RESET) 1 * Port80 Debug Header 1 * SMBUS Header 2 * System FAN Header 1 * CPU FAN Header 1 * Case Open Header 1 * CMOS Clear Jumper 1 * AT or ATX Select Jumper 1 * ME Flash Header 1 * Data Burning Header

TPM	SLB 9670VQ2.0, TPM2.0 (Not onboard by default), Support Intel PTT Default
System	Windows 10 64-bit, Linux
Temperature	Storage: -20~75°C Operating: 0~60°C
BIOS	AMI UEFI BIOS (Support Watchdog Timer)
Power Supply	ATX Standard (24P + 8P + 4P) 1 * ATX 4P Power Input Connector 1 * ATX 8P Power Input Connector 1 * ATX 24P Power Input Connector
Factor	ATX Standard (305mm * 244mm)

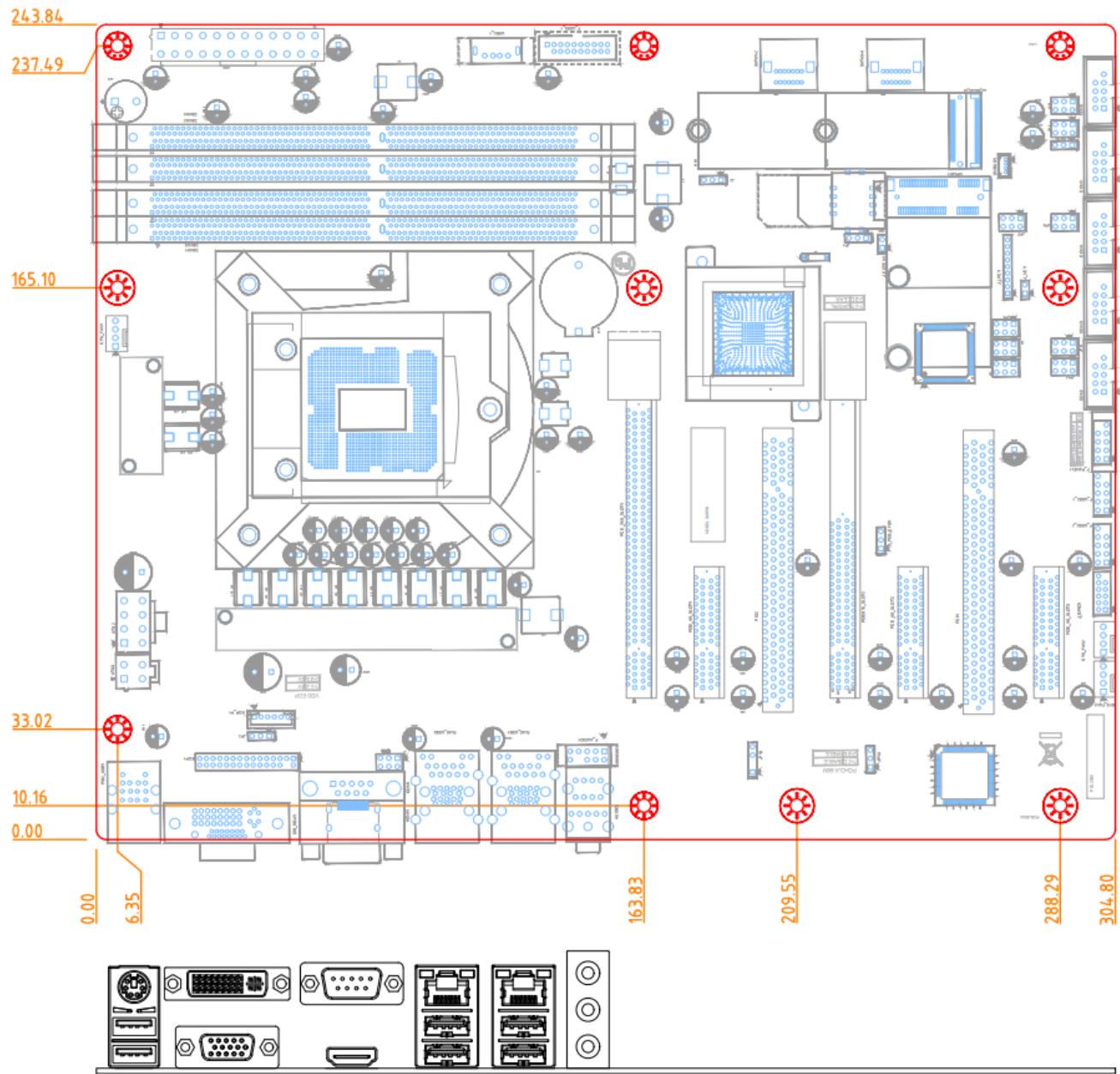
Notes:

- [1]: Chipset can be customized into Intel® W480/Q470E/W480E.
- [2]: Intel® Q470/W480/Q470E/W480E supports three independent displays.
- [3]: The maximum memory frequency depends on CPU. Only Intel® W480/W480E supports ECC.
- [4]: RJ45_USB1 (RJ45) I219-LM supports Intel AMT 12.0 and Intel vPro competent. RJ45_USB2 (RJ45) supports I211 by default and can support I210 if specified.
- [5]: When PCIE16_SLOT2 access device, PCIE_16X_SLOT1 will change to PCIe 8X (Auto detected). And it also can be enforced by 'PCI-E Signal Select Jumper' (J_PEG_CFG1, Location 33)

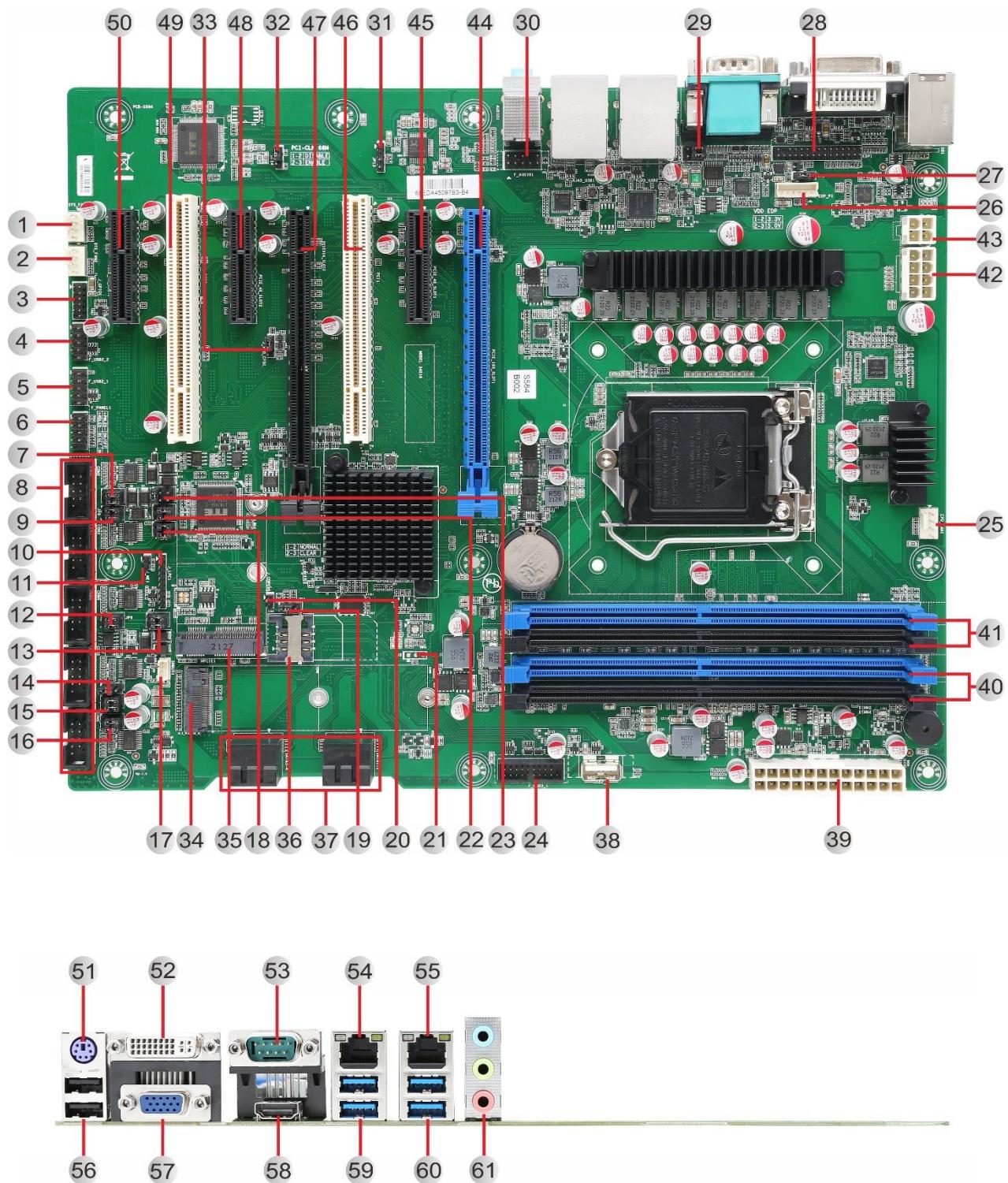
3. Functional Block Diagram

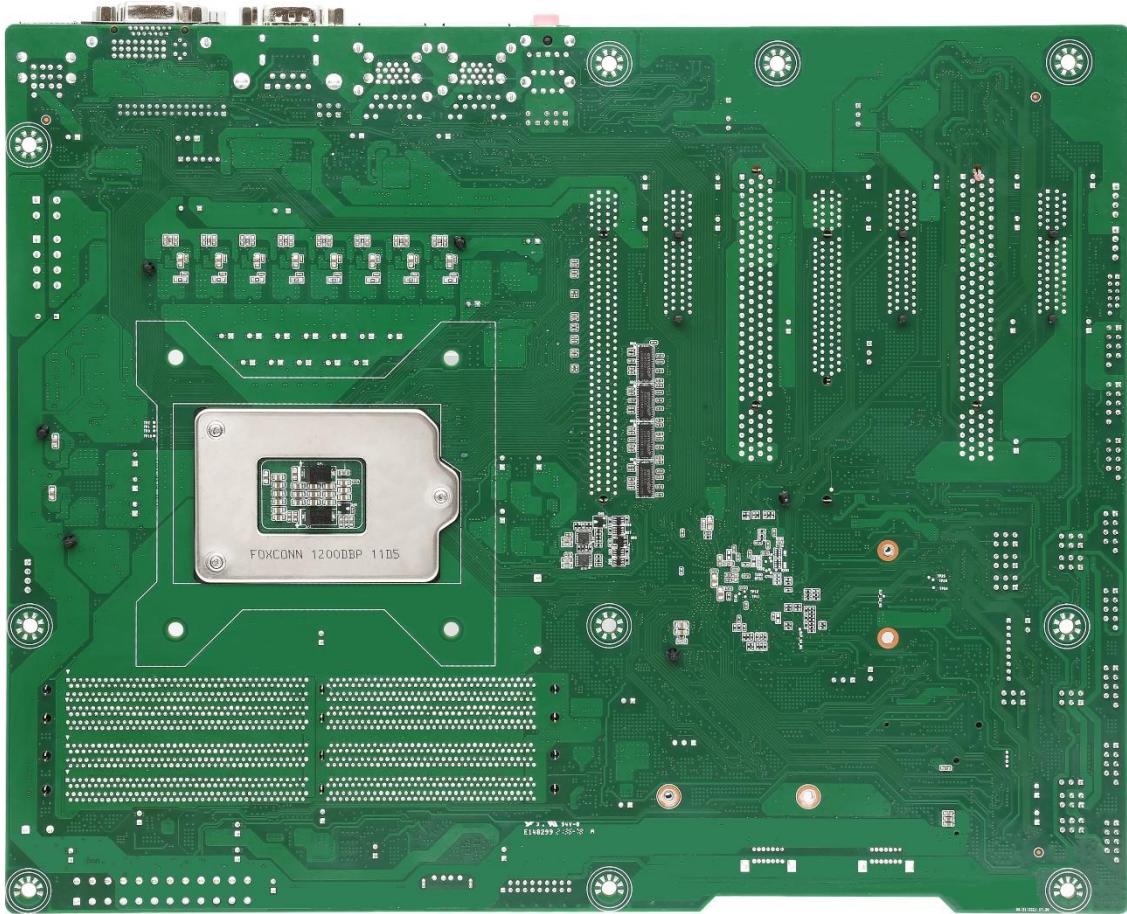


4. Mechanical Drawing



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
5	F_USB2_1	Front USB2.0 Header1
6	F_PANEL1	Front Panel Header
7	JP12	COM2 DCD/RI Select Jumper
8	COM2-6	COM2/3/4/5/6 Header
9	JP8	COM3 DCD/RI Select Jumper
10	J_LPC1	Port80 Debug Header
11	J_ME1	ME Flash Jumper
12	JP9	COM4 DCD/RI Select Jumper
13	JP7	COM4 RS232/485 Select Jumper
14	J_AT/ATX1	AT or ATX Select Jumper
15	JP10	COM5 DCD/RI Select Jumper
16	JP11	COM6 DCD/RI Select Jumper

17	SMBUS1	SMBUS Header
18	JP6	COM3 RS232/422/485 Select Jumper3
19	JP1	CMOS Clear Jumper
20	J_COPEN1	Case Open Header
21	J2	Data Burning Header
22	JP5	COM3 RS232/422/485 Select Jumper2
23	JP4	COM3 RS232/422/485 Select Jumper1
24	F_USB3_1	Front USB3.0 Header
25	CPU_FAN1	CPU FAN Header
26	EDP_P1	eDP Backlight Control Header
27	JP2	eDP VDD Select Jumper
28	EDP1	eDP Signal Header
29	JP3	COM1 DCD/RI Select Jumper
30	F_AUDIO1	Front Audio Header (Line-Out + MIC)
31	JP13	SPDIF Out Header
32	JP14	PCI CLK 66MHz Enable/Disable Select Jumper
33	J_PEG_CFG1	PCI-E Signal Select Jumper
34	M.2_PCIESSD_M1	M.2 (NGFF) Key-M Slot (PCIe x4 NVMe/SATA SSD, 2242/2280)
35	MPCIE1	Mini PCI-E Slot (WIFI+4G/3G)
36	SIM1	Full-Size SIM Card Slot
37	SATA1-2/3-4	SATA3.0 7P Upright Connector1-2/3-4
38	USB2_1	USB2.0 Internal Vertical TYPE-A Connector
39	ATX1	ATX 24P Power Input Connector
40	DIMM2/DIMM4	DDR4 CHB DIMM Slot2/4
41	DIMM1/DIMM3	DDR4 CHA DIMM Slot1/3
42	ATX2	ATX 8P Power Input Connector
43	ATX3	ATX 4P Power Input Connector
44	PCIE_16X_SLOT1	PCI-E 16x Slot1 (PCIe 16X GEN3) [1]
45	PCIE_4X_SLOT1	PCI-E 4x Slot1 (PCIe 4X GEN3)
46	PCI1	PCI Slot1
47	PCIEX16_SLOT2	PCI-E 16x Slot2 (PCIe 8X GEN3) [1]
48	PCIE_4X_SLOT2	PCI-E 4x Slot2 (PCIe 4X GEN3)
49	PCI2	PCI Slot2
50	PCIE_4X_SLOT3	PCI-E 4x Slot3 (PCIe 4X GEN3)
51	PS/2_USB1(PS/2)	PS/2 Connector (Keyboard & Mouse)
52	DVI_VGA1(DVI-D)	DVI-I 24+4P/F Connector (Support DVI-D)
53	COM1	COM1 DB9/M Connector
54	RJ45_USB2 (RJ45)	GBE LAN RJ45 Connector2
55	RJ45_USB1 (RJ45)	GBE LAN RJ45 Connector1
56	PS/2_USB1(USB)	Dual USB2.0 TYPE-A Connector
57	DVI_VGA1(VGA)	VGA DB15/F Connector
58	HDMI1	HDMI TYPE-A Connector

59	RJ45_USB2 (USB)	Dual USB3.0 TYPE-A Connector2
60	RJ45_USB2 (USB)	Dual USB3.0 TYPE-A Connector1
61	AUDIO1	Line-Out + MIC + Line-In 3.5mm Jack

Notes:

[1]: When PCIE16_SLOT2 access device, PCIE_16X_SLOT1 will change to PCIe 8X (Auto detected). And it also can be enforced by 'PCI-E Signal Select Jumper' (J_PEG_CFG1, Location 33)

6. Definition of Jumpers /Headers and Connectors

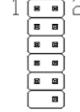
1) SYS_FAN1 (System FAN Header1 4*1 Pin 2.54mm)

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

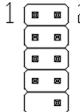
3) J_GPIO1 (GPIO Header 6*2 Pin 2.00mm)

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

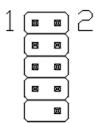
Notes:

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

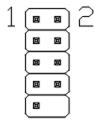
4) F_USB2_2 (Front USB2.0 Header2 5*2 Pin 2.54mm)

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

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

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

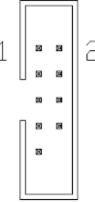
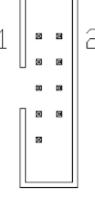
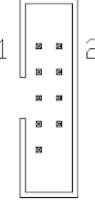
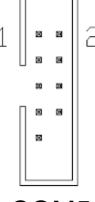
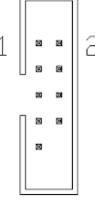
6) F_PANEL1 (Front Panel Header 5*2 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
1 	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) JP12 (COM2 DCD/RI Select Jumper 3*2 Pin 2.54mm)

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

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

Graphic	Pin	Definition	Pin	Definition
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		
COM3 	1	COM3_PIN1 [2] [3]	2	COM3_DSR
	3	COM3_PIN3 [3]	4	COM3_RTS
	5	COM3_PIN5 [3]	6	COM3_CTS
	7	COM3_PIN7 [3]	8	COM3_PIN8 [2] [3]
	9	GND		
COM4 	1	COM4_PIN1 [4] [5]	2	COM4_DSR
	3	COM4_PIN3 [4]	4	COM4_RTS
	5	COM4_TXD	6	COM4_CTS
	7	COM4_DTR	8	COM4_PIN8 [5]
	9	GND		
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		
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". (JP12, 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". (JP8, Location 9)
- [3]: COM3 can be RS232 (default) / RS422 / RS485 by selecting JP4, JP5, JP6 Jumper, check Location 18/22/23 for detail.
- [4]: COM4 can be RS232 (default) / RS485 selecting by "COM4 RS232/RS485 Select Jumper". (JP7 Location 13).
- [5]: PIN1 of COM4 can be DCD (default) /5V and Pin8 of COM4 can be RI(Default) / 12V, selectable by "COM4 DCD/RI Select Jumper". (JP9, 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". (JP10, 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". (JP11, Location 16)

9) JP8 (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_LPC1 (Port80 Debug Header 9*1 Pin 2.00mm)

Graphic	Pin	Definition	Pin	Definition
	1	LFRAME_N	6	GND
	2	LPC_AD3	7	SIO_PCIRST1_N
	3	LPC_AD2	8	CLK_LPC0
	4	LPC_AD1	9	+ 3.3V
	5	LPC_AD0		

11) J_ME1 (ME Flash Jumper 2*1 Pin2.54mm)

Graphic	Setting	Function
	1-2: Open (Default)	ME Protect Enable
	1-2: Connected	ME Protect Disable

12) JP9 (COM4 DCD/RI Select Jumper 3*2 Pin 2.54mm)

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

13) JP7 (COM4 RS232/485 Select Jumper 3*2 Pin 2.54mm)

Graphic	Setting	Function
	1-3, 2-4	COM4: RS485 (COM4_PIN1: RS485- COM4_PIN3: RS485+)
	3-5, 4-6(Default)	COM4: RS232 (COM4_PIN1: DCD COM4_PIN3: RXD)

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) JP10 (COM5 DCD/RI Select Jumper 3*2 Pin 2.54mm)

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) JP11 (COM6 DCD/RI Select Jumper 3*2 Pin 2.54mm)

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]: Power on this Pin is 5V by default, 3.3V is available if specified. (resistor selectable)

18) 22)23) JP6/JP5/JP4 (COM3 RS232/422/485 Select Jumpers 3*2 Pin 2.54mm)

Graphic	Setting	Function
JP4 	JP4 (1-2, Default)	COM3: RS232 (COM3_PIN1: DCD
	JP5 (3-5, 4-6, Default)	COM3_PIN3: RXD COM3_PIN5: TXD
	JP6 (3-5, 4-6, Default)	COM3_PIN7: DTR)
JP5 	JP4 (3-4)	COM3: RS422
	JP5 (1-3, 2-4)	(COM3_PIN1: RS422_TX-
	JP6 (1-3, 2-4)	COM3_PIN3: RS422_RX+ COM3_PIN5: RS422_RX+
JP6 	JP4 (5-6)	COM3: RS485
	JP5(1-3, 2-4)	(COM3_PIN1: RS485-
	JP6 (No Effect)	COM3_PIN3: RS485+)

19) JP1 (CMOS Clear Jumper 3*1 Pin 2.54mm)

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

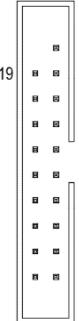
20) J_COPEN1 (Case Open Header 2*1 Pin 2.54mm)

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

21) J2 (Data Burning Header 3*1 Pin 2.54mm)

Graphic	Pin	Definition	Pin	Definition
	1	GP3.0_RXD	3	GND
	2	GP3.1_TXD		

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

Graphic	Pin	Definition	Pin	Definition
			1	+ 5V
	19	+ 5V	2	USB3_RXD5-
	18	USB3_RXD6-	3	USB3_RXD5+
	17	USB3_RXD6+	4	GND
	16	GND	5	USB3_TXD5-
	15	USB3_TXD6-	6	USB3_TXD5+
	14	USB3_TXD6+	7	GND
	13	GND	8	USB2_11-
	12	USB2_10-	9	USB2_11+
	11	USB2_10+	10	N/C

25) 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

26) 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

27) JP2 (eDP VDD Select Jumper 3*1 Pin 2.54mm)

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

28) 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	GND	6	EDP_HPD	
	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	N/C	18	N/C	
	19	EDP_TX0-	20	EDP_TX0+	
	21	EDP_TX1-	22	EDP_TX1+	
	23	EDP_TX2-	24	EDP_TX2+	
	25	GND	26	GND	
	27	EDP_TX3-	28	EDP_TX3+	
	29	EDP_AUX-	30	EDP_AUX+	

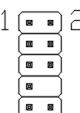
Notes:

[1]: Panel Power VDD can be 3.3V (default) /5V selectable by eDP VDD Select Jumper" (JP2 Location 26).

29) JP3 (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

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

Graphic	Pin	Definition	Pin	Definition
1  2	1	MIC_IN2_L	2	GND_AUD
	3	MIC_IN2_R	4	+ 3.3V
	5	LINE_OUT2_R	6	MIC2_RET
	7	GND_AUD		
	9	LINE_OUT2_L	10	LINE_OUT2_RET

31) JP13 (SPDIF Out Header 4*1 Pin 2.54mm)

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

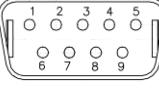
32) JP14 (PCI CLK 66MHz Enable/Disable Select Jumper 3*1 Pin 2.54mm)

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

33) J_PEG_CFG1 (PCI-E Signal Select Jumper 3*1 Pin 2.54mm)

Graphic	Setting	Function
	1-2 (Default)	PCIE_16X_SLOT1: PCIe 16X PCIE_16X_SLOT2: No resources
	2-3	PCIE_16X_SLOT1: PCIe 8X PCIE_16X_SLOT2: PCIe 8X

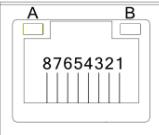
53) COM1 (COM1 DB9/M Connector)

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". (JP3, Location 28)

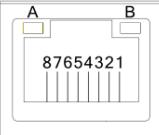
54) RJ45_USB2 (RJ45) * (GBE LAN RJ45 Connector2 8Pin)

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	1000M: Turn Orange	B	Active LED	ACT: Twinkling Yellow
			100M: Turn Green			Only LINK: Lights On
			10M: Lights Off			Stop: Lights Off

Notes:

[*]: RJ45_USB2(RJ45) can support Wake-On-LAN.

55) 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:

[*]: RJ45_USB1(RJ45) can support AMT and Wake-On-LAN.

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

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