Haite Motherboard User' Manual

用户手册

MB-I810 Series

Ver 1.0

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1. Models and Attentions

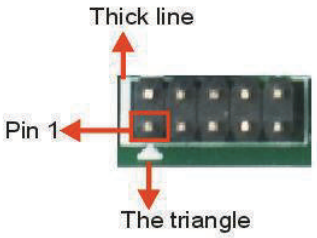
1.1 Models

This manual is applied to flowing models:

Model	Chipset	COM	LAN	VGA	HDMI	USB2.0	USB3.0	PCI-E X16	Mini PCI-E
MB-I810	H81	6	2	1	1	8	2	1	2
MB-I810 +SV-M5-CU	H81	12	2	1	1	15	2	1	2

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	MB-I810	MB-I810 + SV-M5-CU
CPU	Intel Pentium/ Celeron/ 4th Generation Core i3/5/7 CPU, LGA1150	
Chipset	Intel® H81 , TDP 4.1 W	
Display	1 * VGA [1] 1 * HDMI	
Memory	Support DDR3 1333/1600 MHz, 2 * DIMM Slot, Up to 16GB [2]	
Storage	1 * Serial ATA 2.0 Ports [3] +1 * Serial ATA 3.0 Ports +1 * mSATA	
Ethernet	2 * Realtek PCI-E NIC RTL8111F for 1000Mbps	
Audio	Realtek ALC662 5.1 Channel HDA Codec , Support MIC/Line-out Ports	
COM	6 * RS232	12 * RS232
USB	10 * USB: 8 * Rear I/O(USB2.0) + 2 * Rear I/O(USB3.0/USB2.0)	17 * USB: 12 * Rear I/O(USB2.0) + 2 * Rear I/O(USB3.0/USB2.0) + 3 * Header (USB2.0)
Other Ports	8 * GPIO 1 * PS/2 [4] 1 * Front Audio 2 * Mini PCI-E 1 * SIM Card Header 1 * PCI-E X16 slot 1 * Parallel Pin Header	
Temperature	Storage: -20~75℃ Operating: 0~60℃	
BIOS	AMI UEFI BIOS	
Factor	Mini-ITX (170mm * 170mm)	

Notes:

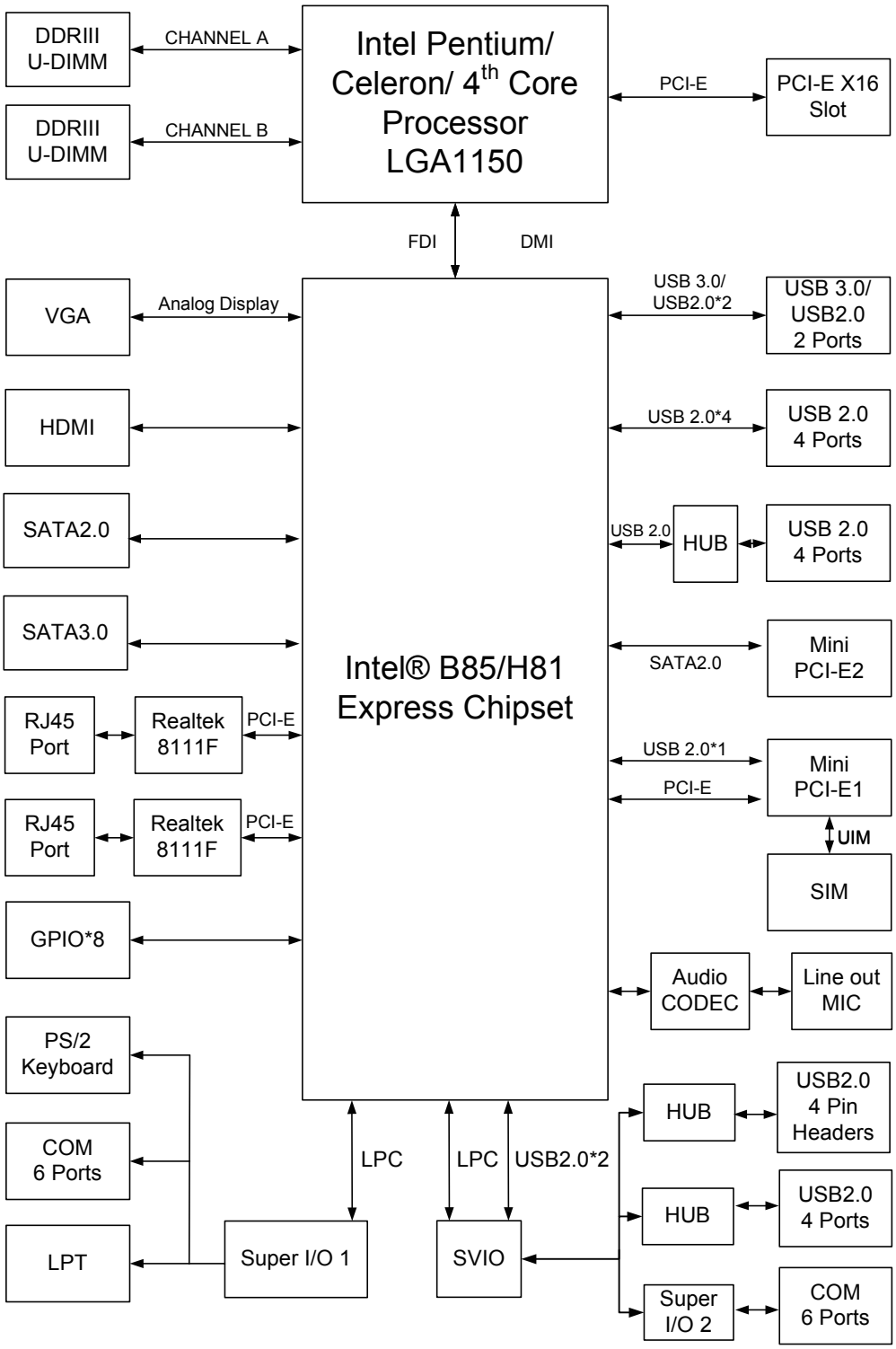
[1]: The VGA1 (DB15) and J_VGA1 share the same signal and can't be accessed simultaneously.

[2]: Due to the restriction of Windows 32 bit OS, when applied more than 4G memory, 32 bit OS may detect less than actual size.

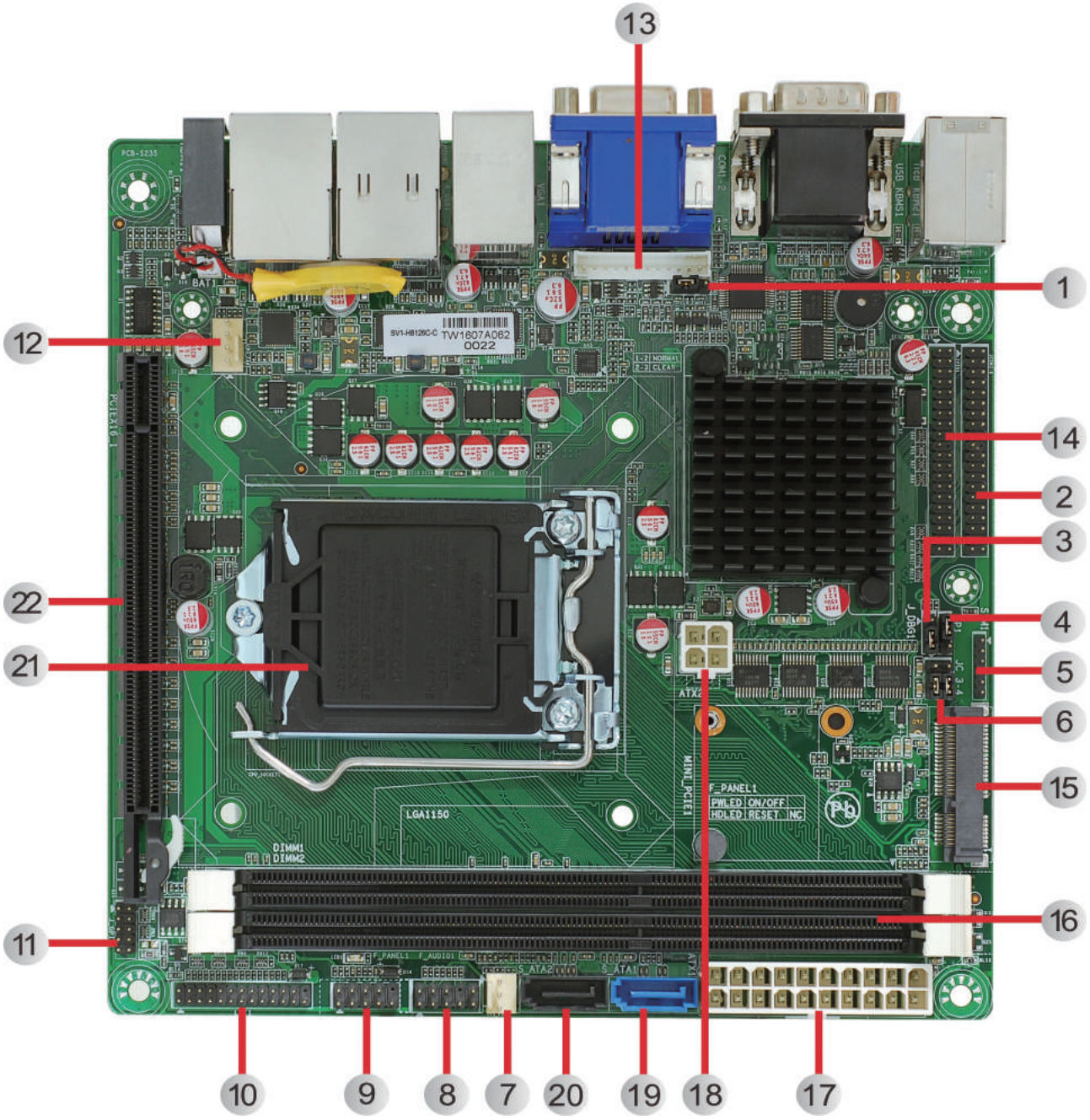
[3]: S_ATA1 is SATA 2.0 Ports, S_ATA2 is SATA 3.0 Ports.

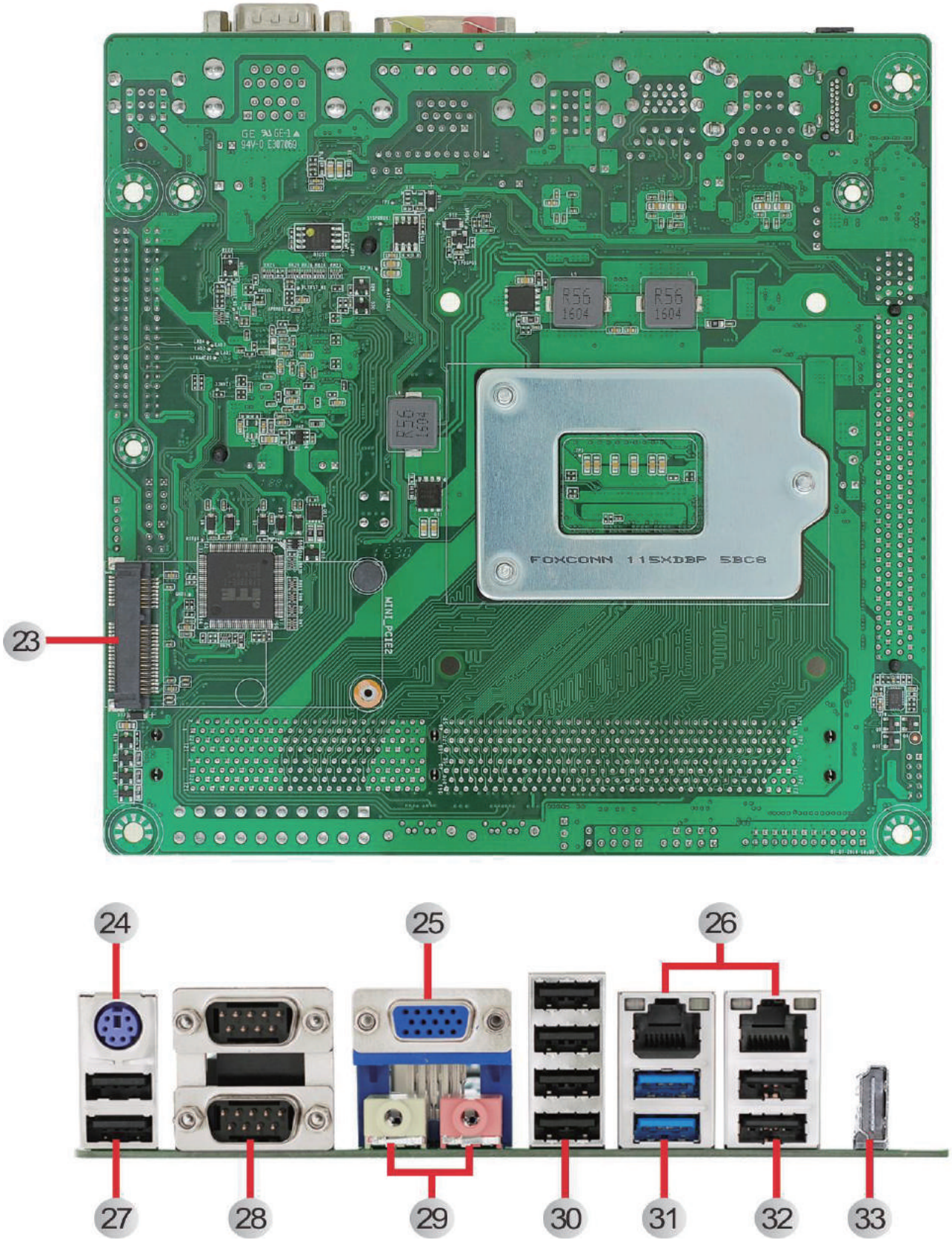
[4]: The PS/2 only support keyboard.

3. Data Flow


DDRIII U-DIMM
CHANNEL A
DDRIII U-DIMM
CHANNEL B
Intel Pentium/ Celeron/ 4th Core Processor LGA1150
PCI-E
PCI-E X16 Slot
FDI
DMI
VGA
Analog Display
HDMI
SATA2.0
SATA3.0
RJ45 Port
Realtek 8111F
PCI-E
RJ45 Port
Realtek 8111F
PCI-E
GPIO*8
Intel® B85/H81 Express Chipset
USB 3.0/ USB2.0*2
USB 3.0/ USB2.0 2 Ports
USB 2.0*4
USB 2.0 4 Ports
USB 2.0
HUB
USB 2.0 4 Ports
SATA2.0
Mini PCI-E2
USB 2.0*1
PCI-E
Mini PCI-E1
UIM
SIM
Audio CODEC
Line out MIC
PS/2 Keyboard
COM 6 Ports
LPT
Super I/O 1
LPC
LPC
USB2.0*2
SVIO
HUB
USB2.0 4 Pin Headers
HUB
USB2.0 4 Ports
Super I/O 2
COM 6 Ports

4. Jumpers / Headers and Connectors




23
FOXCONN 115XDBP SBC8
MINI_PCIE2
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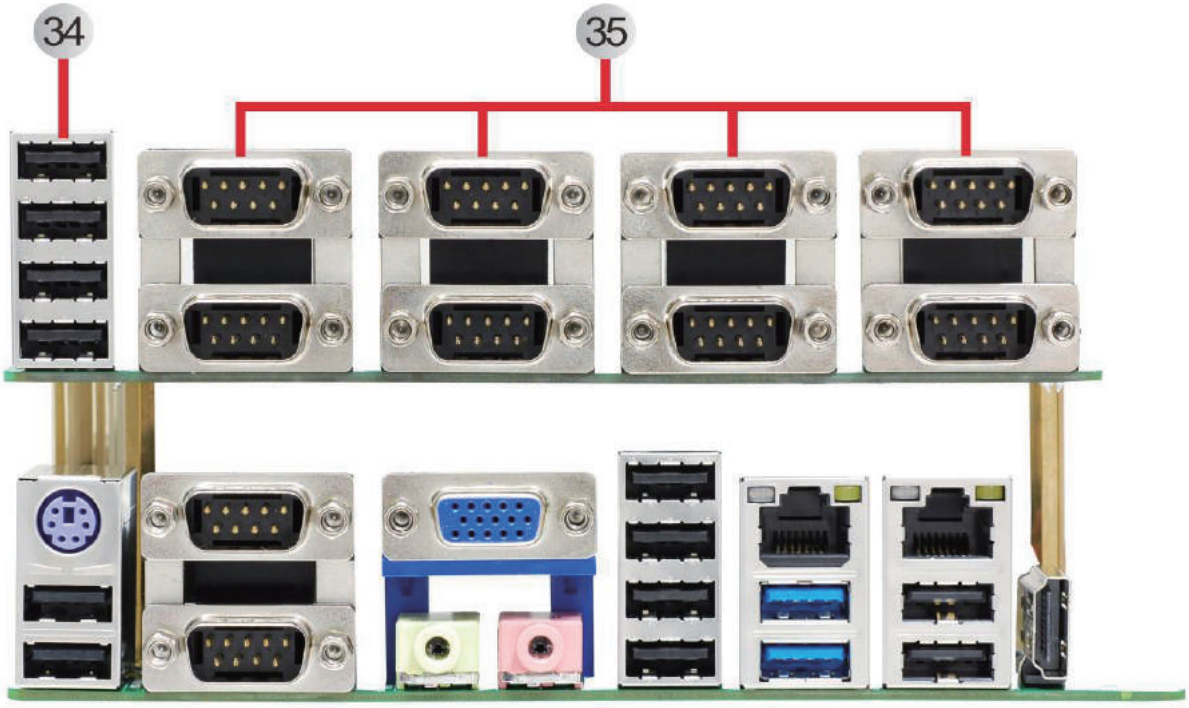
With Daughter Board SV-M5-CU:



Jumpers/Headers/Connectors				
1	CMOS Clear Jumper	P_9	18	ATX2 Power Input Connector
2	COM3~6 Pin Header	P_9	19	SATA 3.0 Connectors
3	Debug Pin Header		20	SATA 2.0 Connectors
4	AT or ATX Select Jumper	P_{10}	21	CPU Slot
5	SIM Card Pin Header	P_{10}	22	PCI-E X16 Slot
6	COM3/4 Pin1 Signal Select Jumper	P_{10}	23	Mini PCI-E2 Slot
7	System Fan Connector	P_{10}	24	PS/2 Connector
8	Front Audio Pin Header	P_{10}	25	VGA Connector
9	Front Panel Pin Header	P_{11}	26	LAN Connectors
10	Parallel Pin Header	P_{11}	27	USB 2.0 Connectors
11	GPIO Pin Header	P_{11}	28	COM Connectors
12	CPU Fan Connector	P_{12}	29	Audio Connectors
13	VGA Pin Header	P_{12}	30	USB 2.0 Connectors
14	Seavo IO Connector		31	USB 3.0 Connectors
15	Mini PCI-E1 Slot		32	USB 2.0 Connectors
16	DIMM Slots SIM Card Slot		33	HDMI Connector
17	ATX1 Power Input Connector			

With Daughter Board SV-M5-CU:

34	USB 2.0 Connectors	35	COM3-10 Connectors

5. Definition of Jumpers/Headers and Connectors

[1] CMOS Clear Jumper (3*1 Pin 2.54mm)

Location	Jumper	Setting	Function
1	CLR_CMOS1	1-2(Default)	Normal
		2-3	Clear CMOS

[2] COM3~6 Pin Headers (20*2 Pin 2.00 mm)

Location	Header	Pin	Definition	Pin	Definition
2	JCOM3-6	1	JC_3-4 *	2	COM3_RXD
		3	COM3_TXD	4	COM3_DTR
		5	GND	6	COM3_DSR
		7	COM3_RTS	8	COM3_CTS
		9	COM3_RI	10	GND
		11	JC_3-4 *	12	COM4_RXD
		13	COM4_TXD	14	COM4_DTR
		15	GND	16	COM4_DSR
		17	COM4_RTS	18	COM4_CTS
		19	COM4_RI	20	
		21	DCD	22	COM5_RXD
		23	COM5_TXD	24	COM5_DTR
		25	GND	26	COM5_DSR
		27	COM5_RTS	28	COM5_CTS
		29	COM5_RI	30	GND
		31	DCD	32	COM6_RXD
		33	COM6_TXD	34	COM6_DTR
		35	GND	36	COM6_DSR
		37	COM6_RTS	38	COM6_CTS
		39	COM6_RI	40	GND

Note:

* Pin1 of JCOM3/4 can be 5V or signal DCD (selected via JC_3-4, Location 6).

[4] AT or ATX Select Jumper (3*1 Pin 2.54mm)

Location	Jumper	Settings	Function
4	JP1	1-2 (Default)	ATX Mode
		2-3	AT Mode

[5] SIM Card Pin Header (6*1 Pin 2.00mm)

Location	Header	Pin	Definition	Pin	Definition
5	SIM1	1	UIM_PWR	2	GND
		3	UIM_DAT	4	UIM_CLK
		5	UIM_RST	6	UIM_VPP

[6] COM3/4 Pin1 Signal Select Jumper (3*2 Pin 2.54mm)

Location	Jumper	Settings	Function
6	JC_3-4	1-3、2-4	COM3_PIN1 : 5V COM4_PIN1 : 5V
		3-5、4-6 (Default)	COM3_PIN1 : DCD COM4_PIN1 : DCD

[7] System Fan Connector (3*1 Pin 2.54mm)

Location	Header	Pin	Definition	Pin	Definition
7	SYS_FAN1	1	GND	2	+ 12V
		3	FAN Speed Detection		

[8] Front Audio Pin Header (5*2 Pin 2.54mm)

Location	Header	Pin	Definition	Pin	Definition
8	F_AUDIO1	1	FP_MIC_L	2	GND
		3	FP_MIC_R	4	+ 3.3V
		5	FP_OUT_R	6	MIC_Detect
		7	GND		
		9	FP_OUT_L	10	MIC_Detect

[9] Front Panel Pin Header (5*2 Pin 2.54 mm)

Location	Header	Pin	Definition	Pin	Definition
9	F_PANEL1	1	HD LED+	2	Power LED+
		3	HD LED-	4	Power LED-
		5	GND	6	PWR+
		7	RESET#	8	PWR -
		9	N/C	10	

[10] Parallel Pin Header (13*2 Pin 2.00mm)

Location	Header	Pin	Definition	Pin	Definition
10	LPT1	1	STROBE#	2	AUTOFEED#
		3	DATA0	4	ERROR#
		5	DATA1	6	INIT#
		7	DATA2	8	SLCTIN#
		9	DATA3	10	GND
		11	DATA4	12	GND
		13	DATA5	14	GND
		15	DATA6	16	GND
		17	DATA7	18	GND
		19	ACKNLG#	20	GND
		21	BUSY	22	GND
		23	PE	24	GND
		25	SLCT		

[11] GPIO Pin Header (5*2 Pin 2.00 mm)

Location	Header	Pin	Definition	Pin	Definition
11	J_GPIO1	1	GPO68(0x1C48 Bit4,H) [1]	2	GPO69(0x1C48 Bit5,H)
		3	GPO70(0x1C48 Bit6,H)	4	GPO71(0x1C48 Bit7,H)
		5	GND	6	GPI1(0x1C0C Bit1)
		7	GPI6(0x1C0C Bit 6)	8	GPI7(0x1C0C Bit7)
		9	GPI17(0x1C0E Bit1)	10	+ 5 V *

Note:

[1]: “H” or “L” means the default voltage is High or Low level.

[2]: * Power on this Pin and GPIO output is 5V signaling by default, 3.3V is available if specified (resistor selectable).

[12] CPU Fan Connector (4*1 Pin 2.54mm)

Location	Header	Pin	Definition	Pin	Definition
12	CPU_FAN1	1	GND	2	+ 12V
		3	FAN Speed Detection	4	FAN Speed Control

[13] VGA Pin Header (12*1 Pin 2.00mm)

Location	Connector	Pin	Definition	Pin	Definition
13	J_VGA1	1	GND	2	VSYNC
		3	HSYNC	4	GND
		5	RED	6	GND
		7	GREEN	8	GND
		9	BLUE	10	GND
		11	DDCDAT	12	DDCCLK

6. BIOS setup

See “MB-I810 Quick Start Guide” & “MB-I810 BIOS Specification Summary Sheet” for detail information of BIOS setup.

【End】