

Chapter

1

**Quick  
Installation  
Guide**

ECB-917T Quick Installation Guide Rev.A 3rd Ed.

June 11, 2014

## 1.1 Safety Precaution

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**Warning!**



*Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.*

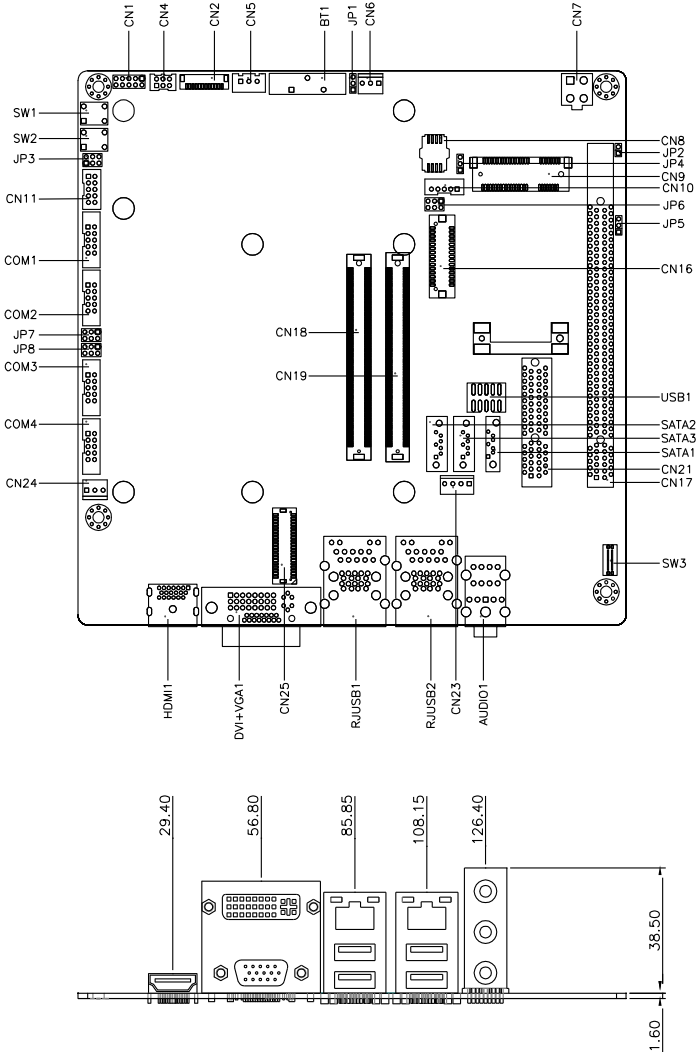
**Caution!**



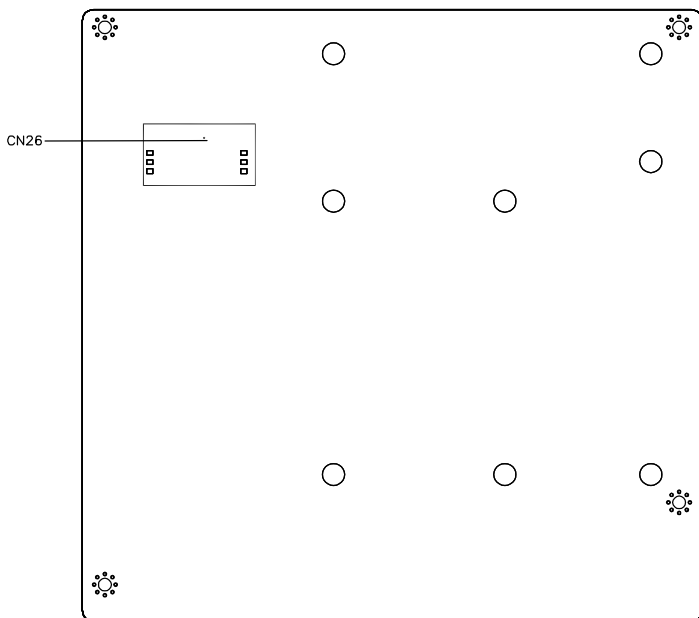
*Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis*

## 1.2 Location of Connectors and Jumpers

### Component Side

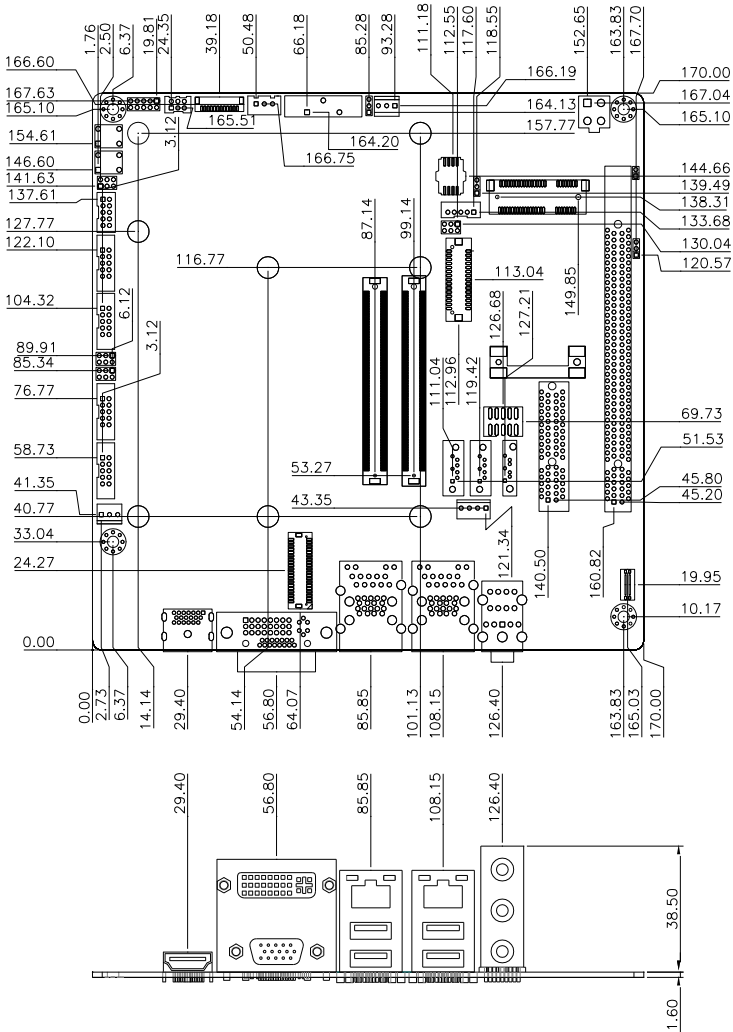


## Solder Side

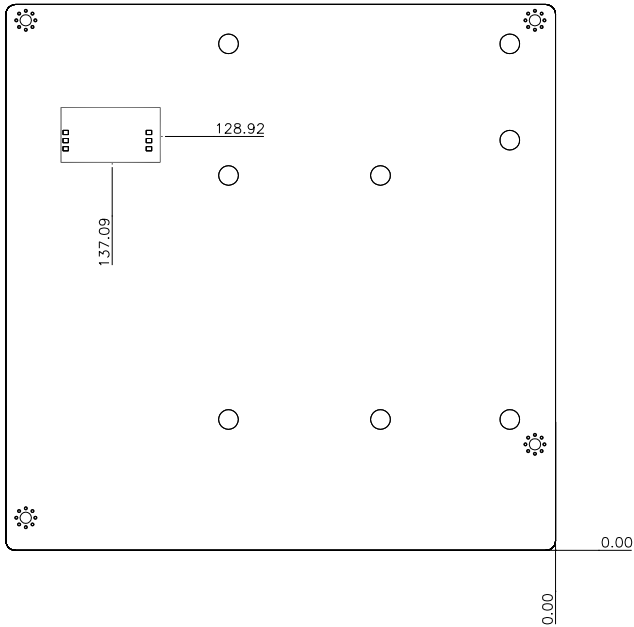


### 1.3 Mechanical Drawing

#### Component Side



Solder Side



## 1.4 List of Jumpers

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The board has a number of jumpers that allow you to configure your system to suit your application.

The table below shows the function of each of the board's jumpers:

<b>Label</b>	<b>Function</b>
JP1	COMS RTC Setting
JP2	AT Mode Setting
JP3	Power Button For AT Power
JP4	LVDS Power Setting
JP5	PEG_ENABLE Setting for Type 6
JP6	BKL Control Selection / Inverter Voltage Selection
JP7	COM2 Pin9 Setting
JP8	RS-232/422/485 Setting

## 1.5 List of Connectors

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The board has a number of connectors that allow you to configure your system to suit your application. The table below shows the function of each board's connectors:

<b>Label</b>	<b>Function</b>
CN1	Front Panel Connector
CN2	LPC Connector
CN4	Keyboard & Mouse Connector
CN5	Standby Power input Connector
CN6	FAN2 Connector
CN7	ATX12V Power Connector
CN8	BIOS Socket
CN9	Mini Card Connector for Type 6
CN10	LVDS Power Connector
CN11	Digital I/O Connector
CN16	LVDS Connector
CN17	PCI-Express [x16] Connector for Type 6
CN18	COM-Express Connector (Row C & D)
CN19	COM-Express Connector (Row A & B)
CN21	PCI-Express [x4] Connector
CN23	HDD Power Connector
CN24	FAN1 Connector
CN25	SDVO Port Connector



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AUDIO1	Audio Connector
RJUSB1	Dual USB 3.0 Ports, LAN Connector for Type 6 Dual USB 2.0 Ports, LAN Connector for Type 10
RJUSB2	Dual USB 3.0 Ports, LAN Connector for Type 6 Dual USB 2.0 Ports for Type 10
DVI+VGA1	DVI & CRT Connector for Type 6
HDMI1	HDMI Connector for Type 6
SATA1	SATA 2.0 Connectors for Type 6
SATA2,SATA3	SATA 3.0 Connector for Type 6 SATA 2.0 Connector for Type 10
SW3	BIOS Boot Selection

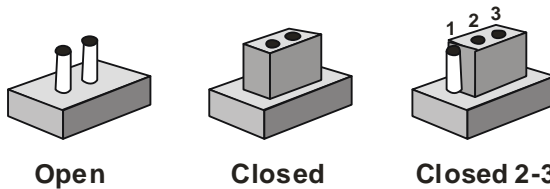
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## 1.6 Setting Jumpers

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You configure your card to match the needs of your application by setting jumpers. A jumper is the simplest kind of electric switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To “close” a jumper you connect the pins with the clip.

To “open” a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2 and 3. In this case you would connect either pins 1 and 2 or 2 and 3.



A pair of needle-nose pliers may be helpful when working with jumpers.

If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any change.

Generally, you simply need a standard cable to make most connections.

## 1.7 CMOS RTC Setting (JP1)

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JP1	Function
1-2	Normal Mode (Default)
2-3	Clear CMOS

## 1.8 AT Mode Setting (JP2)

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JP2	Function
1-2	AT Mode
Open	None AT Mode (Default)

## 1.9 Power Button For AT Power (JP3)

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JP3	Function
1-3	ATX Power Mode (Default)
3-5	AT Power Mode

## 1.10 LVDS Power Setting (JP4)

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JP4	Function
1-2	+5V
2-3	+3.3V (Default)

## 1.11 PEG Enable Setting (JP5)

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JP5	Function
1-2	Enable (Default)
2-3	Disable

### 1.12 BKL Control Selection/ Inverter Voltage Selection (JP6)

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JP6	Function
1-3	Chips Control
3-5	SMBus Control
2-4	+5V Control
4-6	+12V Control (Default)

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### 1.13 COM2 Pin9 Setting (JP7)

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JP7	Function
1-2	+5V
3-4	RI#2 (Default)
5-6	+12V

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### 1.14 RS-232/422/485 Setting (JP8)

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JP8	Function
1-2	RS-232 (Default)
3-4	RS-422
5-6	RS-485

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### 1.15 Front Panel Connector (CN1)

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Pin	Signal
1+2	Power On/Off
3+4	SATA LED
5+6	SPEAKER
7+8	POWER LED

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9+10          Reset

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### 1.16 LPC Connector (CN2)

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Pin	Signal
1	LPC_AD0
2	LPC_AD1
3	LPC_AD2
4	LPC_AD3
5	+3.3V
6	LPC_FRAME#
7	FWHPLT_RST#
8	GND
9	FWH_CLK
10	PCH_DRQ#0
11	PCH_DRQ#1
12	INT_SERIRQ

### 1.17 Keyboard & Mouse Connector (CN4)

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Pin	Signal	Pin	Signal
1	KDAT	2	KCLK
3	GND	4	+5V
5	MDAT	6	MCLK

### 1.18 Standby Power Input Connector (CN5)

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Pin	Signal
1	PS_ON#
2	GND
3	5VSB

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### 1.19 Fan2 Connector (CN6)

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Pin	Signal
1	GND
2	FAN_CTL2
3	5V

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### 1.20 ATX12V Power Connector (CN7)

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Pin	Signal
1	GND
2	GND
3	12V
4	12V

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### 1.21 BIOS Socket (CN8)

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Pin	Signal	Pin	Signal
1	CARRY_SPI_CS#	8	3V_DUAL
2	SPI_SO	7	3V_DUAL
3	3V_DUAL	6	SPI_CLK

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4	GND	5	SPI_SI
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## 1.22 Mini Card Connector (CN9)

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Standard Mini Card Connector

## 1.23 LVDS Power Connector (CN10)

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Pin	Signal
1	Inverter voltage
2	BKL control
3	GND
4	GND
5	L_BKLTEN_DELAY

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## 1.24 Digital I/O Connector (CN11)

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Pin	Signal	Pin	Signal
1	GPI0	2	GPO0
3	GPI1	4	GPO1
5	GPI2	6	GPO2
7	GPI3	8	GPO3
9	+5V	10	GND

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## 1.25 LVDS Connector (CN16)

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Pin	Signal	Pin	Signal
1	L_BKLTEN_DELAY	2	L_BKLTCTL
3	LVDS1VCC	4	GND

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5	LA_CLKN	6	LA_CLKP
7	LVDS1VCC	8	GND
9	LA_DATAN0	10	LA_DATAP0
11	LA_DATAN1	12	LA_DATAP1
13	LA_DATAN2	14	LA_DATAP2
15	LA_DATAN3	16	LA_DATAP3
17	NC	18	NC
19	LB_DATAN0	20	LB_DATAP0
21	LB_DATAN1	22	LB_DATAP1
23	LB_DATAN2	24	LB_DATAP2
25	LB_DATAN3	26	LB_DATAP3
27	3V_DUAL	28	GND
29	LB_CLKN	30	LB_CLKP

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### 1.26 PCI-Express[x16] Connector (CN17)

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Standard PCI-Express[x16]Graphic Connector

### 1.27 COM Express Connector (Row C & D) (CN18)

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Standard COM Express (Row C & D) for Type 6

### 1.28 COM Express Connector (Row A & B) (CN19)

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Standard COM Express (Row A & B) for Type 6/ Type 10

### 1.29 PCI-Express[x4] Connector (CN21)

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Standard PCI-Express[x4] Connector



### 1.30 HDD Power Connector (CN23)

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Pin	Signal
1	12V
2	GND
3	GND
4	5V

### 1.31 FAN1 Connector (CN24)

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Pin	Signal
1	GND
2	FAN_CTL1
3	5V

### 1.32 SDVO Port Connector (CN25)

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Standard SDVO Port Connector

### 1.33 Audio Connector (AUDIO1)

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Color	Signal
Blue	Line In
Green	Line Out
Pink	Mic In

### 1.34 Dual USB3.0 Ports, LAN Connectors (RJUSB1)/ Dual USB2.0 Ports, LAN Connector for Type 10 (RJUSB1)

Pin	Signal	Pin	Signal
1	VBUS	17	(B)SSTX-
2	(A)D-	18	(B)SSTX+
3	(A)D+	19	VCC
4	GND	20	D1+
5	(A)SSRX-	21	D1-
6	(A)SSRX+	22	D2+
7	GND_DRAIN	23	D2-
8	(A)SSTX-	24	D3+
9	(A)SSTX+	25	D3-
10	VBUS	26	D4+
11	(B)D-	27	D4-
12	(B)D+	28	GND
13	GND	29	LED1(Y+)
14	(B)SSRX-	30	LED1(Y-)
15	(B)SSRX+	31	LED2(G-,0+)
16	GND_DRAIN	32	LED2(G+,0-)

### 1.35 Dual USB3.0 Ports, LAN Connector for Type 6/ Dual USB2.0 Ports for Type 10 (RJUSB2)

Pin	Signal	Pin	Signal
1	VBUS	17	(B)SSTX-
2	(A)D-	18	(B)SSTX+
3	(A)D+	19	VCC
4	GND	20	D1+
5	(A)SSRX-	21	D1-
6	(A)SSRX+	22	D2+
7	GND_DRAIN	23	D2-
8	(A)SSTX-	24	D3+
9	(A)SSTX+	25	D3-
10	VBUS	26	D4+
11	(B)D-	27	D4-
12	(B)D+	28	GND
13	GND	29	LED1(Y+)
14	(B)SSRX-	30	LED1(Y-)
15	(B)SSRX+	31	LED2(G-,0+)
16	GND_DRAIN	32	LED2(G+,0-)

### 1.36 DVI & CRT Connector (DVI+VGA1)

Standard DVI & VGA Connector

### **1.37 HDMI Connector (HDMI1)**

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Standard HDMI Connector

### **1.38 SATA 2/3 Connectors (SATA1, SATA2, SATA3)**

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Standard SATA Connector

### **1.39 BIOS Boot Selection (SW3)**

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	<b>ON</b>	<b>OFF</b>
1	BIOS_DIS0#	GND
2	BIOS_DIS1#	GND

## Below Table for China RoHS Requirements

产品中有毒有害物质或元素名称及含量

## AAEON Main Board/ Daughter Board/ Backplane

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
<p><b>O:</b> 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p><b>X:</b> 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>备注：此产品所标示之环保使用期限，系指在一般正常使用状况下。</p>						