

XTX Carrier Board

ECB-910M

Quick Installation Guide



Part No. 2007910M11

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Safety Precautions

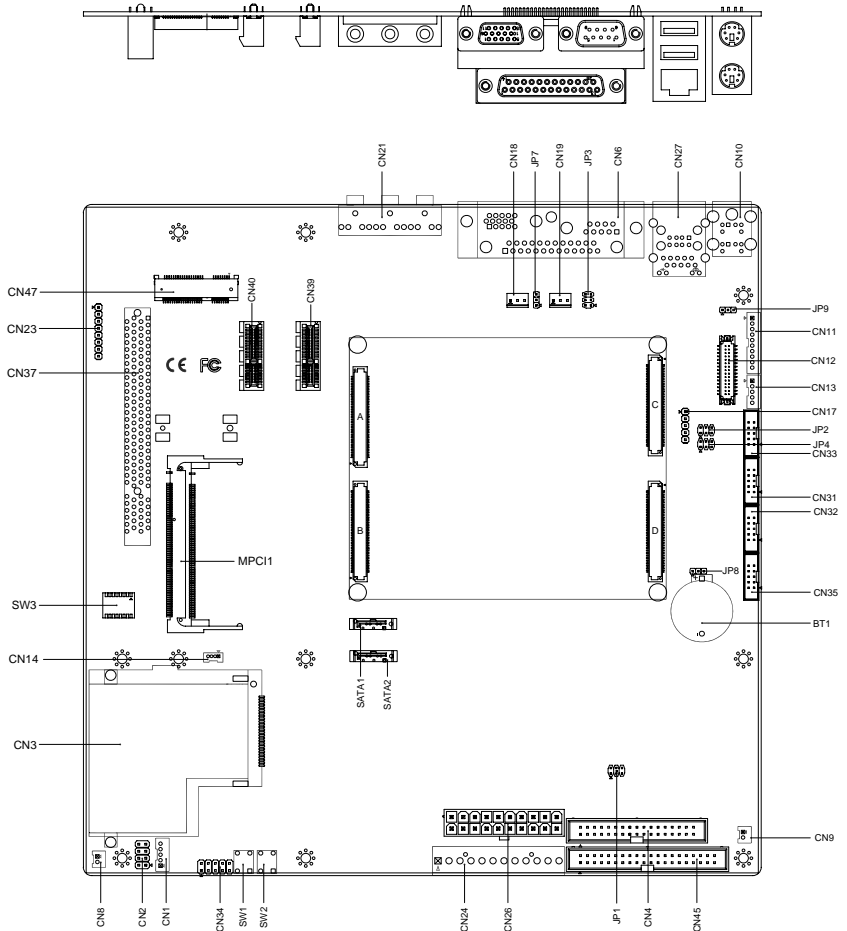
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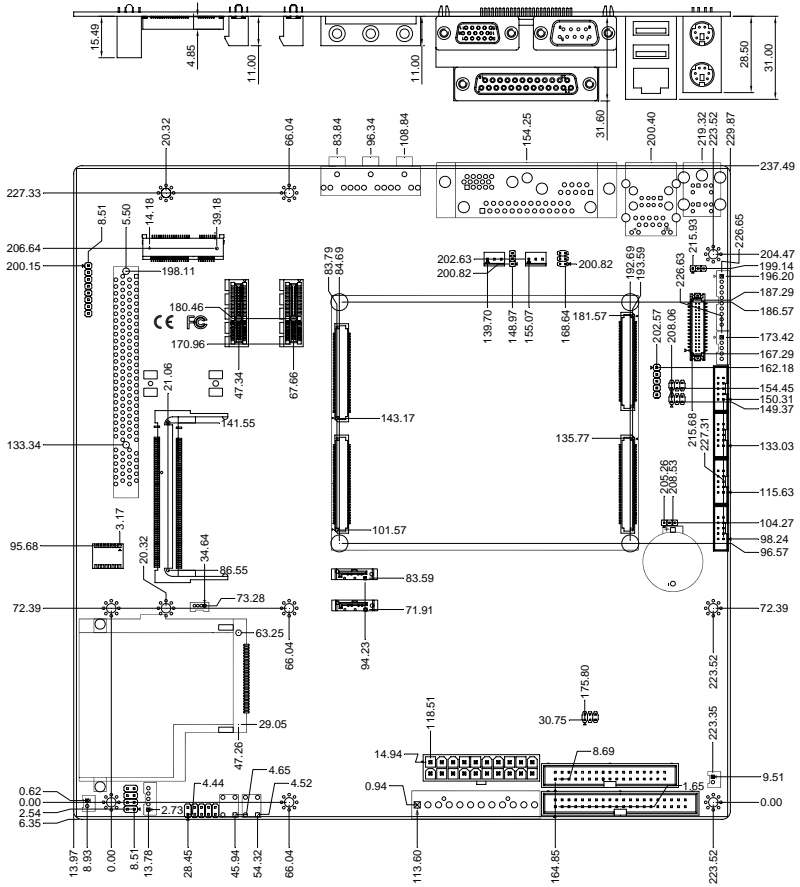
Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.

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

Jumpers, Connectors, and Mechanical Drawing





List of Jumpers

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:

Label	Function
JP1	BIOS write protection and boot selection
JP2	Backlight enable level and LVDS power selection
JP3	COM1 +12V/+5V/RING selection
JP4	COM2 +12V/+5V/RING selection
JP7	FAN power selection
JP8	CMOS clear selection
JP9	LCD brightness and speaker level selection

List of Connectors

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:

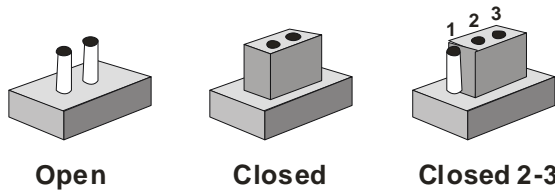
Label	Function
CN1	4/5 wire touch screen connector
CN2	8 wire touch screen connector
CN3	ExpressCard connector
CN4	Floppy connector
CN6	COM1, LPT1, VGA connector
CN8, CN9	Speaker connector
CN10	Keyboard (Down), Mouse (Up) connector
CN11	Function connector (Reserved)
CN12	LVDS connector
CN13	LCD backlight power connector
CN14	USB connector
CN17	IrDA connector
CN18	FAN connector
CN19	FAN connector
CN21	Audio connector (Line-in, Line-out, Microphone)
CN23	Lattice download connector
CN24	AT power connector
CN26	ATX power connector
CN27	Dual USB ports, LAN connector
CN31	COM2 connector
CN32	COM3 connector
CN33	Digital I/O connector

CN34	Front panel connector
CN35	COM4 connector
CN36	XTX connectors
CN37	PCI slot
CN38	Mini PCI slot
CN39, CN40	PCI-Express (x1) slot
CN41, CN42	SATA connectors from south bridge
CN45	IDE connector
CN47	Mini card connector
SW1	Hardware reset switch
SW2	Power button switch
SW3	EC setting switch and touch panel setting

Setting Jumpers

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.

BIOS Write Protection and Boot Selection (JP1)

JP1	Function
1-3	Disable Write Protection
3-5	Enable Write Protection
2-4	CPU Module BIOS Boot
4-6	Carrier Board BIOS Boot

Backlight Enable Level and LVDS Power Selection (JP2)

JP2	Function
1-3	+3.3V Control For Backlight
3-5	+5V Control For Backlight
2-4	+3.3V Power For LVDS
4-6	+5V Power For LVDS

COM1 +12V/+5V/Ring Selection (JP3)

JP3	Function
1-2	+12V
3-4	+5V
5-6	Ring

COM2 +12V/+5V/Ring Selection (JP4)

JP4	Function
1-2	+12V
3-4	+5V
5-6	Ring

FAN Power Selection (JP7)

JP7	Function
2-3	+5V FAN Power
1-2	+12V FAN Power

CMOS Clear Selection (JP8)

JP8	Function
1-2	Normal
2-3	Clear CMOS

LCD Brightness and Speaker Level Selection (JP9)

JP9	Function
1-2	Don't keep previous LCD brightness setting and speaker level
2-3	Keep the previous LCD brightness setting and speaker level

4/5-wire Touch Screen Connector (CN1)

4-wire touch screen

Pin	Signal
1	XH (X+)
2	YH (Y+)
3	NC
4	XL (X-)
5	YL (Y-)

5-wire touch screen

Pin	Signal
1	Y (UL)
2	H (UR)
3	S (PROBE)
4	X (LR)
5	L (LL)

8-wire Touch Screen Connector (CN2)

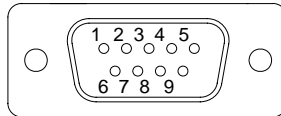
Pin	Signal
1	Right Excite (XH)
2	Right Sense (XH Sense)
3	Top Excite (YH)
4	Top Sense (YH Sense)
5	Left Excite (XL)
6	Left Sense (XL Sense)
7	Bottom Excite (YL)
8	Bottom Sense (YL Sense)

Floppy Connector (CN4)

Pin	Signal	Pin	Signal
1	GND	2	DELSEL#
3	GND	4	NC
5	GND	6	NC
7	GND	8	INDEX#
9	GND	10	MOTEA#

11	GND	12	DRVB#
13	GND	14	DRVA#
15	GND	16	MOTEB#
17	GND	18	DIR#
19	GND	20	STEP#
21	GND	22	WD#
23	GND	24	WE#
25	GND	26	TRAK0#
27	GND	28	WPT#
29	NC	30	RDATA#
31	GND	32	HDSEL#
33	NC	34	DSKCHG#

COM1, LPT1, VGA Connector (CN6)



COM1

Pin	Signal	Pin	Signal
1	DCD1	2	RXD1
3	TXD1	4	DTR1
5	GND	6	DSR1
7	RTS1	8	CTS1
9	+12V/+5V/RING		

LPT1

Pin	Signal	Pin	Signal
1	STB-	2	PTD0
3	PTD1	4	PTD2

5	PTD3	6	PTD4
7	PTD5	8	PTD6
9	PTD7	10	ACKX
11	BUSY	12	PE
13	SLCT	14	AFDX
15	ERRX	16	PAR_INTX
17	SLINX	18	GND
19	GND	20	GND
21	GND	22	GND
23	GND	24	GND
25	GND		

VGA

Pin	Signal	Pin	Signal
1	R	2	G
3	B	4	NC
5	GND	6	GND
7	GND	8	GND
9	+5V with Fuse	10	GND
11	NC	12	DDC_DAT
13	HSYNC	14	VSYNC
15	DDC_CLK		

Speaker Connector (CN8, CN9)

Pin	Signal
1	Speaker +
2	Speaker -

Keyboard, Mouse Connector (CN10)

Pin	Signal	Pin	Signal
1	KDAT	2	MDAT
3	GND	4	+5V with fuse
5	KCLK	6	MCLK
7	MDAT	8	NC
9	GND	10	+5V with fuse
11	MCLK	12	NC

Function Connector (CN11) (Reserved)

Pin	Signal
1	USB Power
2	Power Button
3	LCD Brightness up
4	LCD Brightness down
5	+3.3V pull up 470R
6	Speaker up
7	Speaker down
8	GND
9	NC
10	NC

LVDS Connector (CN12)

Pin	Signal	Pin	Signal
1	Backlight enable	2	NC
3	LVDS Power	4	GND

5	TX1CLK#	6	TX1CLK
7	LVDS Power	8	GND
9	TX1OUT#0	10	TX1OUT0
11	TX1OUT#1	12	TX1OUT1
13	TX1OUT#2	14	TX1OUT2
15	TX1OUT#3	16	TX1OUT3
17	DDC_DAT	18	DDC_CLK
19	TX2OUT#0	20	TX2OUT0
21	TX2OUT#1	22	TX2OUT1
23	TX2OUT#2	24	TX2OUT2
25	TX2OUT#3	26	TX2OUT3
27	LVDS Power	28	GND
29	TX2CLK#	30	TX2CLK

LCD Backlight Power Connector (CN13)

Pin	Signal
1	+12V
2	Brightness level
3	GND
4	GND
5	Backlight enable

USB Connector (CN14)

Pin	Signal
1	USB Power
2	USBD3-
3	USBD3+

4 GND

Note: Wafer box 4P 180D (M) DIP 1.25mm, Molex MX53047

IrDA Connector (CN17)

Pin	Signal
1	+5V
2	NC
3	IRRX
4	GND
5	IRTX

FAN Connector (CN18, CN19)

Pin	Signal
1	GND
2	FAN Power
3	FAN_TAC

Audio Connector (CN21)

Line-out	
Pin	Signal
1	LINE_OUT_L
2	SPEAKER_OUT_L
3	SPEAKER_OUT_R
4	LINE_OUT_R
5	AUDIO GND

Line-in

Pin	Signal
1	LINE_IN_L
2	NC
3	NC
4	LINE_IN_L
5	AUDIO GND

Microphone

Pin	Signal
1	MIC_2
2	NC
3	NC
4	MIC1
5	AUDIO GND

Lattice Download Connector (CN23)

Pin	Signal
1	+3.3V
2	TDO
3	TDI
4	NC
5	NC
6	TMS
7	GND
8	TCK

AT Power Connector (CN24)

Pin	Signal
1	NC
2	+5V
3	+12V
4	-12V
5	GND
6	GND
7	GND
8	GND
9	-5V
10	+5V
11	+5V
12	+5V

ATX Power Connector (CN26)

Pin	Signal	Pin	Signal
1	NC	11	NC
2	NC	12	-12V
3	GND	13	GND
4	5V	14	PSON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	POK	18	-5V
9	5VSB	19	5V

10	12V	20	5V
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USB, LAN Connector (CN27)

LAN

Pin	Signal	Pin	Signal
1	NC	2	TD+
3	TD-	4	RD+
5	RD-	6	NC
7	NC	8	NC
9	NC	10	NC
11	LINK_LED#	12	ACT_LED#
13	GND	14	S100LED

USB

Pin	Signal	Pin	Signal
19	USB Power	23	USB Power
20	USBD0-	24	USBD1-
21	USBD0+	25	USBD1+
22	GND	26	GND

COM2 Connector (CN31)

Pin	Signal	Pin	Signal
1	DCD2	2	RXD2
3	TXD2	4	DTR2
5	GND	6	DSR2
7	RTS2	8	CTS2
9	+12V/+5V/RING	10	NC

COM3 Connector (CN32)

Pin	Signal	Pin	Signal
1	DCD3	2	RXD3
3	TXD3	4	DTR3
5	GND	6	DSR3
7	RTS3	8	CTS3
9	RING3	10	NC

Digital I/O Connector (CN33)

Pin	Signal	Pin	Signal
1	DIO_1	2	DIO_2
3	DIO_3	4	DIO_4
5	DIO_5	6	DIO_6
7	DIO_7	8	DIO_8
9	+5V	10	GND

Front Panel Connector (CN34)

Pin	Signal	Pin	Signal
1	GND	2	Power Button
3	HD_LED	4	3.3V
5	BEEP	6	5V
7	GND	8	Power LED
9	GND	10	Reset

COM4 Connector (CN35)

RS-232

Pin	Signal	Pin	Signal
1	DCD4	2	RXD4

3	TXD4	4	DTR4
5	GND	6	DSR4
7	RTS4	8	CTS4
9	RING4	10	NC

RS-422

Pin	Signal	Pin	Signal
1	TX-	2	RX-
3	TX+	4	RX+
5	GND	6	-
7	-	8	-
9	-	10	NC

RS-485

Pin	Signal	Pin	Signal
1	DATA-	2	-
3	DATA+	4	-
5	GND	6	-
7	-	8	-
9	-	10	NC

XTX Connectors (CN36)

Standard XTX connectors

PCI Slot (CN37)

Standard PCI Slot

Mini PCI Slot (CN38)

Standard Mini PCI Slot

PCI-Express [x1] Slot (CN39, CN40)

Standard PCI-Express [x1] Slot

SATA Connector (CN41, CN42)

Standard SATA connector

CN41, 42: From South Bridge (CN41: SATA2, CN42: SATA1)

IDE Connector (CN45)

Pin	Signal	Pin	Signal
1	IDERST	2	GND
3	PID7	4	PID8
5	PID6	6	PID9
7	PID5	8	PID10
9	PID4	10	PID11
11	PID3	12	PID12
13	PID2	14	PID13
15	PID1	16	PID14
17	PID0	18	PID15
19	GND	20	NC
21	PDREQ	22	GND
23	PIOW#	24	GND
25	PIOR#	26	GND
27	PRDY	28	Pull 330R to GND
29	PACK#	30	GND
31	PIRQ14	32	NC
33	PPDA1	34	ATA66_DET
35	PPDA0	36	PPDA2
37	PPCS1#	38	PPCS3#

39	HDLED#		40	GND
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Mini Card Slot (CN47)

Standard Mini Card Slot

SW1 Connector (SW1)

Hardware reset switch

SW2 Connector (SW2)

Power button switch

EC Setting Switch and Touch Panel Setting (SW3)

Switch Position	Signal	Note
1	Reset#	Note1
2	Test#	Note1
3	Touch_5	On for 4/8 wire, Off for 5 wire
4	X+ Sense	On for 4/5 wire, Off for 8 wire
5	Y+ Sense	On for 4/5 wire, Off for 8 wire
6	X- Sense	On for 4/5 wire, Off for 8 wire
7	Y- Sense	On for 4/5 wire, Off for 8 wire
8	NC	

Note 1:

Test #	Reset#	Chip Status
0	0	Internal flash access enable
0	1	Normal operation by direct external rom
1	0	Normal reset
1	1	Normal operation

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>O: 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>X: 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>						