



**Quick Installation Guide**

3311000 and 3311010

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## About this Quick Installation

This Quick Installation provides general information and installation instructions about the product. This Quick Installation is intended for experienced users and integrators with hardware knowledge of personal computers. If you are not sure about any description in this Quick Installation, please consult your vendor before further handling.

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# Warning

Single Board Computers and their components contain very delicate Integrated Circuits (IC). To protect the Single Board Computer and its components against damage from static electricity, you should always follow the following precautions when handling it :

1. Disconnect your Single Board Computer from the power source when you want to work on the inside
2. Hold the board by the edges and try not to touch the IC chips, leads or circuitry
3. Use a grounded wrist strap when handling computer components.
4. Place components on a grounded antistatic pad or on the bag that came with the Single Board Computer, whenever components are separated from the system
5. It possibly needs BIOS support in the case of using special backplane, otherwise, it might be not able to function completely.

<b>Specification</b>	
<b>Product Name</b>	3311000
<b>Form Factor</b>	ETX Board Size (114 X 95mm)
<b>CPU Type</b>	3311000: BGA 3311010: PGA
<b>Processor</b>	µFC-BGA479 pin Celeron-M 600MHz up to LV Dathan 1.4 GHz(400MHz FSB) OEM:µFC-PGA478 pin Pentium-M 1.1GHz~1.8GHz(400Mhz FSB)
<b>Chipset</b>	NB : Intel 852GM SB: Intel ICH4
<b>System Memory</b>	One SO-DIMM 200Pin to support DDR 200/266 SDRAM Up to 1GB
<b>VGA/LCD Controller</b>	UMA 852GM AGP Video Controller with DVI, LVDS and CRT support (Support Dual Display, Independent display)
<b>Ethemet</b>	Intel 82562 EZ 10/100 Base-T Fast Ethernet LAN
<b>I/O Chips</b>	W/NBOUND W83627HF x 1
<b>BIOS</b>	Phoenix-Award BIOS version 6.0PG, Support 4MB Flash ROM
<b>Audio</b>	AC97 Codec Version 2.1 supports MIC-In/ Line-In/ Line-out
<b>IDE Interface</b>	ATA-100 x 2 channel (Support four ATAPI devices)
<b>Two Serial Port</b>	Two TTL (16550 compatible), IrDA support
<b>Parallel Port</b>	Parallel Port Supports SPP/ EPP/ ECP mode (Share with 1 Floppy drive)
<b>K/B and Mouse</b>	Support Standard PS/2 K/B and Mouse
<b>Universal Serial Bus</b>	6 x USB 2.0 Port
<b>Expansion Interface</b>	PCI Interface x 6 master
<b>Watchdog Timer</b>	
<b>Chipset</b>	1~255 Level (sec or min)
<b>Hardware Monitor</b>	
<b>Chipset</b>	Integrated in W83627HF
<b>RTC</b>	Support Real Time Clock
<b>Operation Temp.</b>	0°C ~ 60°C
<b>Dimension (L x W)</b>	114 x 95 mm (4.5" x 3.7")

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## Packing list

Before you begin installing your single board computer, please make sure that the following materials have been shipped:

> 1 x 3311000 ETX CPU module

OR

1 x 3311010 ETX CPU module

> 1 x Quick Installation Guide

> 1 x CD driver

> 1 x Warranty Card

## Ordering Codes

<b>3311000A</b>	Intel Celeron M 600MHz without L2 Cache
<b>3311000B</b>	Intel Celeron M 1GHz L2=512K
<b>3311000C</b>	Intel Pentium M 1400MHz L2=2M
<b>3311010</b>	Intel $\mu$ FCPGA 478 socket for Intel Pentium M CPU 1.4~1.8 GHz, 2MB L2 Cache
<b>1001020</b>	ATX form factor evaluation board for 3311000 and 3311010

**Heat Sink** for 3311000

**Heat Sink** for 3311010

### CPU:

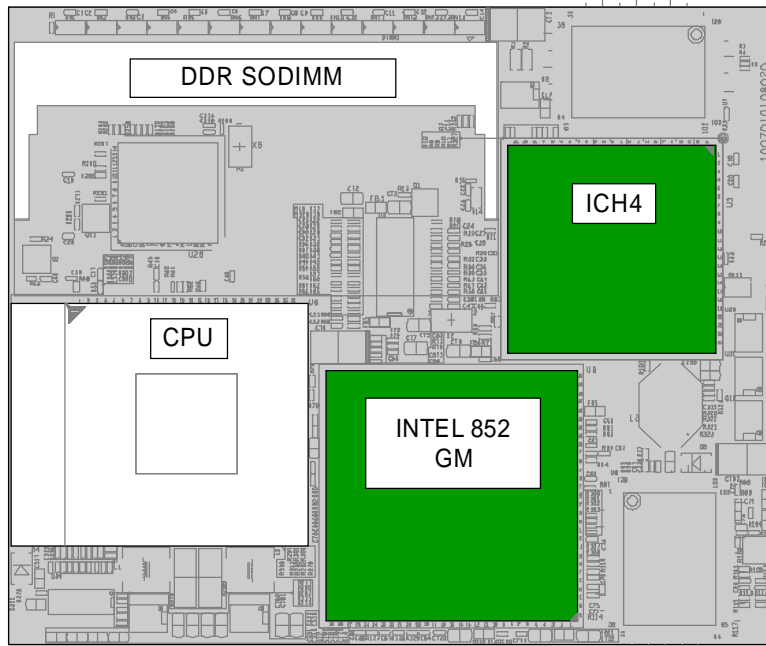
Pentium-M 1.4GHz ( $\mu$ FCPGA 478pin) for 3311010

Pentium-M 1.6GHz ( $\mu$ FCPGA 478pin) for 3311010

Pentium-M 1.7GHz ( $\mu$ FCPGA 478pin) for 3311010

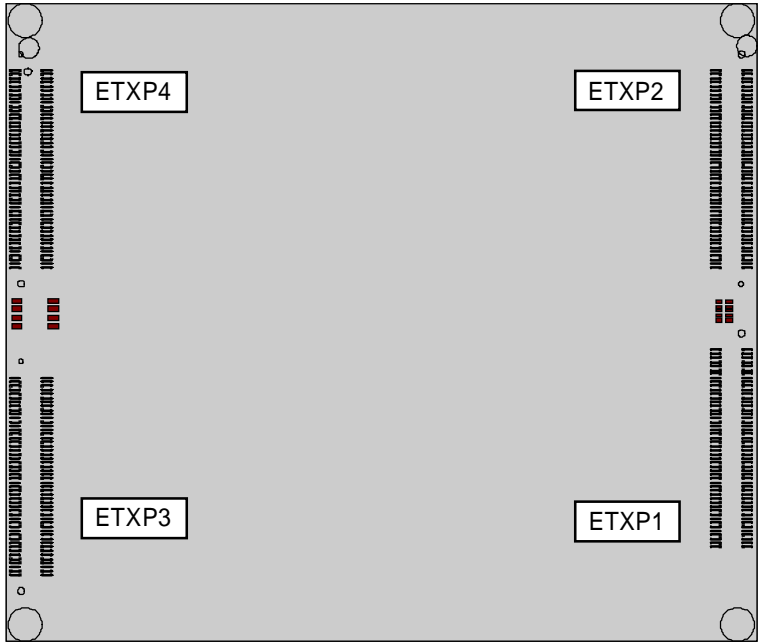
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## Board Layout Top View (Front)



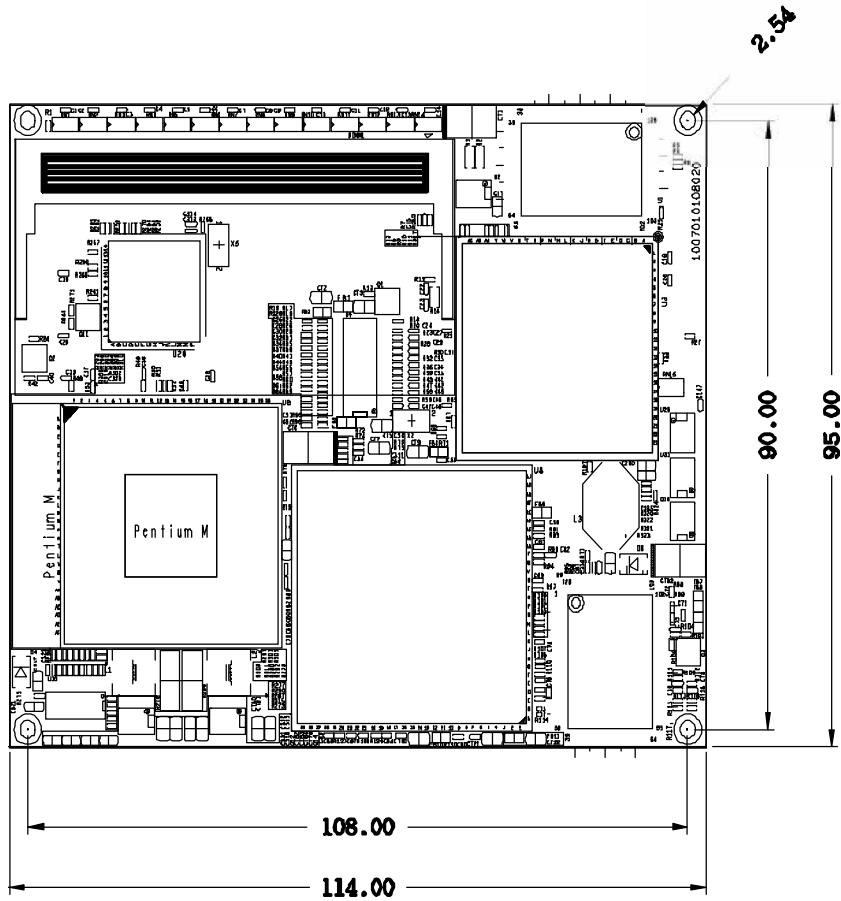
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**Board Layout Top View (Back)**



- ETXP1 PCI1~4, Audio, USB1, USB2
- ETXP2 TMDS, DVO, PCI5, PCI6, LPC, Misc
- ETXP3 CRT, LVDS, TV, COM, LPT / FDD, KB, MS, Misc
- ETXP4 IDE1, IDE2, LAN, SMBUS, WDT, Misc

## Board Dimension



UNIT: mm

## ETXP Connector

### ETX1

### ETX2

1	GND	GND	2	1	GND	GND	2
3	PCICLK3	PCICLK4	4	3	TMDS_TX1+	TMDS_CLK+	4
5	GND	GND	6	5	TMDS_TX1-	TMDS_CLK-	6
7	PCICLK1	PCICLK2	8	7	N.C.	N.C.	8
9	REQ#3	GNT#3	10	9	TMDS_TX2+	TMDS_TX0+	10
11	GNT#2	VCC3	12	11	TMDS_TX2-	TMDS_TX0-	12
13	REQ#2	GNT#1	14	13	DVI_HPD	5VDDCDATA	14
15	REQ#1	VCC3	16	15	-LFRAME	5VDDCLK	16
17	GNT#0	N.C.	18	17	-LDRQ0	PCICLK_SIO2	18
19	VCC	VCC	20	19	-LDRQ1	LAD1	20
21	SERIRQ	REQ#0	22	21	USB_-OC4	LAD2	22
23	AD0	VCC3	24	23	USBP5+	LAD0	24
25	AD1	AD2	26	25	USBP5-	LAD3	26
27	AD4	AD3	28	27	REQ#4	USBP4-	28
29	AD6	AD5	30	29	DVOB_VSYNC	USBP4+	30
31	CBE#0	AD7	32	31	DVOB_HSYNC	PCICLK5	32
33	AD8	AD9	34	33	MDDC_CLK	PCICLK6	34
35	GND	GND	36	35	GND	GND	36
37	AD10	AUXAL	38	37	MDDC_DATA	ISA_NOGO	38
39	AD11	MIC	40	39	ADD_DETECT	-PPDGNTA	40
41	AD12	AUXAR	42	41	DVOB_D2	GNT#5	42
43	AD13	ASVCC	44	43	DVOB_D4	GNT#4	44
45	AD14	SNDL	46	45	DVOB_D5	-PPDREQA	46
47	AD15	ASGND	48	47	DVOB_D1	REQ#5	48
49	CBE#1	SNDR	50	49	DVOB_D6	DVOB_D3	50
51	VCC	VCC	52	51	VCC	VCC	52
53	PAR	SERR#	54	53	DVOB_D0	DVOB_-CLK	54
55	PERR#	N.C.	56	55	DVOB_CLK	DVOB_D9	56
57	PME#	USB2-	58	57	DVOB_D7	DVOB_D8	58
59	LOCK#	DEVSEL#	60	59	N.C.	DVOB_FLDSTL	60
61	TRDY#	USB3-	62	61	DVOB_-CLKINT	DVOB_D10	62
63	IRDY#	STOP#	64	63	DVOB_D11	N.C.	64
65	FRAME#	USB2+	66	65	DVOB_-BLANK	N.C.	66
67	GND	GND	68	67	GND	GND	68
69	AD16	CBE#2	70	69	MDVI_DATA	N.C.	70
71	AD17	USB3+	72	71	MDVI_CLK	MI2C_CLK	72
73	AD19	AD18	74	73	N.C.	MI2C_DATA	74
75	AD20	USB0-	76	75	DVOC_HSYNC	DVOC_VSYNC	76
77	AD22	AD21	78	77	DVOC_D1	DVOC_D3	78
79	AD23	USB1-	80	79	N.C.	DVOC_BLANK	80
81	AD24	CBE#3	82	81	DVOC_D0	DVOC_D2	82
83	VCC	VCC	84	83	VCC	VCC	84
85	AD25	AD26	86	85	DVOC_D4	DVOC_CLK	86
87	AD28	USB0+	88	87	DVOC_D7	DVOC_-CLK	88
89	AD27	AD29	90	89	DVOC_D6	DVO_VREF	90
91	AD30	USB1+	92	91	DVOC_D11	DVOC_D8	92
93	PCIRST#	AD31	94	93	DVOC_FLDSTL	DVOBC_-INTR	94
95	INTR#C	INTR#D	96	95	DVOC_D10	DVOC_D5	96
97	INTR#A	INTR#B	98	97	ADDID7	DVOC_D9	98
99	GND	GND	100	99	GND	GND	100

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## PCI Routing Table

PCI Slot	IDSEL	INT	REQ / GNT	CLK
1	AD19	A	REQ / GNT 0	PCICLK1
2	AD20	B	REQ / GNT 1	PCICLK2
3	AD21	C	REQ / GNT 2	PCICLK3
4	AD22	D	REQ / GNT 3	PCICLK4
5	AD17	C	REQ / GNT 4	PCICLK5
6	AD18	D	REQ / GNT 5	PCICLK6

**ETXP Connector**

**ETX3**

**ETX4**

1	GND	GND	2	1	GND	GND	2
3	R	B	4	3	5V_SB	PWGIN	4
5	HSY	G	6	5	PS_ON	SPEAKER	6
7	VSY	DDCK	8	7	PWRBTN#	BATT	8
9	N.C	DDDA	10	9	N.C	LILED	10
11	TX2CLK#	TX2D3#	12	11	WDT_RST	ACTLED	12
13	TX2CLK+	TX2D3+	14	13	N.C	SPEEDLED	14
15	GND	GND	16	15	N.C	I2CCLK	16
17	TX2D1+	TX2D2+	18	17	VCC	VCC	18
19	TX2D1#	TX2D2#	20	19	OVCR#	N.C	20
21	GND	GND	22	21	N.C	I2CDAT	22
23	TX1D3#	TX2D0+	24	23	SMBCLK	SMBDAT	24
25	TX1D3+	TX2D0#	26	25	SIDE_CS3#	CPUFAN	26
27	GND	GND	28	27	SIDE_CS1#	N.C	28
29	TX1D2#	TX1CLK+	30	29	SIDE_A2	PIDE_CS3#	30
31	TX1D2+	TX1CLK#	32	31	SIDE_A0	PIDE_CS1#	32
33	GND	GND	34	33	GND	GND	34
35	TX1D0+	TX1D1+	36	35	P66DET	PIDE_A2	36
37	TX1D0#	TX1D1#	38	37	SIDE_A1	PIDE_A0	38
39	VCC	VCC	40	39	SIDE_INTRQ	PIDE_A1	40
41	JLIDATA	N.C	42	41	S66DET	N.C	42
43	JLICK	BLON	44	43	SIDE_ACK#	PIDE_INTRQ	44
45	BIASON	ENVDD	46	45	SIDE_RDY	PIDE_ACK#	46
47	TV_COMP	Y	48	47	SIDE_IOR#	PIDE_RDY	48
49	N.C	C	50	49	VCC	VCC	50
51	N.C	N.C	52	51	SIDE_IOW#	PIDE_IOR#	52
53	VCC	GND	54	53	SIDE_DRQ	PIDE_IOW#	54
55	STB#	AFD#	56	55	SIDE_D15	PIDE_DRQ	56
57	N.C	PD7	58	57	SIDE_D0	PIDE_D15	58
59	IRRX	ERR#	60	59	SIDE_D14	PIDE_D0	60
61	IRTX	PD6	62	61	SIDE_D1	PIDE_D14	62
63	RXD2	INIT#	64	63	SIDE_D13	PIDE_D1	64
65	GND	GND	66	65	GND	GND	66
67	RTS#2	PD5	68	67	SIDE_D2	PIDE_D13	68
69	DTR#2	SLIN#	70	69	SIDE_D12	PIDE_D2	70
71	DCD#2	PD4	72	71	SIDE_D3	PIDE_D12	72
73	DSR#2	PD3	74	73	SIDE_D11	PIDE_D3	74
75	CTS#2	PD2	76	75	SIDE_D4	PIDE_D11	76
77	TXD#2	PD1	78	77	SIDE_D10	PIDE_D4	78
79	RI#2	PD0	80	79	SIDE_D5	PIDE_D10	80
81	VCC	VCC	82	81	VCC	VCC	82
83	RXD1	ACK#	84	83	SIDE_D9	PIDE_D5	84
85	RTS#1	BUSY#	86	85	SIDE_D6	PIDE_D9	86
87	DTR#1	PE	88	87	SIDE_D8	PIDE_D6	88
89	DCD#1	SLCT#	90	89	RI	N.C	90
91	DSR#1	MSCLK	92	91	RXD-	PIDE_D8	92
93	CTS#1	MSDAT	94	93	RXD+	SIDE_D7	94
95	TXD#1	KBCLK	96	95	TXD-	PIDE_D7	96
97	RI#1	KBDAT	98	97	TXD+	HDRST#	98
99	GND	GND	100	99	GND	GND	100

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## Driver Setup

The architecture of 3311000 and 3311010 is similar to 3312450 and 3312460. Hence, driver installation is the same with 3312450 and 3312460 except AUDIO driver.

1. For installing general drivers for 3311000 and 3311010, select 3312450:

2. 3311000 and 3311010 uses VIA audio chip, you need to browse CD to get correct driver.

The via audio driver is located at \DRIVER\AUDIO\AUDIO\setup.exe

Any advice or comments about our products and service, or anything we can help you with please don't hesitate to contact with us. We will do our best to support you for your products, projects and business

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