# **Package Contents:**

One BI250-945GSE
One 60W Power Adaptor
One Power Cord
One Bag of Screw Set
One Driver CD/DVD
One User's Quick Start Card







BI250-945GSE

### Inside the BI250-945GSE

One MX945GSE2 Motherboard
One SATA & Power Cable
One HDD Bracket







HDD Bracket

# BI250-945GSE

### Intel<sup>®</sup> Atom™ N270 Processor

**User's Quick Start Card** 

Version 1.0

http://www.bcmcom.com

#### Responsibility:

This manual is provided "As-Is" with no warranties of any kind, expressed or implied, including, but not limited to the implied warranties or conditions of this product's fitness for any particular purpose. In no event shall we be liable for any loss of profits, loss of business, loss of data, interruption of business, or indirect, special, incidental, or consequential damages of any kind, even the possibility of such damages arising from any defect or error in this manual or product. We reserve the right to modify and update the user manual without prior notice.



### **WARNING: CMOS Battery Damage**

Replace your system's CMOS RAM battery only with the identical CR-2032 3V Lithium-Ion coin cell (or equivalent) battery type to avoid risk of personal injury or physical damage to your equipment. Improper installation might cause battery to explode. Always dispose of used batteries according to the manufacturer's instructions, or as required by the local ordinance (where applicable). The damage due to not following this warning will void your motherboard's manufacturer warranty.

Perchlorate Material- Special Handling May Apply. See <a href="http://www.dtsc.ca.gov/hazardouswaste/perchlorate/">http://www.dtsc.ca.gov/hazardouswaste/perchlorate/</a>

#### Additional Information:

Additional information on setting this board up can be found in the User's Manual in the provided CD or DVD ROM. The Online User's Manual and FAQ/Knowledge Base can be found on our website by visiting our website: <a href="http://www.bcmcom.com">http://www.bcmcom.com</a>. If your question is not answered in our FAQ/Knowledge Base, visit our forums and post your messages or submit a new FAQ through FAQ Submittal form for us to add your question in our FAQ with our answer.

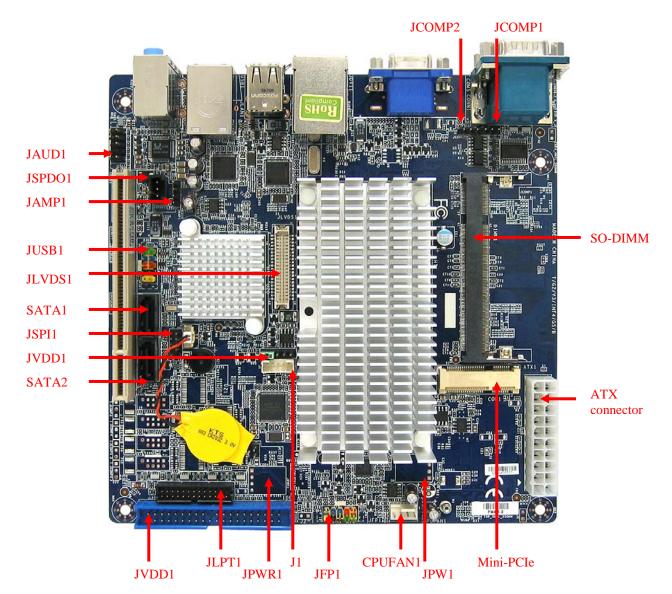


#### **ATTENTION: Incorrect BIOS Setup**

If you do not know how to handle BIOS setup or how to set it up properly, it is strongly advisable that you do not modify any of the settings than otherwise instructed in the User's Quick Start Card. Even a seemingly small incorrect adjustment or modification in the BIOS setup can render your system unstable or unusable. Incorrect BIOS setup is not covered by your motherboard's manufacturer warranty. Try Clear CMOS information when system does not boot after BIOS settings change.

### **Motherboard Layout:**





### COM Port Power (JCOMP1, JCOMP2)

Pin	Signal
1	VCC5
2	VCC_COM
3	12V

#### Chassis Intrusion (JCI1)

Pin	Signal
1	Open#
2	GND

#### Front Panel (JFP1)

Signal	Pin	Pin	Signal
HD_LED+	1	2	FP PWR/SLP
HD_LED-	3	4	FP PWR/SLP
RST_SW-	5	6	PWR_SW+
RST_SW+	7	8	PWR_SW-
NC	9	10	[KEY]

#### Front USB (JUSB1)

Signal	Pin	Pin	Signal
VCC	1	2	VCC
USB5-	3	4	USB4-
USB5+	5	6	USB4+
GND	7	8	GND
[Key]	9	10	USBOC

#### Printer Port (JLPT1)

Pin	Pin	Signal
1	2	AFD#
3	4	ERR#
5	6	PINIT#
7	8	LPT_SLIN#
9	10	GND
11	12	GND
13	14	GND
15	16	GND
17	18	GND
19	20	GND
21	22	GND
23	24	GND
25	26	[KEY]
	Pin 1 3 5 7 9 11 13 15 17 19 21 23	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

#### SPI (JSPI1)

Signal	Pin	Pin	Signal
VCC3_SB	1	2	VCC3_SB
SPI_MISO_F	3	4	SPI_MOSI_F
SPI_CS0_F#	5	6	SPI_CLK_F
GND	7	8	GND
SPI_HOLD#	9	10	[KEY]

### Power in (JPW1)

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

#### Power Out (JPWR1)

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

#### Amplified Audio (JAMP1)

Pin	Signal
1	AMP_L-
2	AMP_L+
3	AMP_R-
4	AMP_R+

### S/PDIF (JSPDO1)

( )	
Pin	Signal
1	VCC5
2	SPDIF_OUT
3	GND

#### Audio (JAUD1)

Signal	Pin	Pin	Signal
MIC_L	1	2	GND
MIC_R	3	4	NC
LINE_OUT_R	5	6	MIC_JD
FRONT_JD	7	8	[KEY]
LINE_OUT_L	9	10	LINE_OUT_JD

### Inverter (J1)

Pin	Signal
1	12V
2	GND
3	INV_ON
4	BKLTCTRL
5	VCC5

### LVDS (JLVDS1)

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Signal	Pin	Pin	Signal
+12V	2	1	+12V
+12V	4	3	+12V
GND	6	5	+12V
GND	8	7	VCC3
LCD_VDD	10	9	LCD_VDD
LDDC_DATA	12	11	LDDC_CLK
LVDS_VDDEN	14	13	L_BKLTCTL
GND	16	15	L_BKLTEN
LA_DATA0	18	17	LA_DATA0#
LA_DATA1	20	19	LA_DATA1#
LA_DATA2	22	21	LA_DATA2#
LA_CLK	24	23	LA_CLK#
LA_DATA3	26	25	LA_DATA3#
GND	28	27	GND
LB_DATA0	30	29	LB_DATA0#
LB_DATA1	32	31	LB_DATA1#
LB_DATA2	34	33	LB_DATA2#
LB_CLK	36	35	LB_CLK#
LB_DATA3	38	37	LB_DATA3#
GND	40	39	GND

### JVDD1

Pin	Signal	
1	VCC3	
2	LVD_SRC	
3	VCC5	
4	LVD_SRC	
5	12V	
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\*default: 1-2 (VCC3)

## **Jumper / Connector**

Name	Description	Note
CPUFAN1	CPU fan	3 pin
IDE1	IDE (PATA)	40 pin
J1	inverter	5 pin
JAMP1	amplified audio	4 pin
JAUD1	audio header	2x pin
JCI1	chassis intrusion	2 pin
JCOMP1, JCOMP2	COM port power	3 pin
JFP1	front panel header	2x5 pin (keyed)
JLPT1	printer	2x13 pin (keyed)
JLVDS1	LVDS	2x20 pin
JPW1	power in	4 pin
JPWR1	power out	4 pin
JSPDO1	S/PDIF	3 pin
JSPI1	SPI header	2x5 pin (keyed)
JUSB1	front USB header	2x5 pin (keyed)
JVDD1	LVDS power select	5 pin



### **WARNING: Electrostatic Sensitive Device (ESD)**

Static electricity can easily damage your motherboard and will void your motherboard warranty. Keep the motherboard and other system components in their anti-static packaging until you are ready to install them. Touch a grounded surface before you remove any system component from its protective anti-static packaging. Unpacking and installation should be done on a grounded, anti-static mat. The operator should be wearing an anti-static wristband, grounded at the same points as the anti-static mat. During configuration and installation touch a grounded surface frequently to discharge any static electrical charge that may have built up in your body. Avoid touching the components when handling the motherboard or a peripheral card. Handle the motherboard and peripheral cards either by the edges or by the peripheral card case-mounting bracket.



### **WARNING: Misplaced Jumper Damage**

Incorrect jumpers and connectors settings may lead to damage to your motherboard and will void your motherboard warranty. Please pay special attention to not connect these headers in the wrong direction. DO NOT change ANY jumpers while the motherboard has power.

### How to access inside the BI250-945GSE

- 1.1 -Tools needed to service.
  - 1.1.1 -#2 Philips screw driver.
- 1.2 -Turn off the power and disconnect the power card.
  - 1.2.1 -Remove the flathead screw fastening the top cover to the base (Figure 1),

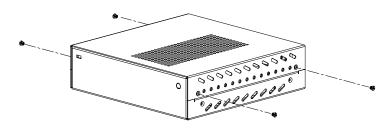


Figure 1- Unscrew 4 screws.

1.3 -Unscrew 4 flat head screw and lift out HDD assembly (Figure 2).
 1.3.1 -Remove or add notebook HDD from or to HDD bracket (Figure 3),

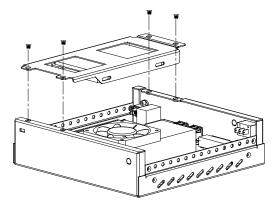


Figure 2- Removal of HDD

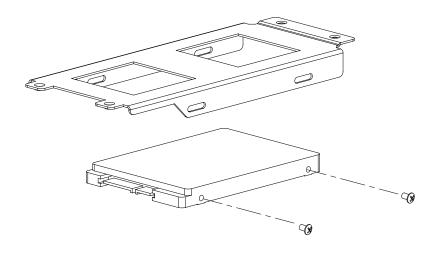


Figure 3- Removal of HDD