BC77Q

Intel® Socket LGA1155
3rd/2nd Generation Core i7/i5/i3 CPU

ATX Motherboard

Quick Installation Guide	Version 1.00	http://www.bcmcom.com

• Inspect the Package:

One **BC77Q Motherboard**
Two **SATA Cable**
Two **COM Port Cable**
One **I/O Shield**
One **Driver CD (Manual/Drivers)**
One **Quick Installation Guide**

SATA Cable

DRIVER CD

I/O Shield

BC77Q

• Responsibility:

This manual is provided "As-Is" with no warranties of any kind, it will neither 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. 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 http://www.dtsc.ca.gov/hazardouswaste/perchlorate/

⚠ 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. The incorrect BIOS setup is not covered by your motherboard's manufacturer warranty.

• Additional Information:

Additional information on setting this board up can be found in the User's Manual in the provided CD-ROM. The Online User's Manual and FAQ/Knowledge Base can be found on our website by visiting our website: **http://www.bcmcom.com**. 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.

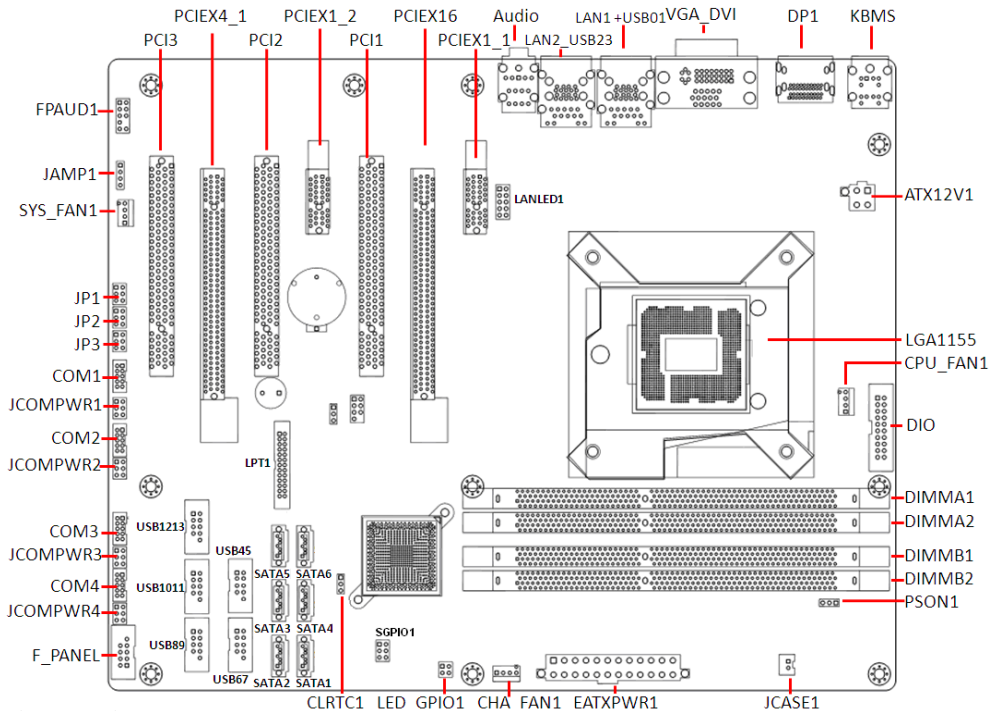## ⚡ WARNING: Electrostatic Sensitive Device (ESD)

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.
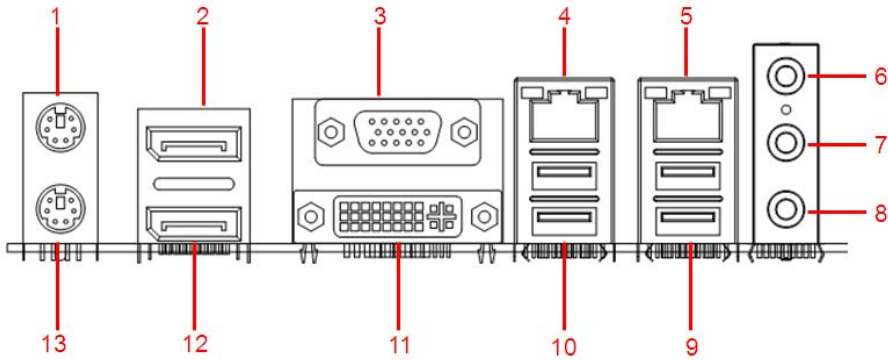
⚠ WARNING: Misplaced Jumper Damage

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

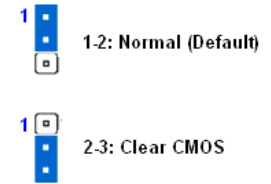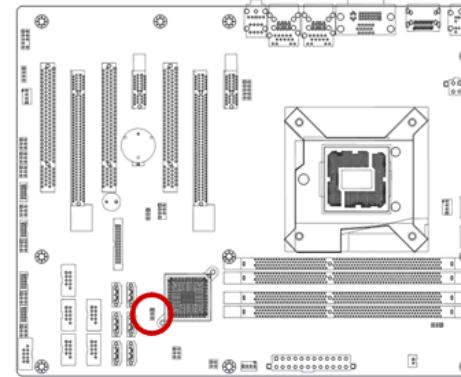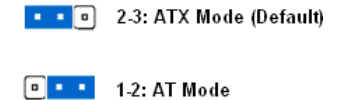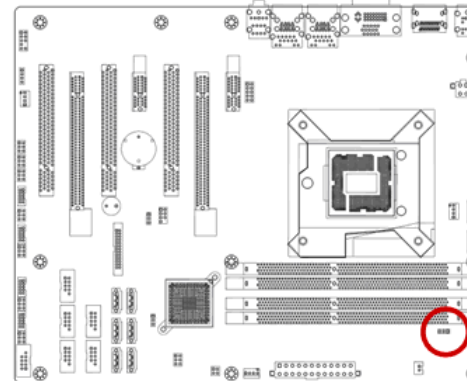## Motherboard Layout:
• Board Layout:

• Back Panel:

Item	Name	Function	Description
1	KBMS	PS/2 Mouse Connector	The port is for a PS/2 mouse.
2	DP1	Display Port 2	Provides "displayport" type connection to monitor.
3	VGA	VGA Video Port	The VGA15-pin Connector.
4/5	LAN1/ LAN2	Gigabit LAN (RJ-45) Connectors	This port allows Gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications.
6	AUDIO	Line-in port (Light blue)	This port connects a tape, CD, DVD player, or other audio sources.
7	AUDIO	Line-out port (Lime)	This port connects a headphone or a speaker. In 4-channel, 6-channel, and 8-channel configuration, the function of this port becomes Front Speaker Out.
8	AUDIO	Microphone port (Pink)	This port connects a microphone.
9	USB	USB 3.0 Connectors	These two 4-pin Universal Serial Bus (USB) ports are available for connecting USB 3.0/ 2.0 devices.
10	USB	USB 3.0 Connectors	These two 4-pin Universal Serial Bus (USB) ports are available for connecting USB 3.0/ 2.0 devices.
11	DVI	DVI Video Port	DVI-D 24-Pin Connector.
12	DP1	Display Port 1	Provides "displayport" type connection to monitor.
13	KBMS	PS/2 Keyboard Connector	This port is for a PS/2 keyboard.

Within item 4/5 Description:

ACT/LINK LED   SPEED LED

LAN port

ACT/Link LED		Speed LED	
Status	Description	Status	Description
OFF	No link	OFF	10Mbps connection
Orange	Linked	Orange	100Mbps connection
Blinking	Data activity	Green	1Gbps connection

Connectors, Jumpers, & Headers:

• Clear CMOS Jumper: CLRTC1

1-2: Normal (Default)

2-3: Clear CMOS

• ATX/AT Mode Selection: PSON1

2-3: ATX Mode (Default)

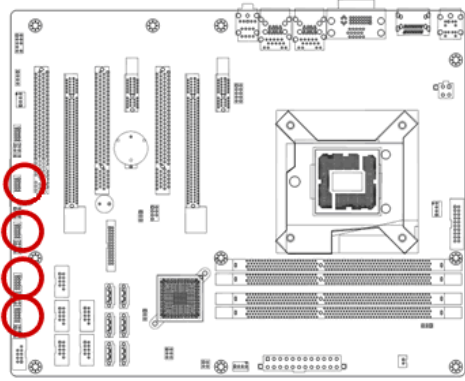1-2: AT Mode

• ATX Power Connectors: EATXPWR1 (24-Pin), ATX12V1 (4-pin)

ATX12V1

CPU_+12V — CPU_+12V
GND — GND

EATXPWR1

+3.3V	+5V	+5V	Power OK	+12V	+3.3V
+3.3V	GND	GND	GND	+5VSB	+12V

1 ... 12
11 ... 24

+3.3V	GND	GND	GND	+5V	+5V
-12V	PSON	GND	-5V	+5V	GND
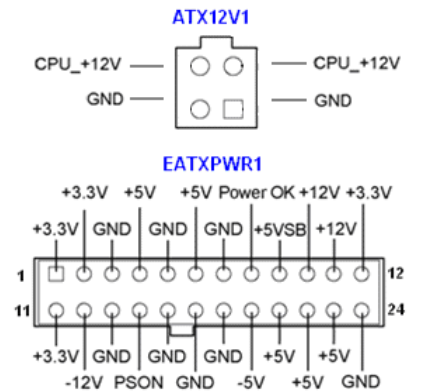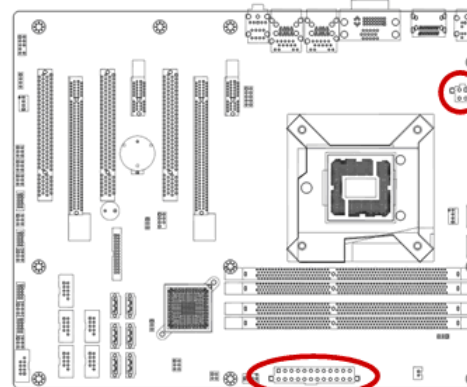
• Serial Port Connectors: COM1, COM2, COM3, COM4

DDCD#		RRXD
TTXD		DDTR#
GND		DDSR#
RRTS#		CCTS#
RRI#		

• LPT Port Connector: LPT1

LPT1

Signal	Pin	Pin	Signal
STB#	1	2	AFD#
PD0	3	4	ERR#
PD1	5	6	INIT#
PD2	7	8	SLIN#
PD3	9	10	
PD4	11	12	
PD5	13	14	
PD6	15	16	
PD7	17	18	
ACK#	19	20	
BUSY	21	22	
PE	23	24	
SLCT	25		

Ground
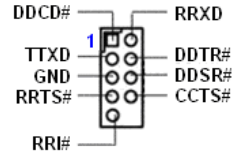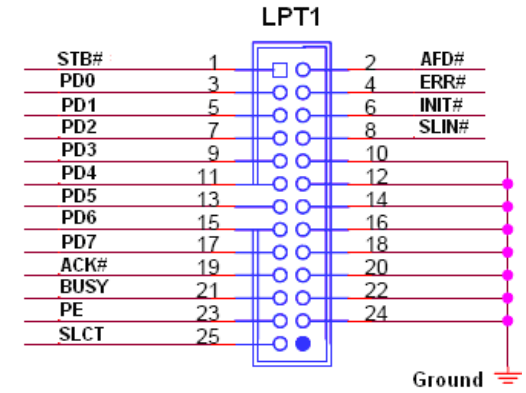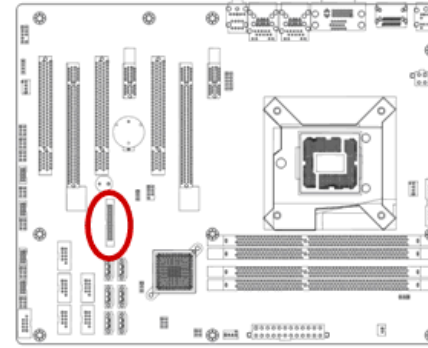
• COM1 RS232/ RS422/ RS485 Select: JP1, JP2, JP3

JP1
JP2
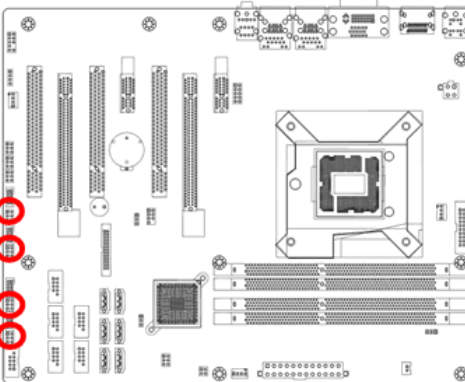JP3
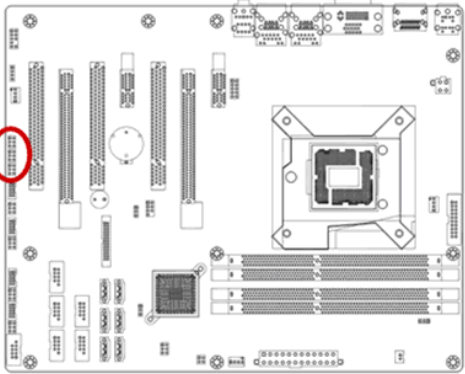
COM1 RS232/ RS422/ RS485 Settings			
Function	JP1	JP2	JP3
RS232 (Default)	1-3 2-4	1-2	1-3 2-4
RS422	3-5 4-6	3-4	3-5 4-6
RS485	3-5 4-6	5-6	3-5 4-6

• Front Panel Connector: F_PANEL

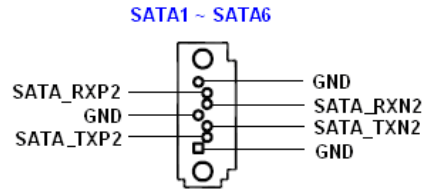|		
		NC
PWR_SW	GND	RESET
	PWR	GND	RESET
PWR_LED	PWR_LED-	HD_LED-
	PWR_LED+	HD_LED+	HD_LED
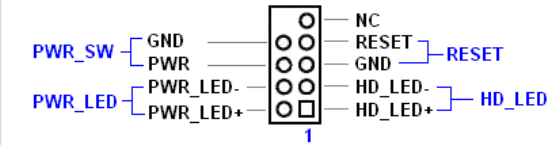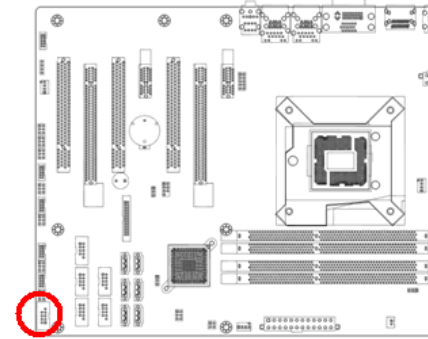
• COM1, COM2, COM3, COM4 Ring-In/ +12V/ +5V Select:
JCOMPWR1, JCOMPWR2, JCOMPWR3, JCOMPWR4

RI (Default)

+12V

+5V
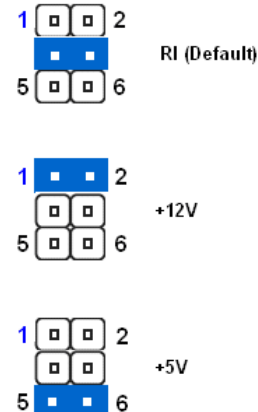
• Fan Connectors: CPU_FAN1, CHA_FAN1, SYS_FAN1

SYS_FAN1
- Sense
- FAN PWM
- +12V
- GND

CPU_FAN1
- Sense
- FAN PWM
- +12V
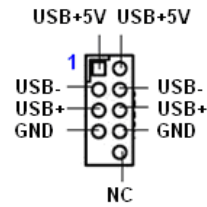- GND

CHA_FAN1
- Sense
- FAN PWM
- +12V
- GND
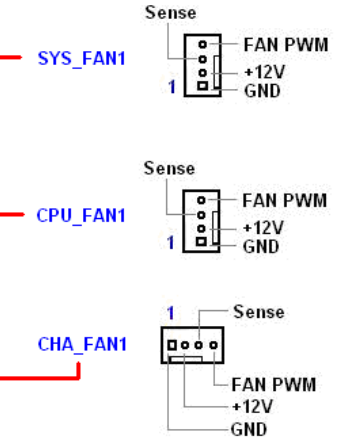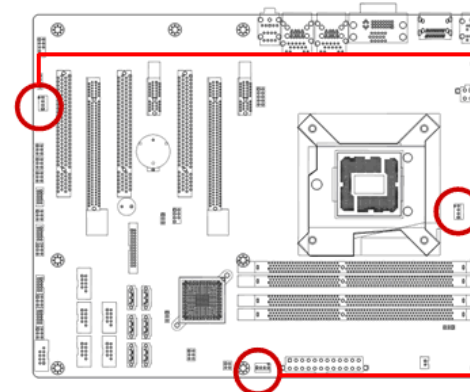
• SATA Ports: SATA3.0: SATA1, SATA2;
SATA2.0: SATA3, SATA4, SATA5, SATA6

SATA1 ~ SATA6

SATA_RXP2	GND
GND	SATA_RXN2
SATA_TXP2	SATA_TXN2
	GND
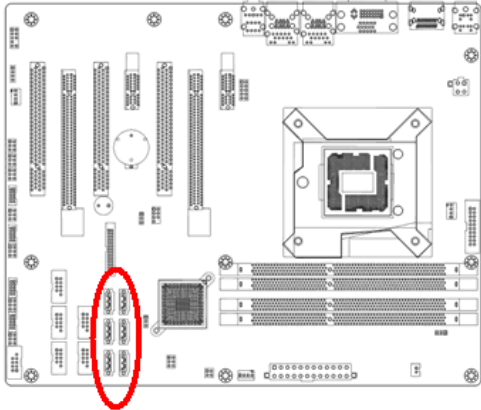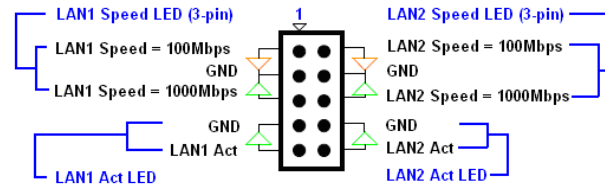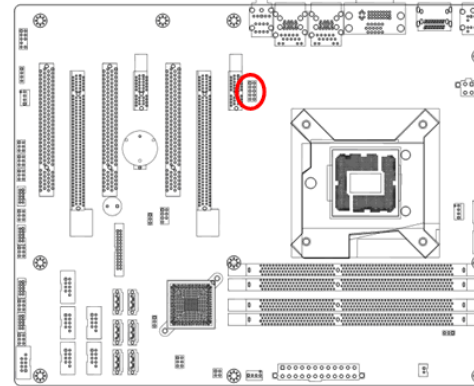
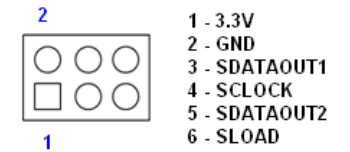## • Front USB Headers: USB45, USB67, USB89, USB1011, USB1213

USB+5V   USB+5V

1	
USB-	USB-
USB+	USB+
GND	GND
	NC
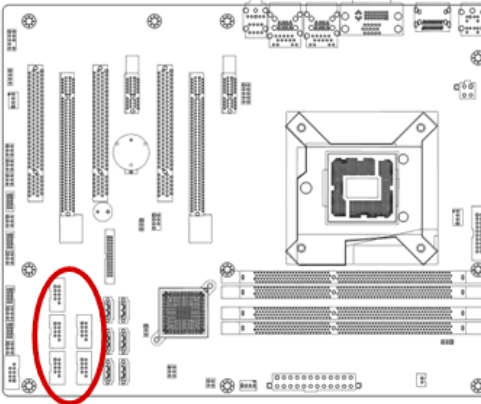
• Chassis Intrusion Connector: JCASE1

1 ▪ — Chassis Signal

▪ — GND

• LAN LED Header: LANLED1

LAN1 Speed LED (3-pin)   LAN2 Speed LED (3-pin)

LAN1 Speed = 100Mbps	LAN2 Speed = 100Mbps
GND	GND
LAN1 Speed = 1000Mbps	LAN2 Speed = 1000Mbps
GND	GND
LAN1 Act	LAN2 Act

LAN1 Act LED   LAN2 Act LED

• RAID LED Header: SGPIO1

2
1

1 - 3.3V
2 - GND
3 - SDATAOUT1
4 - SCLOCK
5 - SDATAOUT2
6 - SLOAD
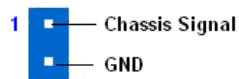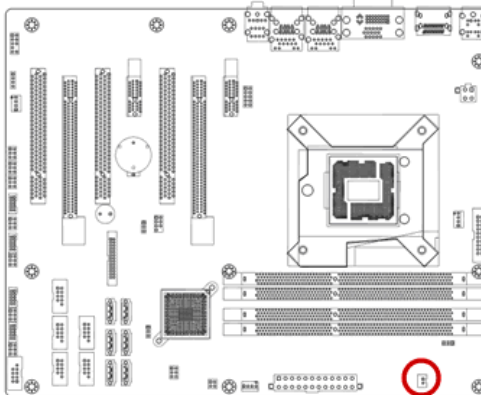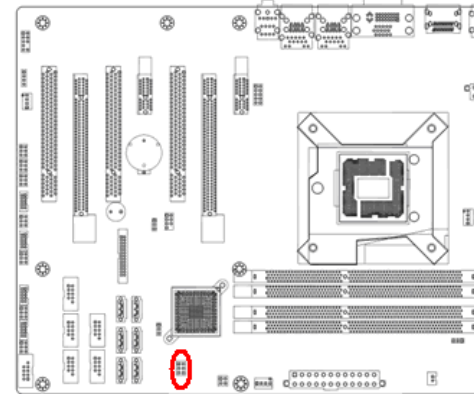
• Front Panel Audio Connector: FPAUD1

```
MIC_L ────── GND
       1
  MIC_R ───── PRESENCE#
LINEOUT_R ─── MIC_JD
FRONT_IO_SENSE
LINEOUT_L ─── LINEOUT_JD
```

• Amplifier Connector: JAMP1

```
1 ─── AMP_L-
      AMP_L+
      AMP_R-
      AMP_R+
```

• Digital I/O Connector: DIO

```
            1  2
GPIO_8    □ ○   GPIO_0
GPIO_9    ○ ○   GPIO_1
GPIO_10   ○ ○   GPIO_2
GPIO_11   ○ ○   GPIO_3
GPIO_12   ○ ○   GPIO_4
GPIO_13   ○ ○   GPIO_5
GPIO_14   ○ ○   GPIO_6
GPIO_15   ○ ○   GPIO_7
SMB_SLK   ○ ○   SMB_DATA
GND       ○ ○   +5V
```
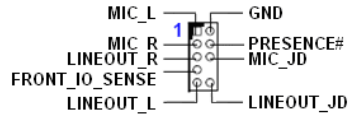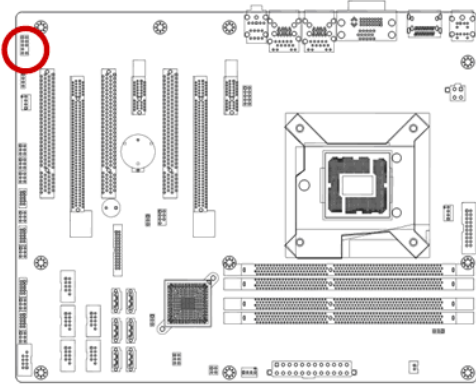
• PC OK Connector : LED_GPIO1 (Reserved for factory use only)

```
LED_DIO0 ─1 □ ○ 2─ LED_DIO1
LED_DIO2 ─3 ○ ○ 4─ N/A
```
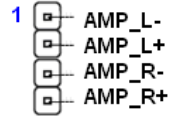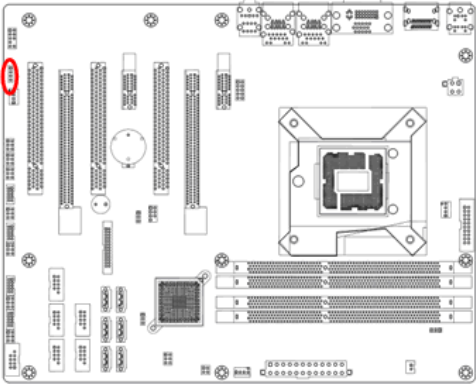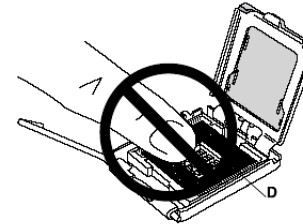
• Save the Processor Socket Cover

After removing the processor cover during processor installation, please save the processor socket cover.
In the event that the desktop board needs to be returned for service or any time the processor is removed, the cover should be replaced on the processor socket.

• Do not Touch Socket Contact