

Intel® Q67 with Core™ i7/ i5 /i3 Micro-ATX Motherboard

### **Quick Installation Guide**

2<sup>nd</sup> Ed – 25 February 2014

#### **FCC Statement**

THIS DEVICE COMPLIES WITH PART 15 FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

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## **1. Getting Started**

#### **1.1 Safety Precautions**

#### Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

#### Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

#### **1.2 Packing List**

Before you begin installing your single board, please make sure that the following parts have been shipped.

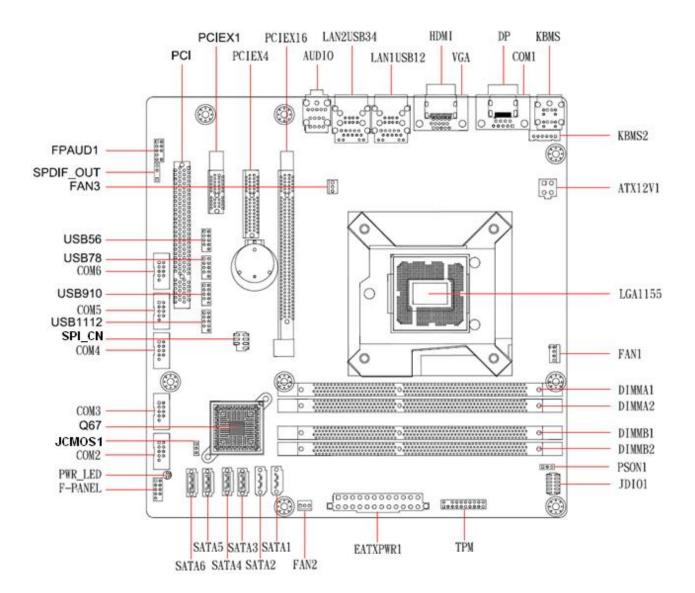
- 1 x ERX-Q67 Micro-ATX Main board
- 1 x CD-ROM contains OS drivers
- 1 x COM cable
- 2 x SATA cable
- 1 x I/O Shield
- 1 x Startup Manual



If any of the above items is damaged or missing, contact your retailer.

# 2. Hardware Configuration

#### 2.1 Product Overview

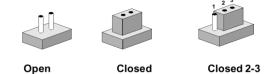


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#### 2.2 Jumper and Connector List

You can configure your board 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 two pins.



The jumper settings are schematically depicted in this manual as follows:

0 0	••••	1 2 3 O
Open	Closed	Closed 2-3

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

Connectors on the board are linked to external devices such as hard disk drives, a keyboard, or floppy drives. In addition, the board has a number of jumpers that allow you to configure your system to suit your application.

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

The following tables list the function of each of the board's jumpers and connectors.

Slots & socket		
Label	Function	Note
LGA1155	LGA1155 socket	
DIMMA1	240-pin DDR3 DIMM Slot A1	
DIMMA2	240-pin DDR3 DIMM Slot A2	
DIMMB1	240-pin DDR3 DIMM Slot B1	
DIMMB2	240-pin DDR3 DIMM Slot B2	
PCIEX16	PCI-e x16 Slot	
PCIEX4	PCI-e x4 Slot	
PCIEX1	PCI-e x1 Slot	

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Jumpers		
Label	Function	Note
JCMOS1	Clear CMOS	3 x 1 header, pitch 2.54mm
PSON1	AT/ATX Mode Select	3 x 1 header, pitch 2.54mm

Rear Panel Connector		
Label	Function Note	
KBMS	PS/2 Keyboard and Mouse	6-pin Mini-Din
COM1	COM1 Connector D-sub 9-pin, male	
DP1	DisplayPort Connector	DisplayPort
VGA1	VGA Port	D-sub 15-pin, female
HDMI1	HDMI Port	HDMI 1.3 19-pin
LAN1USB12	RJ-45 Ethernet Connector x 1	
	USB 2.0 Connector x 2	
LAN2USB34	RJ-45 Ethernet Connector x 1	
	USB 2.0 Connector x 2	
Audio1	Audio Line-In , Line-Out , MicIn	5.1 Channel Audio I/O (3
		jacks)

#### 2.2.1 Internal Connectors

Internal Connector		
Label	Function Note	
FAN1	CPU Fan Connector	4 x 1 wafer, pitch 2.54mm
FAN2	System Fan Connector	3 x 1 wafer, pitch 2.54mm
FAN3	Chassis Fan Connector 3 x 1 wafer, pitch 2.54mm	
COM2 ~ 6	Serial Port Connector * 5 5 x 2 header, pitch 2.54mm	
JDIO1	Digital I/O Connector 6 x 2 header, pitch 2.54mm	
F_PANEL	Front Panel connector	5 x 2 header, pitch 2.54mm
EATXPWR1	ATX power connectors	10 x 2 header
KBMS2	PS2 Keyboard & mouse connector	5 x 2 header, pitch 2.54mm
FPAUD1	Audio MicIn & Line-Out Connector	5 x 2 header, pitch 2.54mm
SPDIF_OUT1	Digital Audio connector	4 x 1 header, pitch 2.54mm
ТРМ	TPM Connector	10 x 2 header, pitch 2.54mm
SPI_CN	SPI Connector	4 x 2 header, pitch 2.54mm
SATA1 ~ 6	SATA Data Connector * 6	7P Male connector
USB56		
USB78	USB Connector * 8	Ex 2 booder pitch 2 E4mm
USB910		5 x 2 header, pitch 2.54mm
USB1112		

#### 2.3 Setting Jumpers & Connectors

Jumpers			
Label	Function	No	ote
JCMOS1	Clear CMOS	Normal *	Clear CMOS
		1	1
PSON1	Select AT/ATX mode	AT MODE	ATX MODE
	3. ATXSEL IN 2. PWRBT 1 1. ATSEL IN	1 1	1

Connectors		
Label	Function	Note
FAN 1	CPU Fan Connector	4. FAN_PWM1_C 3. FANCPUDEC1 2. +V12 1 1. GND
FAN 2	System Fan Connector	1 1. GND 2. +12VPWM 3. Sensor
FAN 3	Chasis Fan Connector	1 I. GND 2. +12VPWM 3. Sensor
Connectors		
Label	Function	Note
COM2 COM3 COM4 COM5 COM6	Serial Port Connector	1       0       2       1. COM_C-DCD3#       2. COM_C-RXD3         3. COM_C-TXD3       4. COM_C-DTR3#         5. GND       6. COM_C-DSR3#         7. COM_C-RTS3#       8. COM_C-CTS3#         9. RI3xPOWERxJMP

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JDIO1	Digital I/O Connector	1       2       1. SIO_GPIO0       2. SIO GPIO4         3. SIO_GPIO1       4. SIO_GPIO5         5. SIO GPIO2       6. SIO_GPIO6         7. SIO_GPIO3       8. SIO_GPIO7         9. SMB CLK MAIN       10. SMB_DATA_MAIN         11. GND       12. N52792386
F_PANEL	Front Panel connector	1 2 1. HDDLED+ 2. POWERLED+ 3. HDDLED- 4. POWERLED- 5. GND 6. PWSWITCH 7. RESET 8. GND 9. NC
KBMS2	PS2 Keyboard & mouse connector	1. KB_A_CLK# 1 2. KB_A_DAT# 3. MS A DAT# 4. GND 5. KBMS1_VCC 6. MS_A_CLK#
FPAUD1	Audio MicIn & Line-Out Connector	1 2 1. MIC2_L 2. GND 3. MIC2 R 4. PRESENSE 00 5. LIN2 R 6. SENSE1_RTN 7. SENSE_B 8. NC 9. LIN2_L 10. SENSE2_RTN
SPDIF_OUT	SPDIF OUT	<ul> <li>4. GND</li> <li>3. SPDIF_O</li> <li>1 1. +5V</li> </ul>
ТРМ	TPM Connector	2 2 0 0 0 0 0 0 0 0 0 0 0 0 0
USB56 USB78 USB910 USB1112	USB 2.0 Connector	1 2 1.USB+5V 2.USB+5V 3.USB- 4.USB- 5.USB+ 6.USB+ 7.GND 8.GND 9.NC

