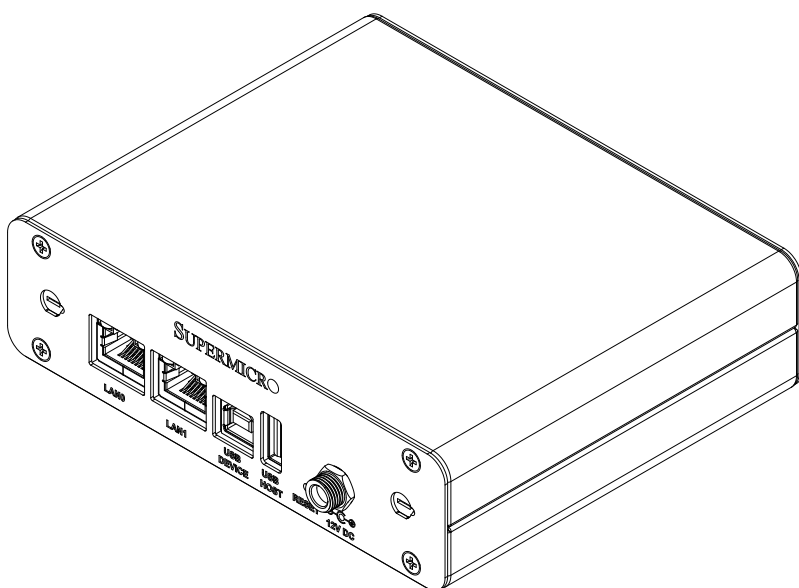




# SuperServer® E100-8Q and E100-8QE



## USER'S MANUAL

Revision 1.0b

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Manual Revision 1.0b

Release Date: August 24, 2015

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## Preface

### About This Manual

This manual is written for professional system integrators and PC technicians. It provides information for the installation and use of the system. Installation and maintenance should be performed by experienced technicians only.

Please refer to the system specifications page on our Web site for updates on supported memory, processors and operating systems ([www.supermicro.com](http://www.supermicro.com)).

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# Chapter 1

## Introduction

### 1-1 Overview

The E100-8Q is a compact, Internet of Things (IoT) Gateway system comprised of the E100-015E chassis and the A1SQN single processor motherboard. The E100-8QE model is an extended temperature model, but otherwise similar. Refer to our website for information on operating systems that have been certified for use with the system ([www.supermicro.com](http://www.supermicro.com)).

For your system to work properly, please follow the links below to download all necessary drivers and utilities, and the user's manual for your system.

- Supermicro product manuals: <http://www.supermicro.com/support/manuals/>
- Product drivers and utilities: <ftp://ftp.supermicro.com>
- Product safety info:  
[http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

If you have any questions, please contact our support team at:  
[support@supermicro.com](mailto:support@supermicro.com).

This manual may be updated periodically without notice, with revisions available on the Supermicro website.

### 1-2 Motherboard Features

The gateway system is built around the A1SQN, or A1SQN-E for extended temperature capabilities. It is an embedded processor motherboard based on the Intel Quark SoC X1021 (System on a Chip). A list of the primary features follows. Figure 1-1 displays a block diagram of the chipset.

#### Processors

The motherboard supports a single Intel Quark SoC X1021 64-bit, 32 nm 2.2W processor.

#### Memory

The board supports up to 512 MB of embedded ECC DDR3-800 memory.

## Storage

System storage is a microSDHC memory card up to 32GB in an internal slot.

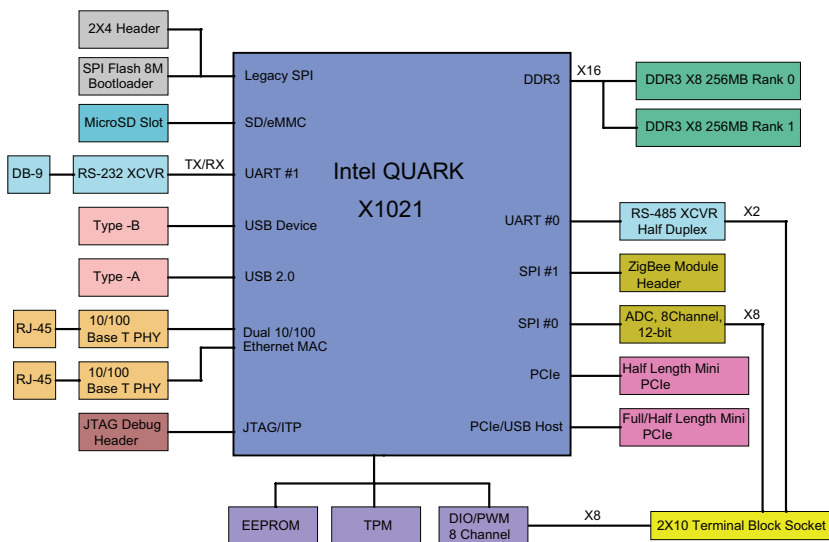
## Expansion Slots

The system has two internal mini PCI-E 2.0 slots and one ZigBee module socket.

## Input/Output

The front of the chassis includes one USB 2.0 host and one USB 2.0 device port and two LAN ports. A reset button is also provided on the front of the unit.

The rear of the unit includes a COM port and an external I/O connector for RS-485, DIO and ADC.



**Figure 1-1. System Block Diagram**

**Note:** This is a general block diagram. Please see Chapter 2 for details.

## 1-3 Chassis Features

The E100-015E is a compact box PC chassis.

### System Power

The system is powered by an external power adapter that connects to the front of the chassis. The external power adapter uses 100-240V AC input, and provides 12V DC, 15W output to the system.

## 1-4 Models

The E100-8Q gateway can be sold with various radio capabilities. The models are listed.

| Module              | Model Name                          |
|---------------------|-------------------------------------|
| 3G(WCDMA)+WiFi      | SYS-E100-8Q-THAW/ SYS-E100-8QE-THAW |
| 3G(WCDMA)+Zigbee US | SYS-E100-8Q-THE3/ SYS-E100-8QE-THE3 |
| 3G(WCDMA)+Zigbee EU | SYS-E100-8Q-THE2/ SYS-E100-8QE-THE2 |
| 3G(CDMA)+WiFi       | SYS-E100-8Q-TDAW/ SYS-E100-8QE-TDAW |
| 3G(CDMA)+Zigbee US  | SYS-E100-8Q-TDE3/ SYS-E100-8QE-TDE3 |
| WiFi+Zigbee US      | SYS-E100-8Q-AWE3/ SYS-E100-8QE-AWE3 |
| WiFi+Zigbee EU      | SYS-E100-8Q-AWE2/ SYS-E100-8QE-AWE2 |
| 3G(WCDMA)           | SYS-E100-8Q-TH/ SYS-E100-8QE-TH     |
| 3G(CDMA)            | SYS-E100-8Q-TD/ SYS-E100-8QE-TD     |
| Zigbee US           | SYS-E100-8Q-E3/ SYS-E100-8QE-E3     |
| Zigbee EU           | SYS-E100-8Q-E2/ SYS-E100-8QE-E2     |
| WiFi                | SYS-E100-8Q-AW/ SYS-E100-8QE-AW     |

## 1-5 System Installation and Setup

The gateway system is shipped with the processor and the motherboard installed in the chassis. Several steps are necessary to begin using your system.

### Unpacking the System

Inspect the box in which the system was shipped and note if it was damaged. If the system itself shows damage, file a damage claim with the carrier.

### Warnings and Precautions

- Use a regulating uninterruptible power supply (UPS) to protect the system from power surges, voltage spikes and to keep your system operating in case of a power failure.
- Review the electrical and general safety precautions in Chapter 4.

### Adding Components to Your System

- **Drives and Storage:** The only internal storage supported is a microSD memory card up to 32GB. It must be added to the system for use. An external USB flash drive can be plugged in to the front of the chassis for additional storage.
- **Input/Output:** See Chapter 2 for I/O ports and connect them as needed.

### Radio Capability

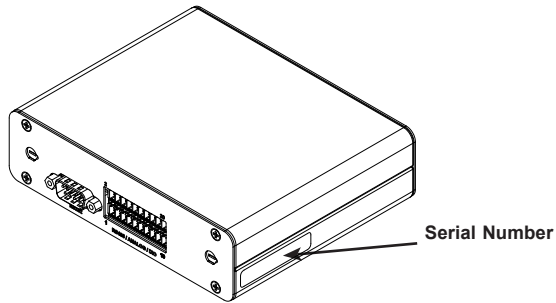
The gateway can be purchased with radio options. It supports 3G, WiFi, or ZigBee. See Section 1-4 for a list of possible configurations.

### Operating System

Normally, the system requires Wind River Linux. The operating system can be installed in either a microSD memory card or a USB flash drive. Please refer to the operating system image installation guide for instruction. To validate the system compliance to the Intel Gateway Solution, you may register this system at: <https://registrationcenter.intel.com> using the serial number found on the side of the chassis (Figure 1-2).

### Connecting Power

To power up the system, screw the connector of the power adapter cord onto the jack on the front right of the chassis.

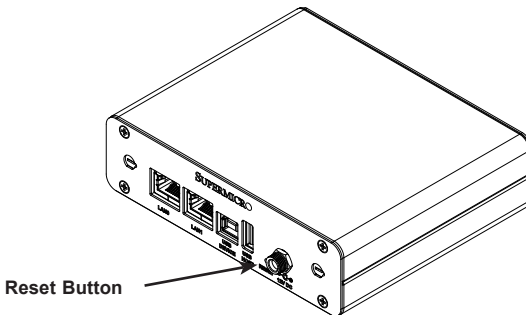


**Figure 1-2. Serial Number**

## **1-6 System Interface**

The system interface is presented using a host computer attached to the serial port using a terminal emulator, such as PuTTY, to communicate.

The front of the chassis includes a power reset button.



**Figure 1-3. Power Reset**

## 1-7 Contacting Supermicro

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## Chapter 2

### Advanced Motherboard Setup

This section describes the connections on the A1SQN motherboard and provides pinout definitions. Note that depending on how the system is configured, not all connections are required. The LEDs on the motherboard are also described.

Please review the Safety Precautions in Chapter 4 before installing or removing components.

#### 2-1 Handling the Motherboard

Electrostatic Discharge (ESD) can damage electronic components. To prevent damage to any printed circuit boards (PCBs), it is important to handle them very carefully (see previous chapter). To prevent the motherboard from bending, keep one hand under the center of the board to support it when handling. The following measures are generally sufficient to protect your equipment from electric static discharge.

##### Precautions

- Use a grounded wrist strap designed to prevent ESD.
- Touch a grounded metal object before removing boards from antistatic bags.
- Handle a board by its edges only; do not touch its components, peripheral chips, memory modules or gold contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard, add-on cards and peripherals back into their antistatic bags when not in use.
- For grounding purposes, make sure your computer chassis provides excellent conductivity between the power supply, the case, the mounting fasteners and the motherboard.

## 2-2 Processor

The E100-8Q features an embedded Intel Quark X1021 single-core 32nm SoC (System-on-a-Chip) processor. This is the next generation secure, low-power Intel Architecture (IA) SoC for deeply embedded applications. The SoC integrates the processor plus all the required hardware components to run off-the-shelf operating systems and to leverage the vast x86 software ecosystem.

## 2-3 Memory

The included onboard memory is 512MB of ECC DDR3 at 800MHz. Memory is not further configurable.

## 2-4 Input/Output Ports

### Front Ports

The figure below describes the front I/O ports on the system.

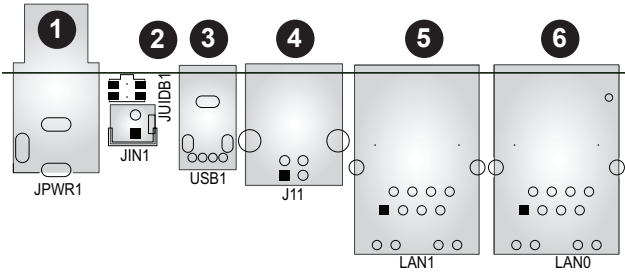


Figure 2-1. Front I/O

| Front I/O Ports |                        |   |                 |
|-----------------|------------------------|---|-----------------|
| 1               | 5V-12V Power Connector | 4 | USB Type B Port |
| 2               | Reset Button           | 5 | LAN1            |
| 3               | USB 2.0 Type A Port    | 6 | LAN0            |

### Rear Ports

The rear ports include one COM port and one twenty-pin terminal connector for RS485, DIO and ADC.

## 2-5 Motherboard Details

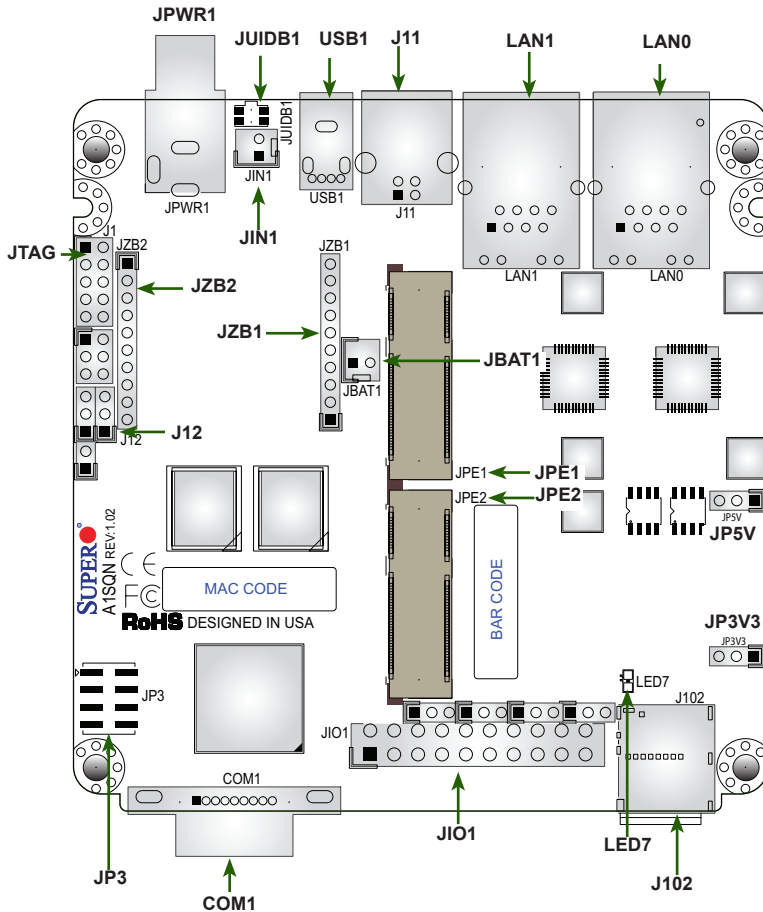


Figure 2-2. A1SQN Motherboard Layout

| Headers/Connectors |                                                                    |
|--------------------|--------------------------------------------------------------------|
| Connector          | Description                                                        |
| COM1               | COM1 Port                                                          |
| J1                 | JTAG Header                                                        |
| J11                | USB Type B Port                                                    |
| J12                | I2C Header                                                         |
| J102               | MicroSD Memory Card Slot                                           |
| JBAT1              | RTC Battery Connector                                              |
| JIN1               | Alternative Power Input when DC Jack is not used (not recommended) |
| JIO1               | 2X10 External I/O                                                  |
| JP3                | 2x4 SPI Flash Image Programming Header                             |
| JPE1               | Full/Half Length Mini PCIe Card Slot with one USB 2.0 Interface    |
| JPE2               | Half Length Mini PCIe Card Slot                                    |
| JPWR1              | 5V-12V Motherboard Power connector                                 |
| JUIDB1             | H/W Reset Button                                                   |
| JZB1/JZB2          | ZigBee Headers                                                     |
| LAN0               | 10/100Mb Ethernet Port                                             |
| LAN1               | General Software program to Bridge LAN Port                        |
| USB1               | USB 2.0 Port                                                       |

| Jumpers |                                             |                     |
|---------|---------------------------------------------|---------------------|
| Label   | Description                                 | Default Setting     |
| JP3V3   | Enable 3.3V auxiliary power at JIO1, pin 19 | Pins 2-3 (Disabled) |
| JP5V    | Enable 5V auxiliary power at JIO1, pin 20   | Pins 2-3 (Disabled) |

| LED Indicators |                              |       |        |
|----------------|------------------------------|-------|--------|
| LED            | Description                  | Color | Status |
| LED7           | MicroSD Read/Write Indicator | Green | On     |

## 2-6 Connector Definitions

### Ethernet Ports

One 10/100Mbps Ethernet port (LAN0) is located on the chassis front to provide network connections. LAN1 is a Bridge LAN port.

### Universal Serial Bus (USB)

One Universal Serial Bus 2.0 port is located on the I/O chassis front. One USB Type B port is located next to the USB 2.0 port.

### Serial Port

COM1 port is located on the chassis rear panel to provide a serial port connection.

### Hardware Reset Button

A hardware reset button is located on the chassis front next to the USB port.

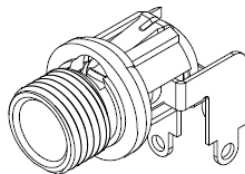
### RTC Battery Connector

The RTC (Real Time Clock) battery connector is located at JBAT1. Use this connector to connect an RTC battery to retain system time and date. The RTC battery is also known as a CMOS battery.

### Motherboard Power Connector

The 5V-12V power connector (JPWR1) provides power to the motherboard. This connector has a special lock mechanism.

| 5V-12V Power Connector<br>Pin Definitions |            |
|-------------------------------------------|------------|
| Pin#                                      | Definition |
| 1                                         | VIN        |
| 2                                         | GND        |
| 3                                         | NC         |



I<sup>2</sup>C Connector

The I<sup>2</sup>C header, located at J12, controls and monitors the I<sup>2</sup>C slave devices. See the table on the right for pin definitions.

| I <sup>2</sup> C Header<br>Pin Definitions |            |
|--------------------------------------------|------------|
| Pin#                                       | Definition |
| 1                                          | SCL        |
| 2                                          | GND        |
| 3                                          | SDA        |

SPI Flash Program Header

The SPI Flash header at JP3 is a 2 x 4 connector that can be used to update the 8MB flash image. See the table on the right for pin definitions.

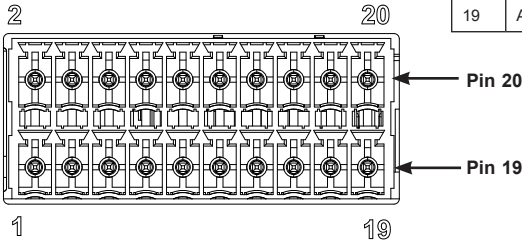
| SPI Flash Program Header<br>Pin Definitions |            |
|---------------------------------------------|------------|
| Pin#                                        | Definition |
| 1                                           | VCC        |
| 2                                           | GND        |
| 3                                           | CS#        |
| 4                                           | CLK        |
| 5                                           | MISO       |
| 6                                           | MOSI       |
| 7                                           | NC         |
| 8                                           | NC         |

I/O Conector

The external I/O connector at JIO1 provides RS485, analog input and DIO (Digital Input/Output) connectivity. See the table on the right for pin definitions.

Output voltage on pins 19 and 20 can be set using jumpers JP3V3 and JP5V respectively. See the jumper definitions later in this chapter.

| 2x10 External I/O<br>Pin Definitions |            |       |            |
|--------------------------------------|------------|-------|------------|
| Pin#                                 | Definition | Pin # | Definition |
| 1                                    | RS485A     | 2     | RS485B     |
| 3                                    | GND        | 4     | GND        |
| 5                                    | DIO1       | 6     | DIO0       |
| 7                                    | DIO3       | 8     | DIO2       |
| 9                                    | DIO5       | 10    | DIO4       |
| 11                                   | DIO7       | 12    | DIO6       |
| 13                                   | ADC1       | 14    | ADC0       |
| 15                                   | ADC3       | 16    | ADC2       |
| 17                                   | ADC5       | 18    | ADC4       |
| 19                                   | ADC7/3.3V  | 20    | ADC6/5V    |



### MicroSD Card Slot

Insert a microSD memory card into the expansion slot at J102 for additional memory or OS image.

### Mini PCIe Card Slots

One full/half and one half length mini PCIe card slots are located at JPE1 and JPE2. A USB 2.0 interface is available with JPE1.

### ZigBee Headers

Connect a ZigBee module to the JZB1 and JZB2 headers. The ZigBee module allows your system to communicate to other devices through a wireless personal area network based on 802.15.4 standard. See the tables below for pin definitions.

| ZigBee Header (JZB1)<br>Pin Definitions |            |
|-----------------------------------------|------------|
| Pin#                                    | Definition |
| 1                                       | FRAME-GND  |
| 2                                       | RSVD1      |
| 3                                       | RSVD2      |
| 4                                       | RSVD3      |
| 5                                       | CS0-GP7    |
| 6                                       | CLK        |
| 7                                       | MOSI       |
| 8                                       | MISO       |
| 9                                       | VCC        |
| 10                                      | GND        |

| ZigBee Header (JZB2)<br>Pin Definitions |            |
|-----------------------------------------|------------|
| Pin#                                    | Definition |
| 1                                       | GND        |
| 2                                       | VCC        |
| 3                                       | CS1-GP5    |
| 4                                       | RST-N-GP4  |
| 5                                       | ID0-GP0    |
| 6                                       | ID1-GP1    |
| 7                                       | ID2-GP2    |
| 8                                       | ID3-GP3    |
| 9                                       | RSVD-GP6   |
| 10                                      | FRAME-GND  |

### JTAG Header

JTAG at J1 stands for Joint Test Action Group, which is the common name for the IEEE 1149.1 - Standard Test Access Port and Boundary-Scan Architecture. This feature was initially created to test printed circuit boards. See the table on the right for pin definitions.

| JTAG Header<br>Pin Definitions |            |
|--------------------------------|------------|
| Pin#                           | Definition |
| 1                              | VCC        |
| 2                              | TMS        |
| 3                              | GND        |
| 4                              | TCK        |
| 5                              | GND        |
| 6                              | TDO        |
| 7                              | N/A        |
| 8                              | TDI        |
| 9                              | GND        |
| 10                             | RESET      |

## 2-7 Jumpers

### JP5V and JP3V3 Jumpers

Power output on the JIO1 connector, pins 19 and 20, can be set. See the tables on the right for jumper settings.

| JP3V3 Jumper Settings |                         |
|-----------------------|-------------------------|
| Pin#                  | Definition              |
| 1-2                   | JIO1 Pin 19 3.3V Output |
| 2-3 (Default)         | JIO1 Pin 19 ADC7        |

| JP5V Jumper Settings |                       |
|----------------------|-----------------------|
| Pin#                 | Definition            |
| 1-2                  | JIO1 Pin 20 5V Output |
| 2-3 (Default)        | JIO1 Pin 20 ADC6      |

## 2-8 LED Indicators

### Micro SD Read/Write Indicator (LED7)

The Micro SD Read/Write indicator is located at LED7. This indicator displays the Micro SD slot activity. Refer to the table on the right for details.

| Micro SD Read/Write Indicator Activity LED |        |            |
|--------------------------------------------|--------|------------|
| Color                                      | Status | Definition |
| Green                                      | On     | Read/Write |

## Chapter 3

### Advanced Chassis Setup

This chapter covers the steps required to install or replace components in the E100-015E chassis. The only tool required is a Phillips screwdriver.

Review the warnings and precautions listed in the manual before setting up or servicing this chassis. These include information in Chapter 4 and in the setup instructions.

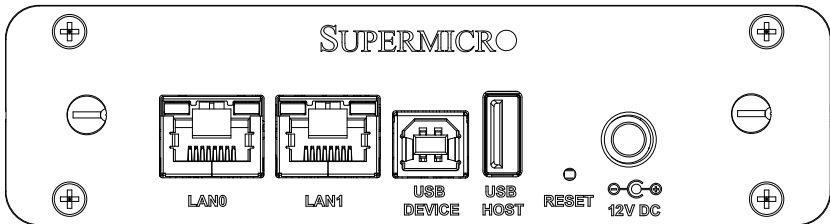


Figure 3-1. Front View

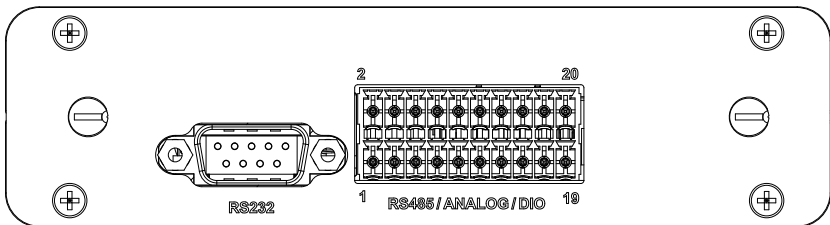


Figure 3-2. Rear View

### 3-1 Removing Power

Before performing most setup or maintenance tasks, use the following procedure to ensure that power has been disconnected from the system.

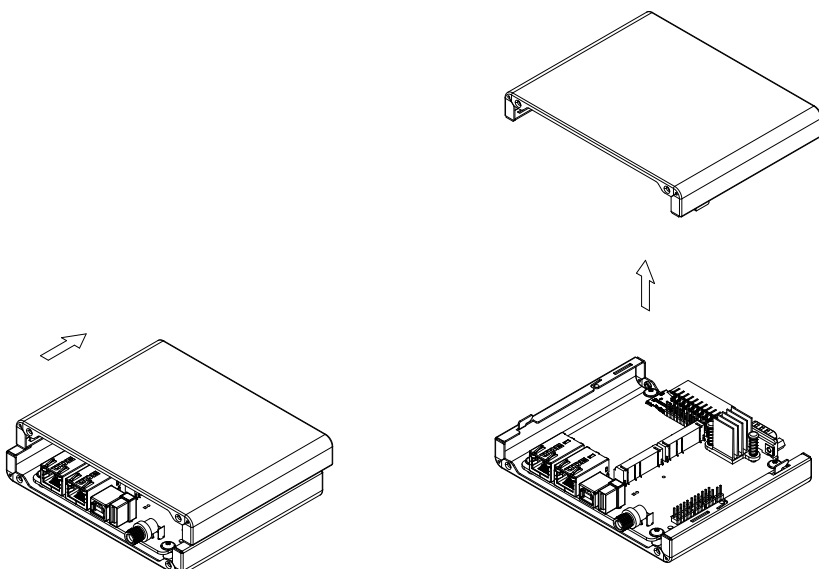
1. Use the host system to power down the system.
2. After the system has completely shut down, remove the power adapter cord from the front of the chassis.
3. Remove the power adapter from the power strip or wall outlet.

## 3-2 Removing the Chassis Covers

The user can remove the rear cover to install the microSD memory card, or the top cover to install expansion devices or move jumpers.

### ***Removing the Top Cover***

1. Power down the system as described in section 3-1.
2. Remove the 20-pin terminal connector.
3. Remove the four screws in the corners of the rear cover.
4. Take off the rear cover.
5. On the front panel, remove the lock nut from the power jack.
6. Remove the four screws in the corners of the front cover and take it off.
7. Slide the top cover toward the rear to release the cover hooks from the chassis.
8. Lift the top cover up and off the chassis.



**Figure 3-4. Removing the Chassis Cover**

### 3-3 Adding Radio Antennas

If you purchased radio options for your gateway, the internal components and antenna jacks are installed by the manufacturer. To enable radio capabilities, you must add the appropriate antennas. There are two types of antenna: one for WiFi or ZigBee, and one for 3G.

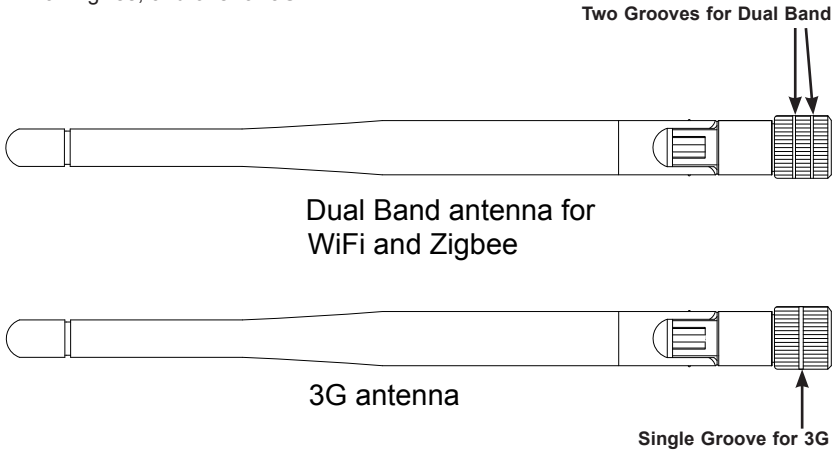


Figure 3-5. Antenna Types

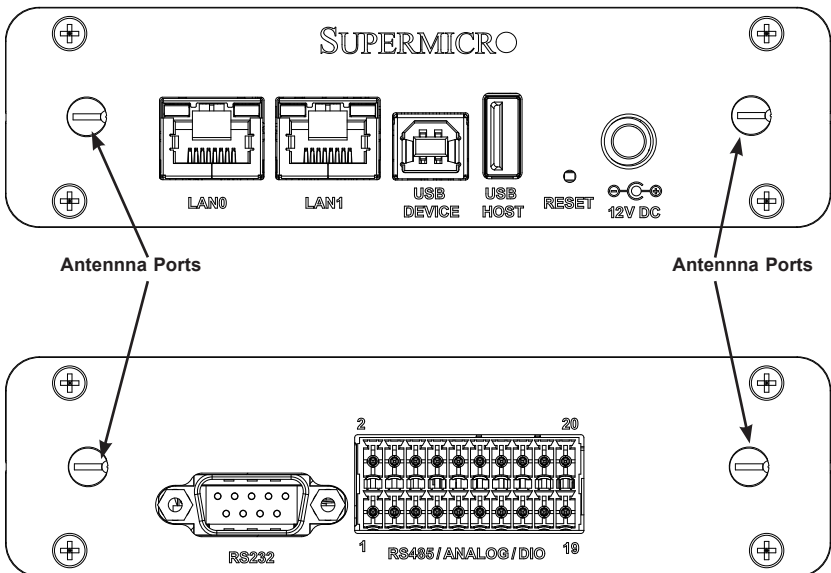
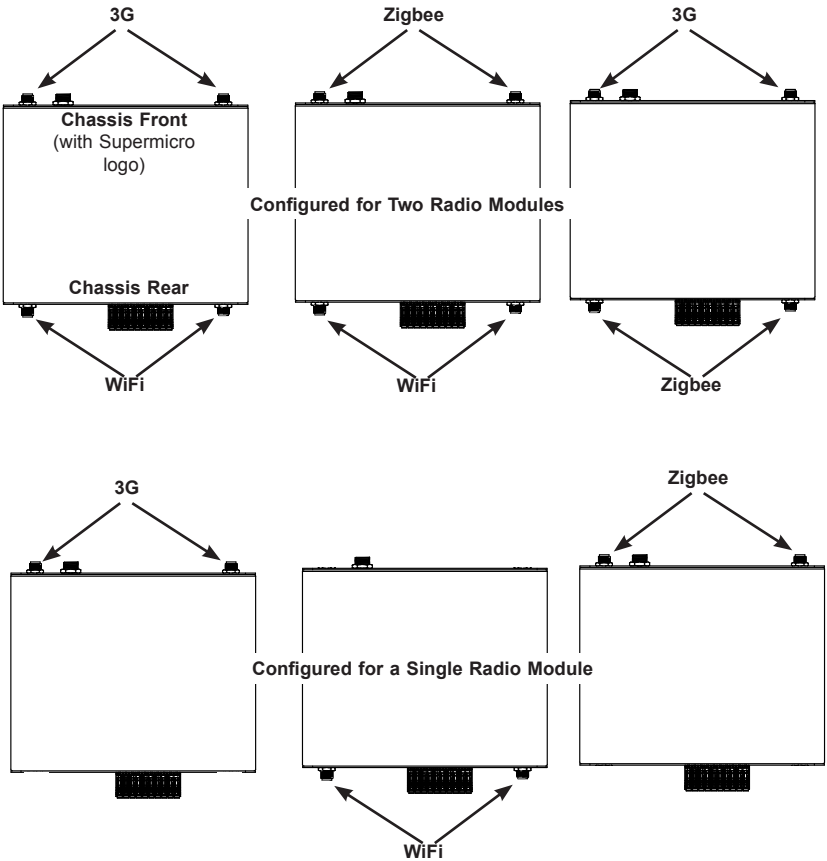


Figure 3-6. Antenna Ports

**Installing an Antenna**

1. For each antenna port, verify that you have the correct antenna type. The dual band antenna is distinguished by two grooves in the screw-on cap (Figure 3-5). The 3G antenna cap has a single groove.
2. Screw the antenna onto the proper antenna jack on the front or rear of the chassis (Figure 3-7).
3. Orient the antenna to vertical for best performance. You can swivel the antenna at the pivot joint, and, if necessary, rotate the antenna cap to make the antenna vertical.



**Figure 3-7. Sample Antenna Port Configurations**

## Chapter 4

# Standardized Warning Statements for AC Systems

### About Standardized Warning Statements

The following statements are industry standard warnings, provided to warn the user of situations which have the potential for bodily injury. Should you have questions or experience difficulty, contact Supermicro's Technical Support department for assistance. Only certified technicians should attempt to install or configure components.

Read this appendix in its entirety before installing or configuring components in the Supermicro chassis. Some warnings may not apply for your system.

These warnings may also be found on our web site at [http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm).

### Warning Definition



#### Warning!

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

#### 警告の定義

この警告サインは危険を意味します。

人身事故につながる可能性がありますので、いずれの機器でも動作させる前に、電気回路に含まれる危険性に注意して、標準的な事故防止策に精通して下さい。

此警告符号代表危險。

您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾的声明号码找到此设备的安全性警告说明的翻译文本。

此警告符號代表危險。

您正處於可能身體可能會受損傷的工作環境中。在您使用任何設備之前，請注意觸電的危險，並且要熟悉預防事故發生的標準工作程序。請依照每一注意事項後的號碼找到相關的翻譯說明內容。

## Warnung

### WICHTIGE SICHERHEITSHINWEISE

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

BEWAHREN SIE DIESE HINWEISE GUT AUF.

### INSTRUCCIONES IMPORTANTES DE SEGURIDAD

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

GUARDE ESTAS INSTRUCCIONES.

### IMPORTANTES INFORMATIONS DE SÉCURITÉ

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

CONSERVEZ CES INFORMATIONS.

## תקנון הצהרות אזהרה

הצהרות הבאות הן אזהרות על פי תקני התעשייה, על מנת להזהיר את המשתמש מפני חבלה פיזית אפשרית. במידה ויש שאלות או היתקלות בבעיה כלשהי, יש ליצור קשר עם מחלקת תמיכה טכנית של סופרמיקרו. טכנאים מוסמכים בלבד רשאים להתקין או להגדיר את הרכיבים.

יש לקרוא את הנספח במלוואו לפני התקנת או הגדרת הרכיבים במארוזי סופרמיקרו.

تحذير! هذا الرمز يعني خطر انك في حالة يمكن أن تتسبب في اصابة جسدية .  
قبل أن تعمل على أي معدات، كن على علم بالمخاطر الناجمة عن الدوائر  
الكهربائية  
وكن على دراية بالممارسات الوقائية لمنع وقوع أي حوادث  
استخدم رقم البيان المنصوص في نهاية كل تحذير للعثور ترجمتها

안전을 위한 주의사항

경고!

이 경고 기호는 위험이 있음을 알려 줍니다. 작업자의 신체에 부상을 야기 할 수 있는 상태에 있게 됩니다. 모든 장비에 대한 작업을 수행하기 전에 전기회로와 관련된 위험요소들을 확인하시고 사전에 사고를 방지할 수 있도록 표준 작업절차를 준수해 주시기 바랍니다.

해당 번역문을 찾기 위해 각 경고의 마지막 부분에 제공된 경고문 번호를 참조하십시오

#### BELANGRIJKE VEILIGHEIDSINSTRUCTIES

Dit waarschuwings symbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij een elektrische installatie betrokken risico's en dient u op de hoogte te zijn van de standaard procedures om ongelukken te voorkomen. Gebruik de nummers aan het eind van elke waarschuwing om deze te herleiden naar de desbetreffende locatie.

#### BEWAAR DEZE INSTRUCTIES

## Installation Instructions



### Warning!

Read the installation instructions before connecting the system to the power source.

設置手順書

システムを電源に接続する前に、設置手順書をお読み下さい。

警告

将此系统连接电源前，请先阅读安装说明。

警告

將系統與電源連接前，請先閱讀安裝說明。

Warnung

Vor dem Anschließen des Systems an die Stromquelle die Installationsanweisungen lesen.

¡Advertencia!

Lea las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Attention

Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

יש לקרוא את הוראות התקנה לפני חיבור המערכת למקור מתח.

اقرأ إرشادات التركيب قبل توصيل النظام إلى مصدر للطاقة

시스템을 전원에 연결하기 전에 설치 안내를 읽어주십시오.

Waarschuwing

Raadpleeg de installatie-instructies voordat u het systeem op de voedingsbron aansluit.

## Circuit Breaker



### Warning!

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A.

サーキット・ブレーカー

この製品は、短絡(過電流)保護装置がある建物での設置を前提としています。

保護装置の定格が250 V、20 Aを超えないことを確認下さい。

### 警告

此产品的短路(过载电流)保护由建筑物的供电系统提供,确保短路保护设备的额定电流不大于250V,20A。

### 警告

此產品的短路(過載電流)保護由建築物的供電系統提供,確保短路保護設備的額定電流不大於250V,20A。

### Warnung

Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als: 250 V, 20 A beträgt.

### ¡Advertencia!

Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 250 V, 20 A.

### Attention

Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à :250 V, 20 A.

מוצר זה מסתמך על הגנה המותקנת במבנים למניעת קצר חשמלי. יש לוודא כי המכשיר המגן מפני הקצר החשמלי הוא לא יותר מ-250 V, 20 A

هذا المنتج يعتمد على معدات الحماية من الدوائر القصيرة التي تم تثبيتها في المبنى

تأكد من أن تقييم الجهاز الوقائي ليس أكثر من: 250V, 20A

경고!

이 제품은 전원의 단락(과전류)방지에 대해서 전적으로 건물의 관련 설비에 의존합니다. 보호장치의 정격이 반드시 250V(볼트), 20A(암페어)를 초과하지 않도록 해야 합니다.

#### Waarschuwing

Dit product is afhankelijk van de kortsluitbeveiliging (overspanning) van uw elektrische installatie. Controleer of het beveiligde apparaat niet groter gedimensioneerd is dan 220V, 20A.

### Power Disconnection Warning



#### Warning!

The system must be disconnected from all sources of power and the power cord removed from the power supply module(s) before accessing the chassis interior to install or remove system components.

#### 電源切斷の警告

システムコンポーネントの取り付けまたは取り外しのために、シャーシ内部にアクセスするには、

システムの電源はすべてのソースから切斷され、電源コードは電源モジュールから取り外す必要があります。

#### 警告

在你打开机箱并安装或移除内部器件前，必须将系统完全断电，并移除电源线。

#### 警告

在您打開機殼安裝或移除內部元件前，必須將系統完全斷電，並移除電源線。

#### Warnung

Das System muss von allen Quellen der Energie und vom Netzanschlusskabel getrennt sein, das von den Spg.Versorgungsteilmodulen entfernt wird, bevor es auf den Chassisinnenraum zurückgreift, um Systemsbestandteile anzubringen oder zu entfernen.

**¡Advertencia!**

El sistema debe ser disconnected de todas las fuentes de energía y del cable eléctrico quitado de los módulos de fuente de alimentación antes de tener acceso el interior del chasis para instalar o para quitar componentes de sistema.

**Attention**

Le système doit être débranché de toutes les sources de puissance ainsi que de son cordon d'alimentation secteur avant d'accéder à l'intérieur du châssis pour installer ou enlever des composants de système.

**אזהרה !**

יש לנתק את המערכת מכל מקורות החשמל ויש להסיר את כבל החשמלי מהספק לפני גישה לחלק הפנימי של המארז לצורך התקנת או הסרת רכיבים.

يجب فصل النظام من جميع مصادر الطاقة وإزالة سلك الكهرباء من وحدة امداد الطاقة قبل الوصول إلى المناطق الداخلية للهيكल لتثبيت أو إزالة مكونات الجهاز

**경고!**

시스템에 부품들을 장착하거나 제거하기 위해서는 새시 내부에 접근하기 전에 반드시 전원 공급장치로부터 연결되어있는 모든 전원과 전기코드를 분리해주어야 합니다.

**Waarschuwing**

Voordat u toegang neemt tot het binnenwerk van de behuizing voor het installeren of verwijderen van systeem onderdelen, dient u alle spanningsbronnen en alle stroomkabels aangesloten op de voeding(en) van de behuizing te verwijderen

## Equipment Installation



### Warning!

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

### 機器の設置

トレーニングを受け認定された人だけがこの装置の設置、交換、またはサービスを許可されています。

### 警告

只有经过培训且具有资格的人员才能进行此设备的安装、更换和维修。

### 警告

只有經過受訓且具資格人員才可安裝、更換與維修此設備。

### Warnung

Das Installieren, Ersetzen oder Bedienen dieser Ausrüstung sollte nur geschultem, qualifiziertem Personal gestattet werden.

### ¡Advertencia!

Solamente el personal calificado debe instalar, reemplazar o utilizar este equipo.

### Attention

Il est vivement recommandé de confier l'installation, le remplacement et la maintenance de ces équipements à des personnels qualifiés et expérimentés.

### אזהרה!

צוות מוסמך בלבד רשאי להתקין, להחליף את הציוד או לתת שירות עבור הציוד.

يجب أن يسمح فقط للموظفين المؤهلين والمدربين لتكوين واستبدال أو خدمة هذا الجهاز

### 경고!

훈련을 받고 공인된 기술자만이 이 장비의 설치, 교체 또는 서비스를 수행할 수 있습니다.

### Waarschuwing

Deze apparatuur mag alleen worden geïnstalleerd, vervangen of hersteld door geschoold en gekwalificeerd personeel.

## Restricted Area



### Warning!

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. (This warning does not apply to workstations).

### アクセス制限区域

このユニットは、アクセス制限区域に設置されることを想定しています。

アクセス制限区域は、特別なツール、鍵と錠前、その他のセキュリティの手段を用いてのみ出入りが可能です。

### 警告

此部件应安装在限制进出的场所，限制进出的场所指只能通过使用特殊工具、锁和钥匙或其它安全手段进出的场所。

### 警告

此裝置僅限安裝於進出管制區域，進出管制區域係指僅能以特殊工具、鎖頭及鑰匙或其他安全方式才能進入的區域。

### Warnung

Diese Einheit ist zur Installation in Bereichen mit beschränktem Zutritt vorgesehen. Der Zutritt zu derartigen Bereichen ist nur mit einem Spezialwerkzeug, Schloss und Schlüssel oder einer sonstigen Sicherheitsvorkehrung möglich.

### ¡Advertencia!

Esta unidad ha sido diseñada para instalación en áreas de acceso restringido. Sólo puede obtenerse acceso a una de estas áreas mediante la utilización de una herramienta especial, cerradura con llave u otro medio de seguridad.

### Attention

Cet appareil doit être installée dans des zones d'accès réservés. L'accès à une zone d'accès réservé n'est possible qu'en utilisant un outil spécial, un mécanisme de verrouillage et une clé, ou tout autre moyen de sécurité.

## אזור עם גישה מוגבלת

### אזהרה!

יש להתקין את היחידה באזורים שיש בהם הגבלת גישה. הגישה ניתנת בעזרת כלי אבטחה בלבד (מפתח, מנעול וכד').

تم تخصيص هذه الوحدة لتركيبها في مناطق محظورة .  
يمكن الوصول إلى منطقة محظورة فقط من خلال استخدام أداة خاصة،  
قفل ومفتاح أو أي وسيلة أخرى للأمان

경고!

이 장치는 접근이 제한된 구역에 설치하도록 되어있습니다. 특수도구, 잠금 장치 및 키, 또는 기타 보안 수단을 통해서만 접근 제한 구역에 들어갈 수 있습니다.

### Waarschuwing

Dit apparaat is bedoeld voor installatie in gebieden met een beperkte toegang. Toegang tot dergelijke gebieden kunnen alleen verkregen worden door gebruik te maken van speciaal gereedschap, slot en sleutel of andere veiligheidsmaatregelen.

## Battery Handling



### Warning!

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions

### 電池の取り扱い

電池交換が正しく行われなかった場合、破裂の危険性があります。交換する電池はメーカーが推奨する型、または同等のものを使用下さい。使用済電池は製造元の指示に従って処分して下さい。

### 警告

電池更換不當會有爆炸危險。請只使用同類電池或製造商推薦的功能相當的電池更換原有電池。請按製造商的說明處理廢舊電池。

### 警告

電池更換不當會有爆炸危險。請使用製造商建議之相同或功能相當的電池更換原有電池。請按照製造商的說明指示處理廢棄舊電池。

**Warnung**

Bei Einsetzen einer falschen Batterie besteht Explosionsgefahr. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

**Attention**

Danger d'explosion si la pile n'est pas remplacée correctement. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

**¡Advertencia!**

Existe peligro de explosión si la batería se reemplaza de manera incorrecta. Reemplazar la batería exclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

**אזהרה !**

קיימת סכנת פיצוץ של הסוללה במידה והוחלפה בדרך לא תקינה. יש להחליף את הסוללה בסוג התואם מחברת יצרן מומלצת.

סילוק הסוללות המשומשות יש לבצע לפי הוראות היצרן.

هناك خطر من انفجار في حالة استبدال البطارية بطريقة غير صحيحة عليك استبدال البطارية فقط بنفس النوع أو ما يعادلها كما أوصت به الشركة المصنعة تخلص من البطاريات المستعملة وفقا لتعليمات الشركة الصانعة

**경고!**

배터리가 올바르게 교체되지 않으면 폭발의 위험이 있습니다. 기존 배터리와 동일하거나 제조사에서 권장하는 동등한 종류의 배터리로만 교체해야 합니다. 제조사의 안내에 따라 사용된 배터리를 처리하여 주십시오.

**Waarschuwing**

Er is ontplofingsgevaar indien de batterij verkeerd vervangen wordt. Vervang de batterij slechts met hetzelfde of een equivalent type die door de fabrikant aanbevolen wordt. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften afgevoerd te worden.

## Redundant Power Supplies



### Warning!

This unit might have more than one power supply connection. All connections must be removed to de-energize the unit.

### 冗長電源装置

このユニットは複数の電源装置が接続されている場合があります。  
ユニットの電源を切るためには、すべての接続を取り外さなければなりません。

### 警告

此部件连接的电源可能不止一个，必须将所有电源断开才能停止给该部件供电。

### 警告

此裝置連接的電源可能不只一個，必須切斷所有電源才能停止對該裝置的供電。

### Warnung

Dieses Gerät kann mehr als eine Stromzufuhr haben. Um sicherzustellen, dass der Einheit kein Strom zugeführt wird, müssen alle Verbindungen entfernt werden.

### ¡Advertencia!

Puede que esta unidad tenga más de una conexión para fuentes de alimentación. Para cortar por completo el suministro de energía, deben desconectarse todas las conexiones.

### Attention

Cette unité peut avoir plus d'une connexion d'alimentation. Pour supprimer toute tension et tout courant électrique de l'unité, toutes les connexions d'alimentation doivent être débranchées.

### אם קיים יותר מספק אחד

### אזהרה !

ליחידה יש יותר מחיבור אחד של ספק. יש להסיר את כל החיבורים על מנת לרוקן את היחידה.

قد يكون لهذا الجهاز عدة اتصالات بوحدات امداد الطاقة.  
يجب إزالة كافة الاتصالات لعزل الوحدة عن الكهرباء

경고!

이 장치에는 한 개 이상의 전원 공급 단자가 연결되어 있을 수 있습니다. 이 장치에 전원을 차단하기 위해서는 모든 연결 단자를 제거해야만 합니다.

Waarschuwing

Deze eenheid kan meer dan één stroomtoevoeraansluiting bevatten. Alle aansluitingen dienen verwijderd te worden om het apparaat stroomloos te maken.

### **Backplane Voltage** (if applicable to your system)



#### **Warning!**

Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.

バックプレーンの電圧

システムの稼働中は危険な電圧または電力が、バックプレーン上にかかっています。

修理する際にはご注意ください。

警告

当系统正在进行时，背板上有很危险的电压或能量，进行维修时务必小心。

警告

當系統正在進行時，背板上有危險的電壓或能量，進行維修時務必小心。

Warnung

Wenn das System in Betrieb ist, treten auf der Rückwandplatine gefährliche Spannungen oder Energien auf. Vorsicht bei der Wartung.

¡Advertencia!

Cuando el sistema está en funcionamiento, el voltaje del plano trasero es peligroso. Tenga cuidado cuando lo revise.

Attention

Lorsque le système est en fonctionnement, des tensions électriques circulent sur le fond de panier. Prendre des précautions lors de la maintenance.

## מתח בפנל האחורי

אזהרה !

קיימת סכנת מתח בפנל האחורי בזמן תפעול המערכת. יש להיזהר במהלך העבודה.

هناك خطر من التيار الكهربائي أو الطاقة الموجودة على اللوحة  
عندما يكون النظام يعمل كن حذرا عند خدمة هذا الجهاز

경고!

시스템이 동작 중일 때 후면판 (Backplane)에는 위험한 전압이나 에너지가 발생  
합니다. 서비스 작업 시 주의하십시오.

Waarschuwing

Een gevaarlijke spanning of energie is aanwezig op de backplane wanneer het  
systeem in gebruik is. Voorzichtigheid is geboden tijdens het onderhoud.

## Comply with Local and National Electrical Codes



### Warning!

Installation of the equipment must comply with local and national electrical codes.

地方および国の電気規格に準拠

機器の取り付けはその地方および国の電気規格に準拠する必要があります。

警告

设备安装必须符合本地与本国电气法规。

警告

設備安裝必須符合本地與本國電氣法規。

Warnung

Die Installation der Geräte muss den Sicherheitsstandards entsprechen.

¡Advertencia!

La instalación del equipo debe cumplir con las normas de electricidad locales y  
nacionales.

#### Attention

L'équipement doit être installé conformément aux normes électriques nationales et locales.

#### תאום חוקי החשמל הארצי

אזהרה !

התקנת הציוד חייבת להיות תואמת לחוקי החשמל המקומיים והארציים.

تركيب المعدات الكهربائية يجب أن يمثل للقوانين المحلية والوطنية المتعلقة  
بالكهرباء

경고!

현 지역 및 국가의 전기 규정에 따라 장비를 설치해야 합니다.

#### Waarschuwing

Bij installatie van de apparatuur moet worden voldaan aan de lokale en nationale elektriciteitsvoorschriften.

### Product Disposal



#### Warning!

Ultimate disposal of this product should be handled according to all national laws and regulations.

#### 製品の廃棄

この製品を廃棄処分する場合、国の関係する全ての法律・条例に従い処理する必要があります。

#### 警告

本产品的废弃处理应根据所有国家的法律和规章进行。

#### 警告

本產品的廢棄處理應根據所有國家的法律和規章進行。

#### Warnung

Die Entsorgung dieses Produkts sollte gemäß allen Bestimmungen und Gesetzen des Landes erfolgen.

¡Advertencia!

Al deshacerse por completo de este producto debe seguir todas las leyes y reglamentos nacionales.

Attention

La mise au rebut ou le recyclage de ce produit sont généralement soumis à des lois et/ou directives de respect de l'environnement. Renseignez-vous auprès de l'organisme compétent.

## סילוק המוצר

אזהרה !

סילוק סופי של מוצר זה חייב להיות בהתאם להנחיות וחוקי המדינה.

عند التخلص النهائي من هذا المنتج ينبغي التعامل معه وفقا لجميع القوانين واللوائح الوطنية

경고!

이 제품은 해당 국가의 관련 법규 및 규정에 따라 폐기되어야 합니다.

Waarschuwing

De uiteindelijke verwijdering van dit product dient te geschieden in overeenstemming met alle nationale wetten en reglementen.

## Hot Swap Fan Warning (if applicable to your system)



### Warning!

The fans might still be turning when you remove the fan assembly from the chassis. Keep fingers, screwdrivers, and other objects away from the openings in the fan assembly's housing.

ファン・ホットスワップの警告

シャーシから冷却ファン装置を取り外した際、ファンがまだ回転している可能性があります。ファンの開口部に、指、ドライバー、およびその他のものを近づけないで下さい。

警告

当您从机架移除风扇装置，风扇可能仍在转动。小心不要将手指、螺丝起子和其他物品太靠近风扇

**警告**

當您從機架移除風扇裝置，風扇可能仍在轉動。小心不要將手指、螺絲起子和其他物品太靠近風扇。

**Warnung**

Die Lüfter drehen sich u. U. noch, wenn die Lüfterbaugruppe aus dem Chassis genommen wird. Halten Sie Finger, Schraubendreher und andere Gegenstände von den Öffnungen des Lüftergehäuses entfernt.

**¡Advertencia!**

Los ventiladores podran dar vuelta cuando usted quite el montaje del ventilador del chasis. Mantenga los dedos, los destornilladores y todos los objetos lejos de las aberturas del ventilador

**Attention**

Il est possible que les ventilateurs soient toujours en rotation lorsque vous retirerez le bloc ventilateur du châssis. Prenez garde à ce que doigts, tournevis et autres objets soient éloignés du logement du bloc ventilateur.

**אזהרה !**

כאשר מסירים את חלקי המאוורר מהמארז, יתכן והמאווררים עדיין עובדים. יש להרחיק למרחק בטוח את האצבעות וכלי עבודה שונים מהפתחים בתוך המאוורר

من الممكن أن المراوح لا تزال تدور عند إزالة كتلة المروحة من الهيكل يجب إبقاء الأصابع ومفكات البراغي وغيرها من الأشياء بعيدا عن الفتحات في كتلة المروحة.

**경고!**

새시로부터 팬 조립품을 제거할 때 팬은 여전히 회전하고 있을 수 있습니다. 팬 조립품 외관의 열려있는 부분들로부터 손가락 및 스크류드라이버, 다른 물체들이 가까이 하지 않도록 배치해 주십시오.

**Waarschuwing**

Het is mogelijk dat de ventilator nog draait tijdens het verwijderen van het ventilatorsamenstel uit het chassis. Houd uw vingers, schroevendraaiers en eventuele andere voorwerpen uit de buurt van de openingen in de ventilatorbehuizing.

## Power Cable and AC Adapter



### Warning!

When installing the product, use the provided or designated connection cables, power cables and AC adaptors. Using any other cables and adaptors could cause a malfunction or a fire. Electrical Appliance and Material Safety Law prohibits the use of UL or CSA -certified cables (that have UL/CSA shown on the code) for any other electrical devices than products designated by Supermicro only.

### 電源コードとACアダプター

製品を設置する場合、提供または指定された接続ケーブル、電源コードとACアダプターを使用下さい。他のケーブルやアダプタを使用すると故障や火災の原因になることがあります。電気用品安全法は、ULまたはCSA認定のケーブル(UL/CSEマークがコードに表記)をSupermicroが指定する製品以外に使用することを禁止しています。

### 警告

安裝此產品時，請使用本身提供的或指定的連接線，電源線和電源適配器。使用其它線材或適配器可能會引起故障或火災。除了Supermicro所指定的產品，電氣用品和材料安全法律規定禁止使用未經UL或CSA認證的線材。（線材上會顯示UL/CSA符號）。

### 警告

安裝此產品時，請使用本身提供的或指定的連接線，電源線和電源適配器。使用其它線材或適配器可能會引起故障或火災。除了Supermicro所指定的產品，電氣用品和材料安全法律規定禁止使用未經UL或CSA認證的線材。（線材上會顯示UL/CSA符號）。

### Warnung

Bei der Installation des Produkts, die zur Verfügung gestellten oder benannt Anschlusskabel, Stromkabel und Netzteile. Verwendung anderer Kabel und Adapter kann zu einer Fehlfunktion oder ein Brand entstehen. Elektrische Geräte und Material Safety Law verbietet die Verwendung von UL-oder CSA-zertifizierte Kabel, UL oder CSA auf der Code für alle anderen elektrischen Geräte als Produkte von Supermicro nur bezeichnet gezeigt haben.

### ¡Advertencia!

Al instalar el producto, utilice los cables de conexión previstos o designados, los cables y adaptadores de CA. La utilización de otros cables y adaptadores podría ocasionar un mal funcionamiento o un incendio. Aparatos Eléctricos y la Ley de Seguridad del Material prohíbe el uso de UL o CSA cables certificados que tienen UL o CSA se muestra en el código de otros dispositivos eléctricos que los productos designados por Supermicro solamente.

**Attention**

Lors de l'installation du produit, utilisez les bables de connection fournis ou désigné. L'utilisation d'autres cables et adaptateurs peut provoquer un dysfonctionnement ou un incendie. Appareils électroménagers et de loi sur la sécurité Matériel interdit l'utilisation de UL ou CSA câbles certifiés qui ont UL ou CSA indiqué sur le code pour tous les autres appareils électriques que les produits désignés par Supermicro seulement.

**חשמליים ומתאמי AC****אזהרה!**

כאשר מתקינים את המוצר, יש להשתמש בכבלים, ספקים ומתאמים AC אשר נועדו וסופקו לשם כך. שימוש בכל כבל או מתאם אחר יכול לגרום לתקלה או קצר חשמלי. על פי חוקי שימוש במכשירי חשמל וחוקי בטיחות, קיים איסור להשתמש בכבלים המוסמכים ב- UL או ב- CSA (כשאר מופיע עליהם קוד של UL/CSA) עבור כל מוצר חשמלי אחר שלא צוין על ידי סופרמיקרו בלבד.

عند تركيب الجهاز يجب استخدام كابلات التوصيل، والكابلات الكهربائية ومحولات التيار المتردد التي . أن استخدام أي كابلات ومحولات أخرى يتسبب في حدوث عطل أو حريق. تم توفيرها لك مع المنتج الأجهزة الكهربائية ومواد قانون السلامة يحظر استخدام الكابلات UL أو CSA معتمدة من قبل لأي أجهزة كهربائية أخرى غير المنتجات المعينة من قبل Supermicro (التي تحمل علامة UL/CSA)

**경고!**

제품을 설치할 때에는 제공되거나 지정된 연결케이블과 전원케이블, AC 어댑터를 사용해야 합니다. 그 밖의 다른 케이블들이나 어댑터들은 고장 또는 화재의 원인이 될 수 있습니다. 전기용품안전법 (Electrical Appliance and Material Safety Law)은 슈퍼마이크로에서 지정한 제품들 외에는 그 밖의 다른 전기 장치들을 위한 UL 또는 CSA에서 인증한 케이블 (전선 위에 UL/CSA가 표시)들의 사용을 금지합니다.

**Waarschuwing**

Bij het installeren van het product, gebruik de meegeleverde of aangewezen kabels, stroomkabels en adapters. Het gebruik van andere kabels en adapters kan leiden tot een storing of een brand. Elektrisch apparaat en veiligheidsinformatiebladen wet verbiedt het gebruik van UL of CSA gecertificeerde kabels die UL of CSA die op de code voor andere elektrische apparaten dan de producten die door Supermicro alleen.

**Notes**

# Appendix A

## System Specifications

### Processors

One Intel Quark SoC X1021 (CPU TDP support 2.2W), single socket FCBGA393

### BIOS

8MB SPI Flash EEPROM Board Support Package

### Memory Capacity

512 MB of Onboard ECC DDR3 800 MHz memory

Micro SDHC up to 32 GB slot

### Expansion Slots

Two Mini-PCIe

One ZigBee module socket

### Input/Output

LAN: Two 10/100Mbps RJ45 Gigabit Ethernet LAN ports

USB: Two USB 2.0 ports (1 Device & 1 Host)

Serial Port: One RS-232 via DB9

I/O connector for RS485, ADC (analog input) and DIO connectivity

### Motherboard

Super A1SQN

Dimensions: 4" x 4.1" (101.6mm x 104.14mm)

### Chassis

E100-015E, Compact Box PC

Dimensions: (WxHxD) 5.3" (135 mm) x 1.4" (36 mm) x 4.3" (109mm)

### Weight

Gross: 3 lbs (1.4 kg)

## External Power Adapter

100 to 240V AC input, to 12V DC output, 15W power adapter to supply system

## Operating Environment

Operating Temperature: 0°C ~ 50°C (32°F ~ 122°F)

Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)

Operating Relative Humidity: 8% to 90% (non-condensing)

Non-operating Relative Humidity: 5% to 95% (non-condensing)

## Regulatory Compliance

Electromagnetic Emissions: FCC Class B, EN 55022 Class B, EN 61000-3-2/-3-3, CISPR 22 Class B

Electromagnetic Immunity: EN 55024/CISPR 24, (EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11)

Safety: CSA/EN/IEC/UL 60950-1 Compliant, UL or CSA Listed (USA and Canada), CE Marking (Europe)

California Best Management Practices Regulations for Perchlorate Materials: This Perchlorate warning applies only to products containing CR (Manganese Dioxide) Lithium coin cells. "Perchlorate Material-special handling may apply. See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)" for further details.

## FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example: use only shielded interface cables when connecting to computer or peripheral devices).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

### ***FCC Radiation Exposure Statement***

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **IC Approvals**

CAN-ICES-3 (B)/ NMB-3(B)

This device complies with RSS-GEN of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-GEN d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna type: 3G dipole antenna (AOC-ANT3G-A0005)

Antenna gain: 2.1 dBi (850MHz); 2.5 dBi (900MHz); 2.0 dBi (1700MHz);  
2.8 dBi (1900MHz); 3.6 dBi (2100MHz)

Antenna type: Dual Band dipole antenna (AOC-ANTDB-A0006)

Antenna gain: 2.1 dBi (2.4GHz)

### ***IC Radiation Exposure Statement***

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

**(continued from front)**

The products sold by Supermicro are not intended for and will not be used in life support systems, medical equipment, nuclear facilities or systems, aircraft, aircraft devices, aircraft/emergency communication devices or other critical systems whose failure to perform be reasonably expected to result in significant injury or loss of life or catastrophic property damage. Accordingly, Supermicro disclaims any and all liability, and should buyer use or sell such products for use in such ultra-hazardous applications, it does so entirely at its own risk. Furthermore, buyer agrees to fully indemnify, defend and hold Supermicro harmless for and against any and all claims, demands, actions, litigation, and proceedings of any kind arising out of or related to such ultra-hazardous use or sale.