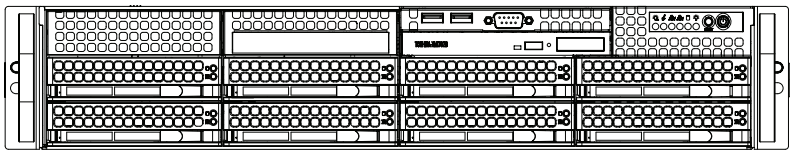
SUPERO®

SC825 CHASSIS
Series



SC825TQ-R720LPB
SC825TQ-R740LPB
SC825TQ-710LP
SC825TQ-R720UB
SC825TQ-R740UB
SC825TQ-R740WB
SC825TQ-R700LP(V)(B)
SC825TQ-R700U(V)(B)
SC825TQ-600LPB
SC825TQ-563UB
SC835TQ-600WB
SC825TQ-563LPB
SC825TQ-560LP(V)(B)
SC825TQ-560U(V)(B)
SC825TQ-R500WB

USER'S MANUAL

2.0a

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WARNING: Handling of lead solder materials used in this product may expose you to lead, a chemical known to the State of California to cause birth defects and other reproductive harm.

Manual Revision 2.0a
Release Date: December 9, 2013

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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 SC825 2U chassis. Installation and maintenance should be performed by experienced technicians only.

Supermicro's SC825 2U chassis features a unique and highly optimized design. The chassis is equipped with a 560W (single), 563W (single) 600W (single), 700W (redundant) 710W (single), 720W (redundant) or 740W (redundant) high-efficiency power supply for superb power savings. High-performance fans provide ample optimized cooling for the chassis.

This document lists compatible parts and configurations available when this document was published. Always refer to the our website for updates on supported parts and configurations.

Manual Organization

Chapter 1 Introduction

The first chapter provides a checklist of the main components included with this chassis and describes the main features of the SC825 chassis. This chapter also includes contact information.

Chapter 2 Standardized Warning Statements for AC Systems

This chapter lists warnings, precautions, and system safety. You should thoroughly familiarize yourself with this chapter for a general overview of safety precautions that should be followed before installing and servicing this chassis.

Chapter 3 Chassis Components

Refer here for details on this chassis model including the fans, bays, airflow shields, and other components.

Chapter 4 System Interface

Refer to this chapter for details on the system interface, which includes the functions and information provided by the control panel on the chassis as well as other LEDs located throughout the system.

Chapter 5 Chassis Setup and Maintenance

Refer to this chapter for detailed information on this chassis. You should follow the procedures given in this chapter when installing, removing, or reconfiguring your chassis.

Chapter 6 Rack Installation

Refer to this chapter for detailed information on chassis rack installation. You should follow the procedures given in this chapter when installing, removing or reconfiguring your chassis into a rack environment.

Appendices

This section lists compatible cables, power supply specifications, and compatible backplanes. Not all compatible backplanes may be listed. Refer to our website for the latest compatible backplane information.

Table of Contents

Chapter 1 Introduction

1-1 Overview 1-1
1-2 Shipping List 1-1
1-3 Chassis Features 1-2
CPU 1-2
Hard Drives 1-2
I/O Expansion slots 1-2
Peripheral Drives 1-2
Other Features 1-2
SCSI Chassis Models 1-2
1-4 Contacting Supermicro 1-3
1-5 Returning Merchandise for Service 1-4

Chapter 2 Standardized Warning Statements for AC Systems

2-1 About Standardized Warning Statements 2-1
Warning Definition 2-1
Installation Instructions 2-4
Circuit Breaker 2-5
Power Disconnection Warning 2-6
Equipment Installation 2-8
Restricted Area 2-9
Battery Handling 2-10
Redundant Power Supplies 2-12
Backplane Voltage 2-13
Comply with Local and National Electrical Codes 2-14
Product Disposal 2-15
Hot Swap Fan Warning 2-16
Power Cable and AC Adapter 2-18

Chapter 3 Chassis Components

3-1 Overview 3-1
3-2 Components 3-1
Chassis 3-1
Backplane 3-1
Fans 3-1
Mounting Rails 3-1
Power Supply 3-2

Air Shroud 3-2
3-3 Where to get Replacement Components 3-2

Chapter 4 System Interface

4-1 Overview 4-1
4-2 Control Panel Buttons 4-2
4-3 Control Panel LEDs 4-2
4-4 Drive Carrier LEDs 4-4
SAS/SATA Drives 4-4

Chapter 5 Chassis Setup and Maintenance

5-1 Overview 5-1
5-2 Installation and General Maintnenance 5-1
Installation 5-1
5-3 Removing the Chassis Cover 5-2
5-4 Installing Hard Drives 5-3
5-5 Installing an Optional Floppy or Fixed Hard Drive 5-6
5-6 DVD-ROM Replacement or Installation 5-7
Replacing the DVD-ROM and Front Panel 5-7
5-7 Installing the Motherboard 5-8
I/O Shield 5-8
Installing the I/O Shield 5-8
Permanent and Optional Standoffs 5-9
Add-on Card/Expansion Slot Setup 5-11
Add-on Card/Expansion Slot Setup in LP (Low Profile) Chassis 5-11
Add-on Card/Expansion Slot Setup for SC825U (Universal Output) and SC825W 5-12
5-8 Installing the Air Shroud 5-13
Checking the Server's Air Flow 5-14
Installation Complete 5-14
5-9 System Fans 5-15
5-10 Power Supply 5-17
Power Supply Failure 5-17
Replacing the Power Distributor 5-19
Replacing or Installing the Front Port Panel 5-20
5-11 Optional Front Bezel 5-21

Chapter 6 Rack Installation

6-1 Overview 6-1
6-2 Unpacking the System 6-1
6-3 Preparing for Setup 6-1

Choosing a Setup Location 6-1
Rack Precautions 6-2
General Server Precautions 6-2
Rack Mounting Considerations 6-3
Ambient Operating Temperature 6-3
Reduced Airflow 6-3
Mechanical Loading 6-3
Circuit Overloading 6-3
Reliable Ground 6-3
6-4 Rack Mounting Instructions 6-4
Separating the Sections of the Rack Rails 6-4
Installing the Inner Rail Extension 6-5
Outer Rack Rails 6-6

Appendix A SC825 Chassis Cables

Appendix B SC825 Power Supply Specifications

Appendix C BPN-SAS-825TQ Backplane Specifications

Chapter 1

Introduction

1-1 Overview

Supermicro's SC825 2U chassis features a unique and highly-optimized design. The chassis is equipped with high efficiency power supply.

1-2 Shipping List

Please visit the following link for the latest shipping lists and part numbers for your particular chassis model www.supermicro.com

SC825 Chassis			
Model	**HDD**	**I/O Slots**	**Power Supply**
SC825TQ-R740WB	8x SAS / SATA	4x FF 3x LP	740W (Platnum Level Redundant)
SC825TQ-R740UB	8x SAS / SATA	4x FH 3x LP	740W (Platnum Level Redundant)
SC825TQ-R740LPB	8x SAS / SATA	7x LF	740W (Platnum Level Redundant)
SC825TQ-720LPB	8x SAS/SATA	7x LF	720W (Gold Level)
SC825TQ-720UB	8x SAS/SATA	4x FF 3x LP	720W (Gold Level)
SC825TQ-710LP	8x SAS/ SATA	7x LP, FL	710W
SC825TQ-R700UV / SC825TQ-R700UB	8x SAS/SATA	4x FF 3x LP	700W Redundant
SC825TQ-R700LPV / SC825TQ-R700LPB	8x SAS/SATA	7x LP	700W Redundant
SC825TQ-600WB	8x SAS/SATA	8x SAS/SATA	600W (Platinum Level)
SC825TQ-600LPB	8x SAS/SATA	7x LF	600W
SC825TQ-563LPB / SC825TQ-563UB	8x SAS/SATA	7x LF / 3x FF, 3 LP, 1 UIO	560W
SC825TQ-560UV / SC825TQ-560UB	8x SAS/SATA	4x FF 3x LP	560W
SC825TQ-560LPV / SC825TQ-560LPB	8x SAS/SATA	7x LP	560W
SC825TQ-R500WB	8x SAS/SATA	4x FF 3x LP	500W (Platinum Level Redundant)

Legend: FF: Full-height, full length, FH: Full-height, half length. LF: Low-profile, full-length. LP: Low-profile.

1-3 Chassis Features

The SC825 2U, high-performance chassis includes the following features:

CPU

The SC825 chassis supports single or dual processors. Please refer to the motherboard specifications pages on our web site for updates on supported processors.

Hard Drives

The SC825 chassis features eigh slots for SAS/SATA drives. These drives are hot-swappable. Once set up correctly, these drives can be removed without powering down the server. In addition, these drives support SES2 (SAS/SATA).

I/O Expansion slots

Each SC825 chassis model includes seven low-profile I/O expansion slots.

Peripheral Drives

Each SC825 chassis supports one slim DVD-ROM drive (included) and one slim floppy drive (optional). These drives allow you to quickly install or save data.

Other Features

Other onboard features are included to promote system health. These include various three cooling fans, a convenient power switch, reset button, and five LED indicators.

1-4 Contacting Supermicro

Headquarters

Address:	Super Micro Computer, Inc.
	980 Rock Ave.
	San Jose, CA 95131 U.S.A.
Tel:	+1 (408) 503-8000
Fax:	+1 (408) 503-8008
Email:	marketing@supermicro.com (General Information)
	support@supermicro.com (Technical Support)
Website:	www.supermicro.com

Europe

Address:	Super Micro Computer B.V.
	Het Sterrenbeeld 28, 5215 ML
	's-Hertogenbosch, The Netherlands
Tel:	+31 (0) 73-6400390
Fax:	+31 (0) 73-6416525
Email:	sales@supermicro.nl (General Information)
	support@supermicro.nl (Technical Support)
	rma@supermicro.nl (Customer Support)
Website:	www.supermicro.nl

Asia-Pacific

Address:	Super Micro Computer, Inc.
	3F, No. 150, Jian 1st Rd.
	Zhonghe Dist., New Taipei City 235
	Taiwan (R.O.C)
Tel:	+886-(2) 8226-3990
Fax:	+886-(2) 8226-3992
Email:	support@supermicro.com.tw
Website:	www.supermicro.com.tw

1-5 Returning Merchandise for Service

A receipt or copy of your invoice marked with the date of purchase is required before any warranty service will be rendered. You can obtain service by calling your vendor for a Returned Merchandise Authorization (RMA) number. When returning to the manufacturer, the RMA number should be prominently displayed on the outside of the shipping carton, and mailed prepaid or hand-carried. Shipping and handling charges will be applied for all orders that must be mailed when service is complete.

For faster service, RMA authorizations may be requested online (http://www.supermicro.com/support/rma/).

Whenever possible, repack the chassis in the original Supermicro carton, using the original packaging material. If these are no longer available, be sure to pack the chassis securely, using packaging material to surround the chassis so that it does not shift within the carton and become damaged during shipping.

This warranty only covers normal consumer use and does not cover damages incurred in shipping or from failure due to the alteration, misuse, abuse or improper maintenance of products.

During the warranty period, contact your distributor first for any product problems.

Chapter 2

Standardized Warning Statements for AC Systems

2-1 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.

These warnings may also be found on our web site at 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。

此警告符号代表危险。

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 במלואו לפני התקנת או הגדרת הרכיבים במארזי 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.

اقر 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: 20A, 250V

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 electrische installatie. Controleer of het beveiligde aparaat 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.

電源切断の警告

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、シャーシー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断され、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 chassis pour installer ou enlever des composants de systéme.

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 للهيكل لتثبيت أو إزالة مكونات الجهاز

경고!

시스템에 부품들을 장착하거나 제거하기 위해서는 섀시 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 لتركيب 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 للالأمان

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
电池更换不当会有爆炸危险。请只使用同类电池或制造商推荐的功能相当的电池更换原有电池。请按制造商的说明处理废旧电池。

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 فعليك 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 ontploffingsgevaar 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 trom 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 !
ליחדה 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

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 أوالطاقة الموجودة على اللوحة
عندما يكون النظام يعمل كن حذرا عند خدمة هذا الجهاز

경고!

시스템이 동작 중일 때 후면판 (Backplane)에는 위험한 전압이나 에너지가 발생합니다. 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 instalacion 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.

תיאום חוקי החשמל הארצי

אזהרה !
התקנת הציוד חייבת להיות תואמת לחוקי החשמל המקומיים והארציים.

تركيب المعدات الكهربائية يجب أن يمتثل 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

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 ell montaje del ventilador del chasis. Mandtenga 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 והמאוררים 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!

섀시로부터 팬 조립품을 제거할 때 팬은 여전히 회전하고 있을 수 있습니다. 팬 조림품 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

安装此产品时,请使用本身提供的或指定的连接线,电源线和电源适配器.使用其它线材或适配器可能会引起故障或火灾。除了Supermicro所指定的产品,电气用品和材料安全法律规定禁止使用未经UL或CSA认证的线材。(线材上会显示UL/CSA符号)。

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 CSA أو UL 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, AC어댑터를 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 UL또는 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

Chapter 3

Chassis Components

3-1 Overview

This chapter describes the most common components included with your chassis. Some components listed may not be included or may not be compatible with your particular chassis model. For more information, see the installation instructions detailed later in this manual.

3-2 Components

Chassis

The SC825 chassis includes eight hard drive bays. Most chassis models come with a DVD-ROM. Hard drives must be purchased separately. For the latest shipping lists, visit our website at: www.supermicro.com.

This chassis supports a 2U backplane, three fans and one or two power supplies. SC825 models come in silver or black.

Backplane

Each SC825 chassis comes with a 2U SAS/SATA backplane. For more information regarding compatible backplanes, view the appendices found at the end of this manual. In addition, visit our website for the latest information at www.supermicro.com.

Fans

The SC825 chassis supports three system fans. System fans for SC825 chassis are powered from the motherboard. These fans are 2U high and are powered by 3-pin connectors.

Mounting Rails

The SC825 can be placed in a rack for secure storage and use. To setup your rack, follow the step-by-step instructions included in this manual.

Power Supply

Each SC825 chassis model includes a high-efficiency power supply rated at 500W (redundant), 560W (single), 563W (single) 600W (single), 700W (redundant) 710W (single), 720W (redundant) or 740W (Redundant). In the unlikely event your power supply fails, replacement is simple and can be accomplished without tools.

Air Shroud

Air shrouds are shields, usually plastic, which conduct the airflow directly to where it is needed. Always use the air shroud included with your chassis.

3-3 Where to get Replacement Components

Although not frequently, you may need replacement parts for your system. To ensure the highest level of professional service and technical support, we strongly recommend purchasing exclusively from our Supermicro Authorized Distributors/ System Integrators/Resellers. A list of Supermicro Authorized Distributors/System Integrators/Reseller can be found at: www.supermicro.com. Click the Where to Buy link.

Chapter 4

System Interface

4-1 Overview

There are LEDs on the control panel and the drive carriers to keep you constantly informed of the over-all status of the system, as well as the activity and health of specific components. Most SC825 models have two buttons on the chassis control panel: a reset button and an on/off switch. This chapter explains the meanings of all LED indicators and the appropriate response you may need to take.

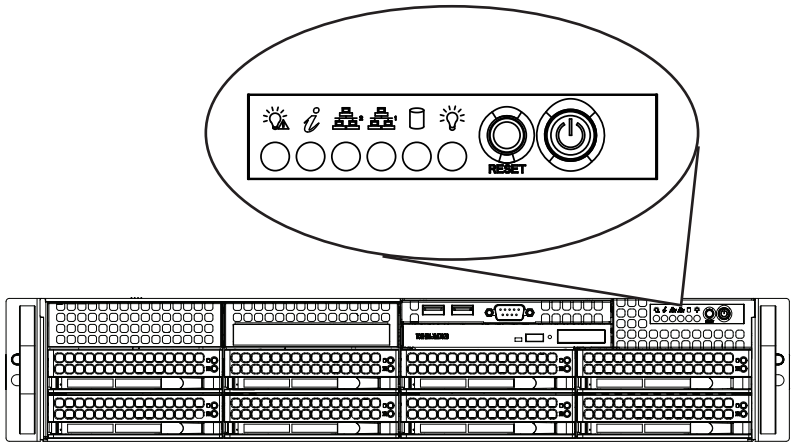
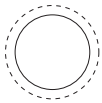


Figure 4-1: Control Panel LEDs

4-2 Control Panel Buttons

There are two push-buttons located on the front of the chassis. These are (in order from left to right) a reset button and a power on/off button.



- **Reset:** The reset button is used to reboot the system.

- **Power:** The main power switch is used to apply or remove power from the power supply to the server system. Turning off system power with this button removes the main power but keeps standby power supplied to the system. Therefore, you must unplug system before servicing.

4-3 Control Panel LEDs

The control panel located on the front of the SC825 chassis has five LEDs. These LEDs provide you with critical information related to different parts of the system. This section explains what each LED indicates when illuminated and any corrective action you may need to take.

- **Power Failure:** When this LED flashes, it indicates a power failure in the power supply.

- **Information LED:** See the following table for the status shown by this LED.

Information LED	
Status	**Description**
Continously on and red	An overheat ocondition has occured. (This may be caused by cable congestion.)
Blinking red (1 Hz)	Fan failure: check for an inoperative fan.
Blinking red (0.25 Hz)	Power failure: check for an inoperative power supply.
Solid blue	Local UID has been activated. Use this function to locate the server in a rack environment.
Blinking blue (300 msec)	Remote UID has been activated. Use this function to locate the server from a remote location.

- **NIC2:** Indicates network activity on GLAN2 when flashing.

- **NIC1:** Indicates network activity on GLAN1 when flashing.

- **HDD:** Indicates IDE channel activity in the SAS/SATA drive, SCSI drive, and/or DVD-ROM drive activity when flashing.

- **Power:** Indicates power is being supplied to the system's power supply units. This LED should normally be illuminated when the system is operating.

4-4 Drive Carrier LEDs

Your chassis uses SAS/SATA drives.

SAS/SATA Drives

Each SAS/SATA drive carrier has two LEDs.

Green: Each Serial ATA drive carrier has a green LED. When illuminated, this green LED (on the front of the SATA drive carrier) indicates drive activity. A connection to the SATA backplane enables this LED to blink on and off when that particular drive is being accessed.

Red: The red LED indicates a SAS/SATA drive failure. If one of the SAS/SATA drives fail, you should be notified by your system management software.

Chapter 5

Chassis Setup and Maintenance

5-1 Overview

This chapter covers the steps required to install components and perform maintenance on the chassis. The only tool you will need to install components and perform maintenance is a Phillips screwdriver. Print this page to use as a reference while setting up your chassis.

5-2 Installation and General Maintnenance

Installation

- Removing the Chassis Cover
- Installing Hard Drives
- Installing an Optional Fixed Hard Drive
- DVD ROM Replacement or Installation
- Installing the Motherboard (includes I/O Slot Setup)
- Installing the Air Shroud

General Maintenance

- System Fans
- Replacing the Power Supply
- Optional Front Bezel

Review the warnings and precautions listed in the manual before setting up or servicing this chassis. These include information in Chapter 2: Standardized Warning Statements for and the warning/precautions listed in the setup instructions.

5-3 Removing the Chassis Cover

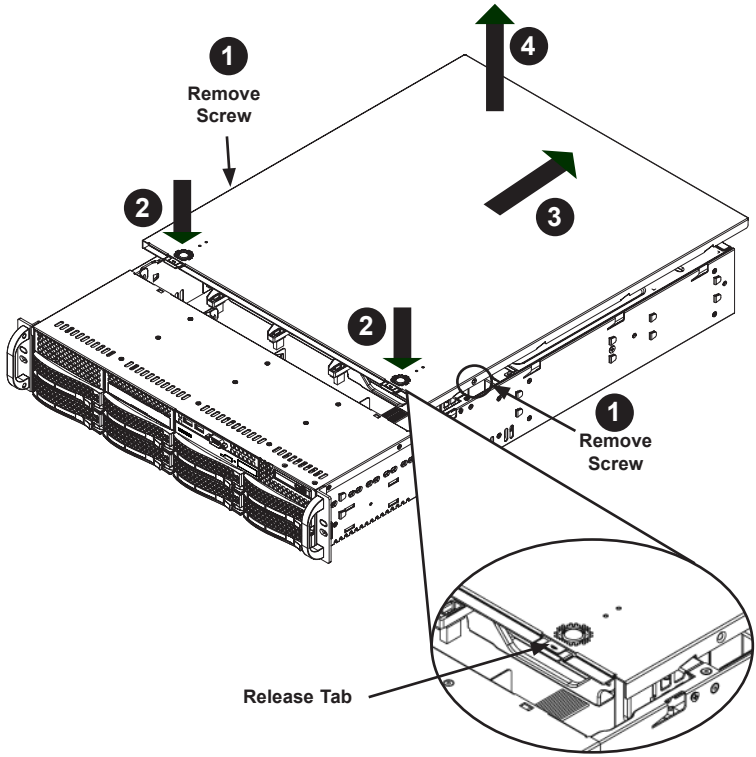


Figure 5-1: Removing the Chassis Cover

Removing the Chassis Cover

1. Disconnect the power supply, lay the chassis on a flat surface.
2. Remove the two screws on each side of the cover, which secure the cover to the chassis.
3. Press the release tabs to remove the cover from the locked position. Press both tabs at the same time.
4. Once the top cover is released from the locked position, slide the cover toward the rear of the chassis.
5. Lift the cover off the chassis.

Warning: Except for short periods of time, do NOT operate the server without the cover in place. The chassis cover must be in place to allow proper airflow and prevent overheating.

5-4 Installing Hard Drives

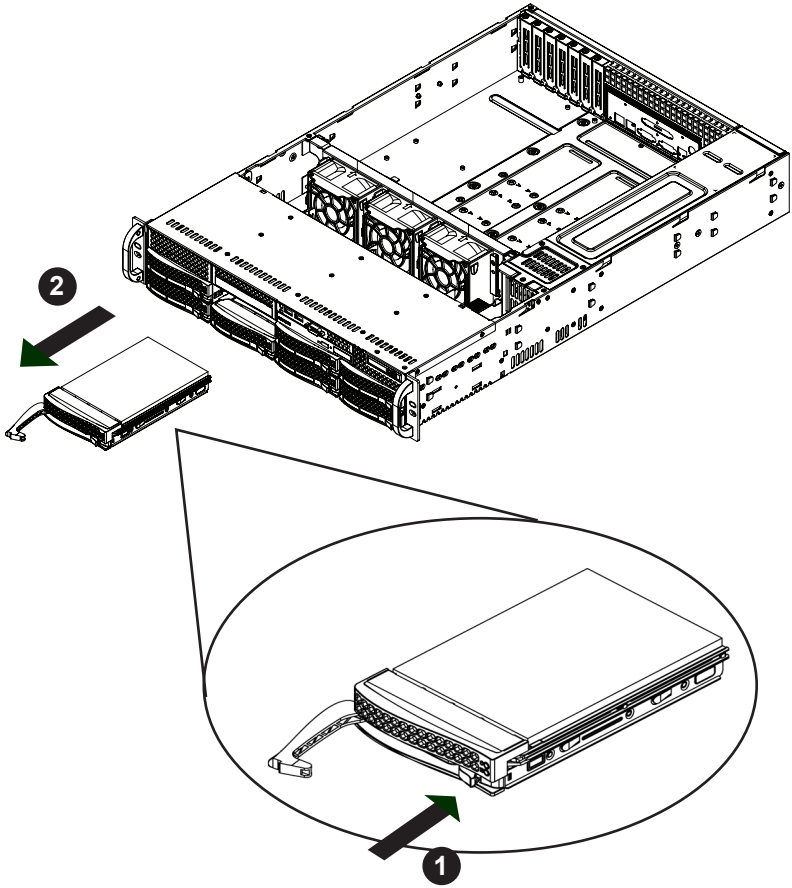


Figure 5-2: Removing Hard Drive

The SC825 features hot-swappable hard drives which can be removed without powering down the system.

Removing Hard Drive Trays from the Chassis

1. Press the release button on the drive carrier. This extends the drive carrier handle.

2. Use the handle to pull the drive out of the chassis.

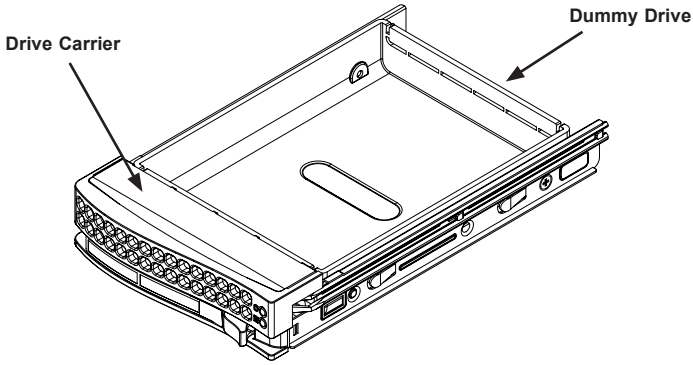


Figure 5-3: Chassis Drive Carrier

The drives are mounted in drive carriers to simplify their installation and removal from the chassis. These carriers also help promote proper airflow for the drive bays.

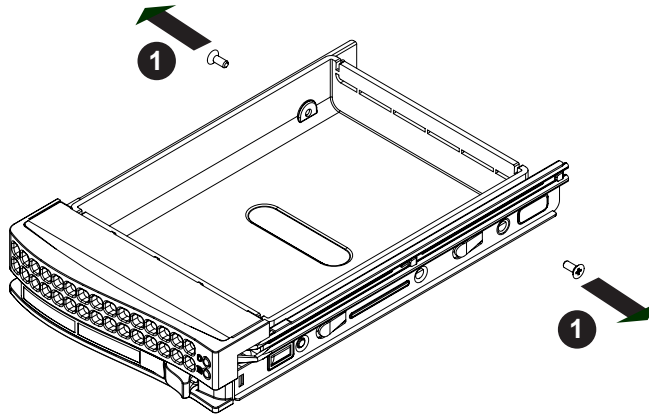


Figure 5-4: Removing Dummy Drive from Carrier

Installing a Hard Drive to the Hard Drive Carrier

1. Remove the screws securing the dummy drive to the carrier.

2. Remove the dummy drive from the carrier.

Warning: Except for short periods of time (swapping hard drives), do not operate the server with the hard drives removed from the bays.

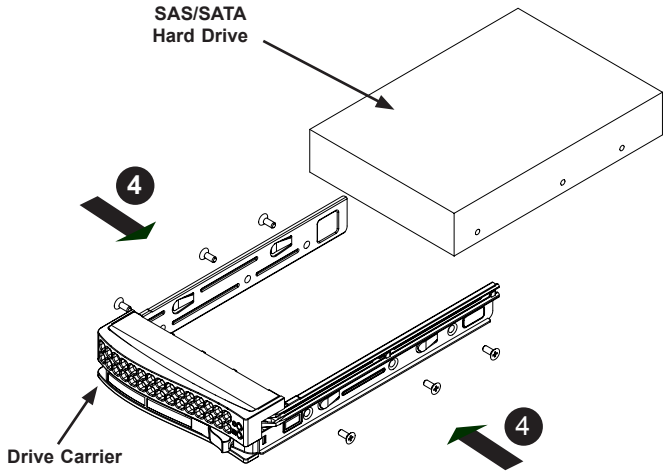


Figure 5-5: Removing the Hard Drive

3. Install a new drive into the carrier with the printed circuit board side facing down so that the mounting holes align with those in the carrier.

4. Secure the hard drive by tightening all six screws.

5. Replace the drive carrier into the chassis bay, making sure that the drive carrier handle is completely closed.

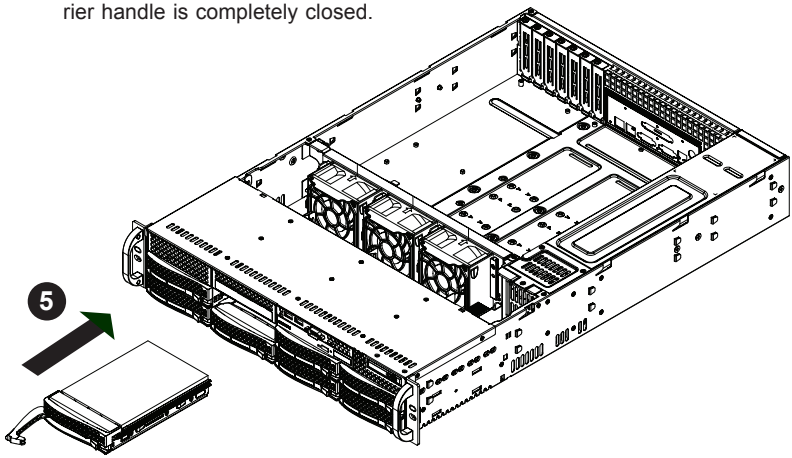


Figure 5-6: Installing the Hard Drive

Warning! Enterprise level hard disk drives are recommended for use in Supermicro chassis and servers.

5-5 Installing an Optional Fixed Hard Drive

The SC825 chassis models include two open slots for optional hard disk drives. To utilize these slots, the dummy drive and the slot cover must be removed.

Removing the Dummy Drive or Hard Disk Drive

1. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

2. Press the release tab.

3. Push against the back of the dummy drive, sliding the dummy drive and slot cover forward, out through the front of the chassis.

4. Insert the drive into rear of the open slot and connect the wiring.

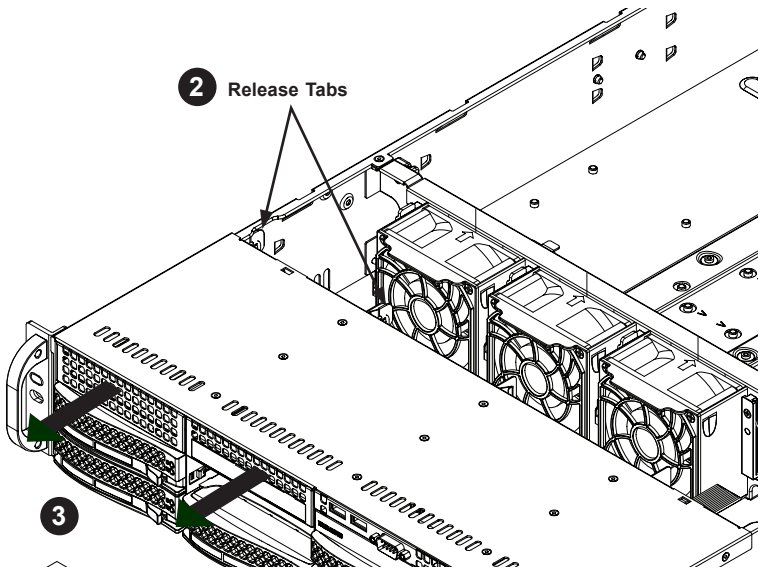


Figure 5-7: Removing the Dummy Drive and Slot Cover

5-6 DVD-ROM Replacement or Installation

Most SC825 chassis models include a DVD-ROM which is usually pre-installed.

Installing or Replacing a DVD-ROM Drive

1. Power down the system and if necessary, remove the server from the rack.
2. Remove the chassis cover.
3. Unplug the drives power and data cables from the motherboard and/or backplane.
4. **If you are adding a new DVD-ROM drive:** Remove the mini-bezel (grate) from the drive bay The bezel can be removed by pulling out the hard drive beneath the DVD-ROM drive bay, then pulling the mini-bezel forward.
   If you are replacing a drive: Locate the locking tab at the rear (left hand side when viewed from the front) of the DVD-ROM drive. Push the tab toward the drive and push the drive unit out the front of the chassis.
5. Insert the new drive unit in the slot until the tab locks in place.
6. Reconnect the data and power cables.
7. Replace the chassis cover (replace the server in the rack, if necessary) and power up the system.

Replacing the DVD-ROM and Front Panel

SC825 chassis models include a slim DVD-ROM, and front port panel. Use the instructions in this section in the unlikely event that you must replace any of these components.

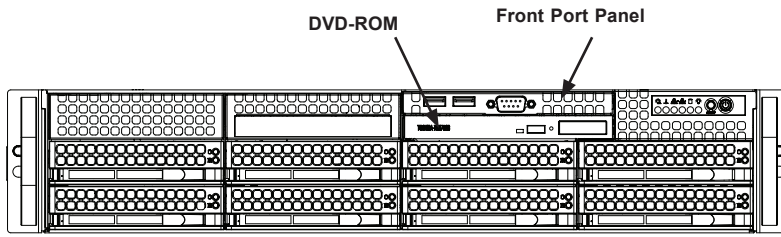


Figure 5-8: Install the DVD-ROM and Front Panel

5-7 Installing the Motherboard

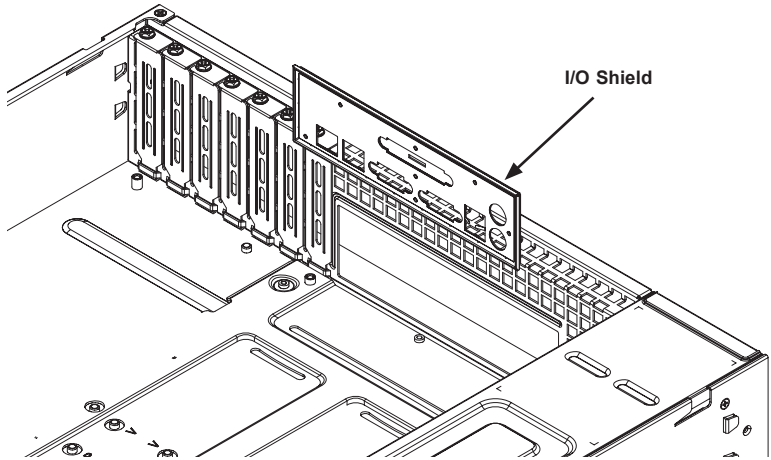


Figure 5-9: I/O Shield Placement

I/O Shield

The I/O shield holds the motherboard ports in place. Install the I/O shield before you install the motherboard.

Installing the I/O Shield

Installing the I/O Shield

1. Review the documentation that came with your motherboard. Become familiar with component placement, requirements, and precautions.

2. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

3. With the illustrations facing the outside of the chassis, place the shield into the space provided.

4. Once installed, the motherboard will hold the I/O shield in place.

Permanent and Optional Standoffs

Standoffs prevent short circuits by securing space between the motherboard and the chassis surface. The SC825 chassis includes permanent standoffs in locations used by most motherboards. These standoffs accept the rounded Phillips head screws included in the SC825 accessories packaging.

Some motherboards require additional screws for heatsinks, general components and/or non-standard security. Optional standoffs are included to these motherboards. To use an optional standoff, you must place the hexagonal screw through the bottom the chassis and secure the screw with the hexagon nut (rounded side up).

Installing the Motherboard

1. Review the documentation that came with your motherboard. Become familiar with component placement, requirements, precautions, and cable connections.

1. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

2. As required by your motherboard, install standoffs in any areas that do not have a permanent standoff. To do this:
   A. Place a hexagonal standoff screw through the bottom the chassis.
   B. Secure the screw with the hexagon nut (rounded side up).

3. Lay the motherboard on the chassis aligning the permanent and optional standoffs

4. Secure the motherboard to the chassis using the rounded, Phillips head screws. Do not exceed eight pounds of torque when tightening down the motherboard.

5. Secure the CPU(s), heatsinks, and other components to the motherboard as described in the motherboard documentation.

6. Connect the cables between the motherboard, backplane, chassis, front panel, and power supply, as needed. Also, the fans may be temporarily removed to allow access to the backplane ports.

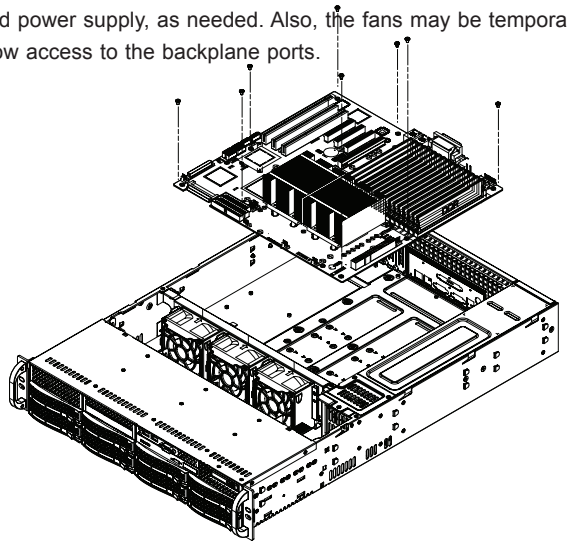


Figure 5-10: Chassis Standoffs

Expansion Card PCI Slot Setup

SC825: chassis include PCI slots for expansion cards. The number of cards you can use depends on your chassis model.

SC825 LP: Provides seven low-profile PCI slots.

SC825U: Provides three full-height/full-length and three low-profile PCI slots through a user defined universal expansion card.

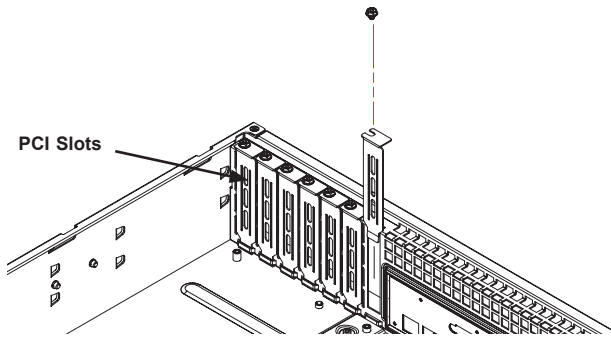


Figure 5-11: SC825 LP model

PCI Slot Setup in LP (Low-Profile) Chassis

SC825 chassis include PCI slots for expansion cards. The number of cards you can use depends on your chassis model and motherboard model.

Installing Expansion cards in SC825LP (Low-Profile) Chassis

1. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

2. Remove the screw holding the cover in place for each low-profile PCI slot you want to use. Keep this screw for later use.

3. Connect the expansion cards to the mother board.

4. Secure each card to the chassis using the card's L bracket and the screw previously removed.

PCI Slot Setup for SC825U (Universal Output) and SC825W

SC825U and SC825W chassis accepts a slightly smaller "L" shaped motherboard to allow for a universal expansion card. This universal output card allows the systems to accept SAS, SCSI, IB, Ethernet, and other types of connections.

SC825U/SC825W chassis are setup similar to 825RC chassis with two differences:

A. The SC825U/SC825W chassis accepts three full-length, full-height expansion cards instead of four. The fourth slot is used for the UI/O card (SC825U) or a 4x full-height, full-length card (SC825W).

B. The SC825U/SC825W chassis includes a bracket that extends from the fan row to the back of the chassis. This bracket provides support for the riser card.

Installing a Universal Input/Output Card in the SC825U chassis:

1. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

2. Connect the universal input/output to the motherboard using the slots provided on the motherboard and the back panel.

3. Secure the card to the chassis using the four screws provided with the chassis packaging.

The SC825U chassis accepts 3 full-height/full-length slots and 3 low profile slots.

Installing Add-on Cards in the SC825U and SC825W Chassis

1. Disconnect the power supply, lay the chassis on a flat surface, and open the chassis cover.

2. If you are using a universal input/output card, make sure it is installed before continuing (applies only to the SC825U).

3. If you installing low profile expansion cards, remove the chassis air shroud.

4. Secure the card to the chassis using the four screws provided with the chassis packaging.

5-8 Installing the Air Shroud

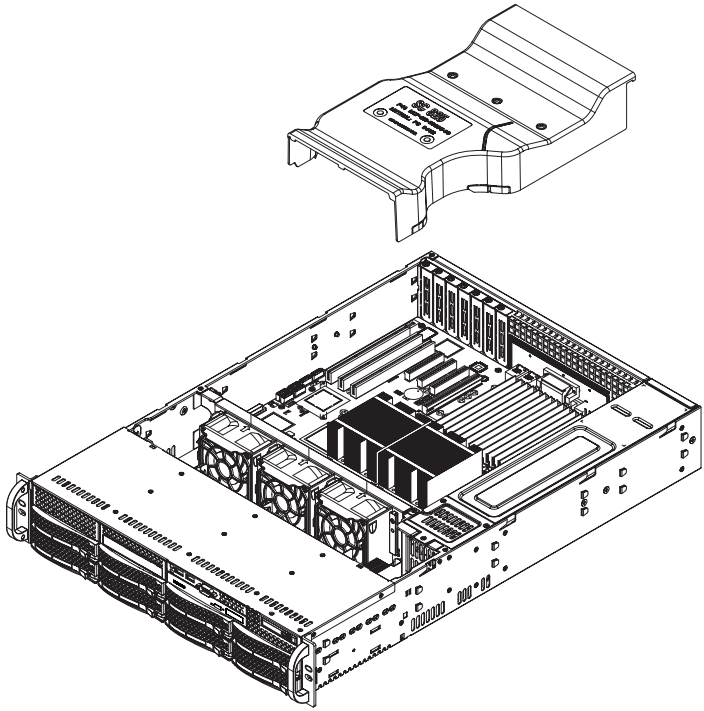


Figure 5-12: Air Shroud for SC825LP Chassis

Air shrouds concentrate airflow to maximize fan efficiency. The SC825 chassis air shroud does not require screws to set up.

Installing the Air Shroud

1. Confirm that your air shroud matches your chassis model. Each shroud is labeled SC825LP or SC825U,

2. Place air shroud in the chassis. The air shroud fits behind the two fans closest to the power supply.

Note that if a 16 DIMM (13.68" x 13") motherboard is used, it is necessary to use the optional MCP-310-82502-0N air shroud. For ordering information, visit the Supermicro website at www.supermicro.com and click on the Where to Buy link.

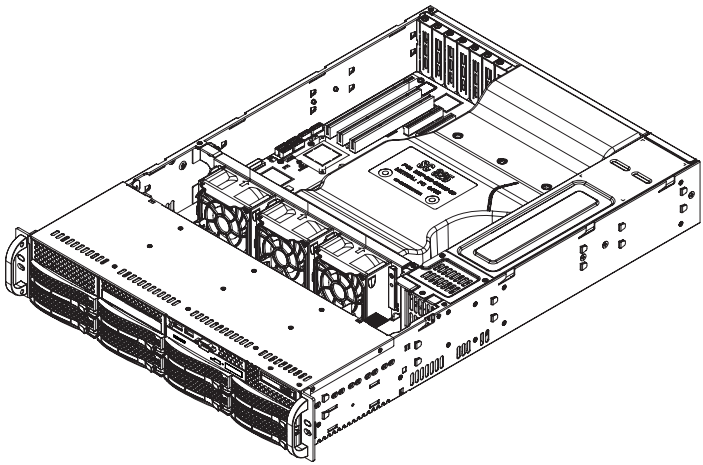


Figure 5-13: Air Shroud in Place in the SC825LP Chassis

Checking the Server's Airflow

Checking the Airflow

1. Make sure there are no objects to obstruct airflow in and out of the server. In addition, if you are using a front bezel, make sure the bezel's filter is replaced periodically.

2. Do not operate the server without drives or drive trays in the drive bays. Use only recommended server parts.

3. Make sure no wires or foreign objects obstruct air flow through the chassis. Pull all excess cabling out of the airflow path or use shorter cables.

The control panel LEDs inform you of system status. See “Chapter 3: System Interface” for details on the LEDs and the control panel buttons.

Installation Complete

In most cases, the chassis power supply and fans are pre-installed. If you need to install fans continue to the Systems Fan section of this chapter. If the chassis will be installed into a rack, continue to the next chapter for rack installation instructions.

5-9 System Fans

Three heavy duty fans provide cooling for the chassis. These fans circulate air through the chassis as a means of lowering the chassis internal temperature.

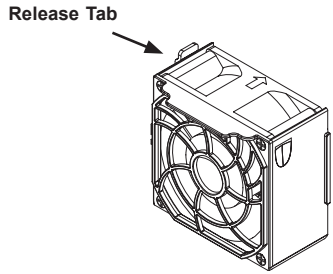


Figure 5-14: System Fan

Replacing a System Fan

1. If necessary, open the chassis while the power is running to determine which fan has failed. (Never run the server for an extended period of time with the chassis open.)

2. Turn off the power to the system and unplug the system from the outlet.

3. Remove the failed fan's power cord from the serverboard.

4. Press the fan release tab to lift the failed fan from the chassis and pull it completely from the chassis.

5. Place the new fan into the vacant space in the housing while making sure the arrows on the top of the fan (indicating air direction) point in the same direction as the arrows on the other fans.

6. Power up the system and check that the fan is working properly before replacing the chassis cover.

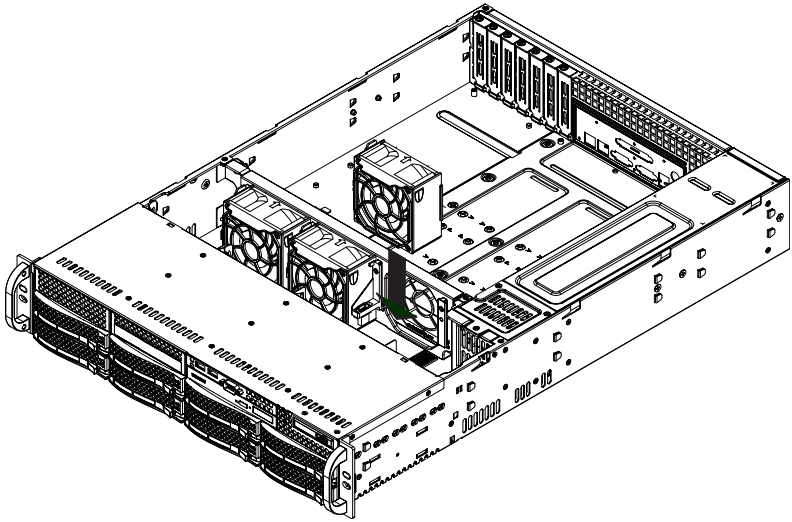


Figure 5-15: Placing a System Fan

5-10 Power Supply

Depending on your chassis model, the SC825 Chassis has a 560, 600, 700, 710, 720 or 740 Watt power supply. This power supply is auto-switching capable. This enables it to automatically sense and operate at a 100v to 240v input voltage. An amber light will be illuminated on the power supply when the power is off. An illuminated green light indicates that the power supply is operating.

Power Supply Failure

SC825 chassis models have either one or two (redundant) power supplies. In the unlikely event that the power supply unit fails, if you have a single power supply, the system will shut down and you will need to replace the power supply unit. SC825 chassis models which include a redundant power supply, will allow for the power supply to be replaced without powering down the system.

Replacement units can be ordered directly from Supermicro (see the contact information in the Preface).

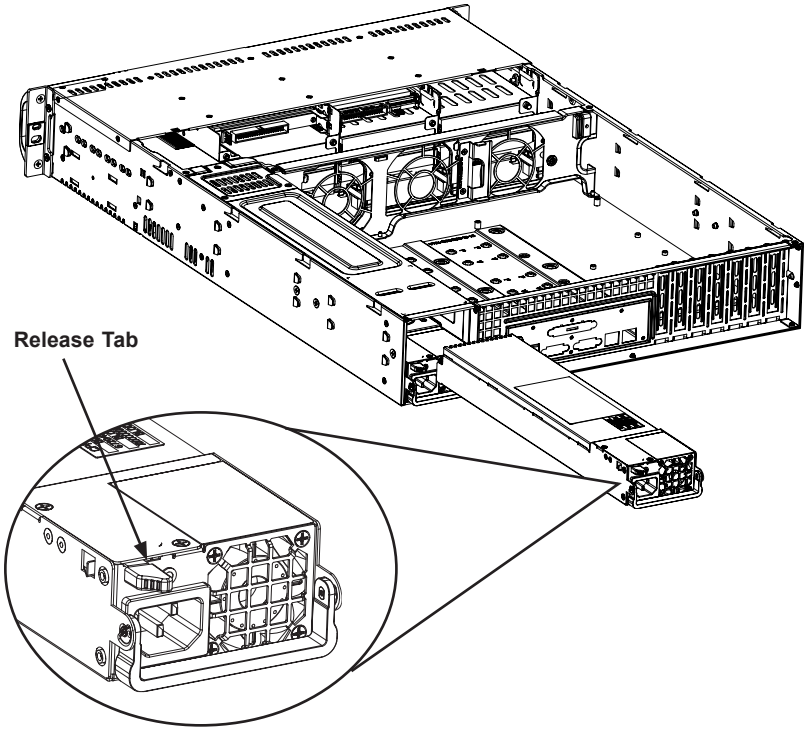


Figure 5-16: Removing the Power Supply

Replacing the Power Supply

1. If your chassis includes a redundant power supply (at least two power modules), you can leave the server running and remove only one power supply. If your server has only one power supply, you must power-down the server and unplug the power cord before replacing the power supply.
2. Push the release tab (on the back of the power supply) as illustrated.
3. Pull the power supply out using the handle provided.
4. Replace the failed power module with the same model.
5. Push the new power supply module into the power bay until you hear a click.
6. Plug the AC power cord back into the module and power up the server.

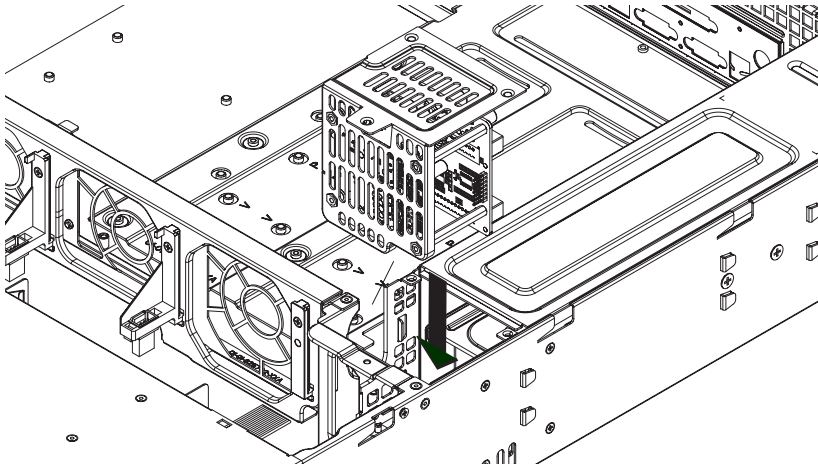


Figure 5-17: Replacing the Power Distributor

Replacing the Power Distributor

Redundant server chassis that are 2U or greater require a power distributor. The power distributor provides failover and power supply redundancy. In the unlikely event you must replace the power distributor, do following

1. Power down the server and remove the plug from the wall socket or power strip.
2. Remove all cable connections to the power supply from the motherboard, backplane, and other components. Also, remove both power supplies.
3. Locate the power distributor between the power supply and the fan row.
4. Remove the three screws securing the power supply.
5. Gently pull the power distributor from the chassis. Gently guide all the cables through the power distributor housing.
6. Slide the new power distributor module into the power distributor housing. Make that you slide the cables through the bottom of the housing.
7. Reconnect all the power cables, replace the power supply, and insert the plug into the wall.

Replacing or Installing the Front Port Panel

Replace or Install the Front Port Panel

1. Power down and unplug the system

2. Remove the chassis cover.

3. Disconnect the power and data cables from the front port panel to other chassis components including the motherboard and backplane.

4. Remove the old port panel by depressing the release tab, then pulling the unit out of the chassis.

5. Insert the new front port panel unit in the slot until the tab locks into place.

6. Connect the data and power cables to the backplane and motherboard.

For more information, see the manual for your backplane in the appendix.

5-11 Optional Front Bezel

The SC825 chassis supports an optional full-face locking front bezel for added security. The front bezel is not included with the SC825 chassis, but can be ordered seperately by visiting the Supermicro website at www.supermicro.com, clicking on the Where to Buy link and referencing part number MCP-210-82503-0B.

Notes

Chapter 6

Rack Installation

6-1 Overview

This chapter provides a quick setup checklist to get your chassis up and running. Following these steps in the order given should enable you to have the system operational within a minimum amount of time.

6-2 Unpacking the System

You should inspect the box the chassis was shipped in and note if it was damaged in any way. If the chassis itself shows damage you should file a damage claim with the carrier who delivered it.

Decide on a suitable location for the rack unit that will hold your chassis. It should be situated in a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. You will also need it placed near a grounded power outlet. Be sure to read the Rack and Server Precautions in the next section.

6-3 Preparing for Setup

The box your chassis was shipped in should include two sets of rail assemblies, two rail mounting brackets and the mounting screws you will need to install the system into the rack. Please read this section in its entirety before you begin the installation procedure outlined in the sections that follow.

Choosing a Setup Location

- Leave enough clearance in front of the rack to enable you to open the front door completely (~25 inches).
- Leave approximately 30 inches of clearance in the back of the rack to allow for sufficient airflow and ease in servicing.
- This product is for installation only in a Restricted Access Location (dedicated equipment rooms, service closets and the like).

Rack Precautions

- Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them.
- In single rack installation, stabilizers should be attached to the rack.
- In multiple rack installations, the racks should be coupled together.
- Always make sure the rack is stable before extending a component from the rack.
- You should extend only one component at a time - extending two or more simultaneously may cause the rack to become unstable.

General Server Precautions

- Review the electrical and general safety precautions that came with the components you are adding to your chassis.
- Determine the placement of each component in the rack *before* you install the rails.
- Install the heaviest server components on the bottom of the rack first, and then work up.
- Use a regulating uninterruptible power supply (UPS) to protect the server from power surges, voltage spikes and to keep your system operating in case of a power failure.
- Allow the hot plug hard drives and power supply modules to cool before touching them.
- Always keep the rack's front door and all panels and components on the servers closed when not servicing to maintain proper cooling.

Rack Mounting Considerations

Ambient Operating Temperature

If installed in a closed or multi-unit rack assembly, the ambient operating temperature of the rack environment may be greater than the ambient temperature of the room. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (Tmra).

Reduced Airflow

Equipment should be mounted into a rack so that the amount of airflow required for safe operation is not compromised.

Mechanical Loading

Equipment should be mounted into a rack so that a hazardous condition does not arise due to uneven mechanical loading.

Circuit Overloading

Consideration should be given to the connection of the equipment to the power supply circuitry and the effect that any possible overloading of circuits might have on overcurrent protection and power supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Ground

A reliable ground must be maintained at all times. To ensure this, the rack itself should be grounded. Particular attention should be given to power supply connections other than the direct connections to the branch circuit (i.e. the use of power strips, etc.).

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

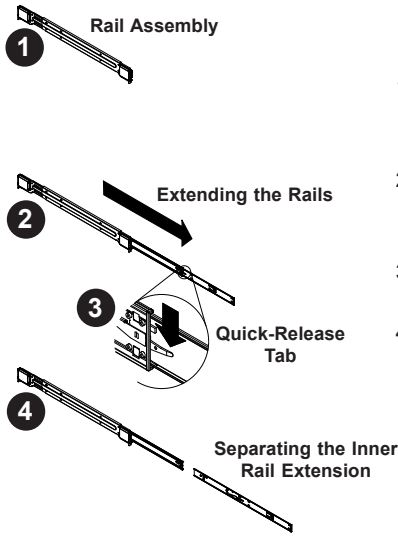
6-4 Rack Mounting Instructions

This section provides information on installing the SC825 chassis into a rack unit with the quick-release rails provided. There are a variety of rack units on the market, which may mean the assembly procedure will differ slightly. You should also refer to the installation instructions that came with the rack unit you are using.

NOTE: This rail will fit a rack between 26" and 33.5" deep.

Separating the Sections of the Rack Rails

The chassis package includes two rail assemblies in the rack mounting kit. Each assembly consists of two sections: an inner fixed chassis rail that secures directly to the server chassis and an outer fixed rack rail that secures directly to the rack itself.



Separating the Inner and Outer Rails

1. Locate the rail assembly in the chassis packaging.
2. Extend the rail assembly by pulling it outward.
3. Press the quick-release tab.
4. Separate the inner rail extension from the outer rail assembly.

Figure 6-1: Separating the Rack Rails

Warning: do not pick up the server by the front handles. They are designed to pull the system from a rack only.

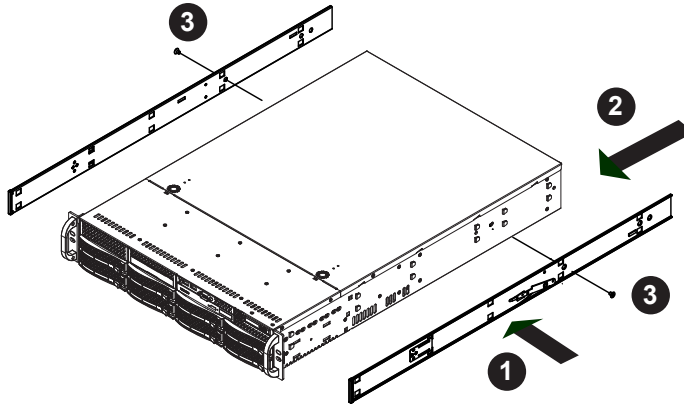


Figure 6-2: Installing the Inner Rail Extensions

Installing the Inner Rail Extension

The SC825 chassis includes a set of inner rails in two sections: inner rails and inner rail extensions. The inner rails are pre-attached to the chassis, and do not interfere with normal use of the chassis if you decide not to use a server rack. The inner rail extension is attached to the inner rail to mount the chassis in the rack.

Installing the Inner Rails

1. Place the inner rail extensions on the side of the chassis aligning the hooks of the chassis with the rail extension holes. Make sure the extension faces "outward" just like the pre-attached inner rail.

2. Slide the extension toward the front of the chassis.

3. Optional: Secure the chassis with 2 screws as illustrated. Repeat steps for the other inner rail extension.

Stability hazard. The rack stabilizing mechanism must be in place, or the rack must be bolted to the floor before you slide the unit out for servicing. Failure to stabilize the rack can cause the rack to tip over.

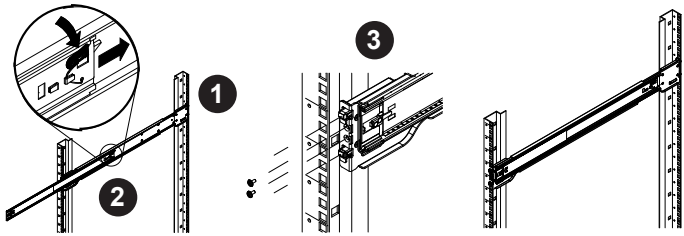


Figure 6-3: Assembling the Outer Rails

Outer Rack Rails

Outer rails attach to the rack and hold the chassis in place. The outer rails for the SC825 chassis extend between 30 inches and 33 inches.

Installing the Outer Rails to the Rack

1. Secure the back end of the outer rail to the rack, using the screws provided.
2. Press the button where the two outer rails are joined to retract the smaller outer rail.
3. Hang the hooks of the rails onto the rack holes and if desired, use screws to secure the front of the outer rail onto the rack.
4. Repeat steps 1-3 for the remaining outer rail.

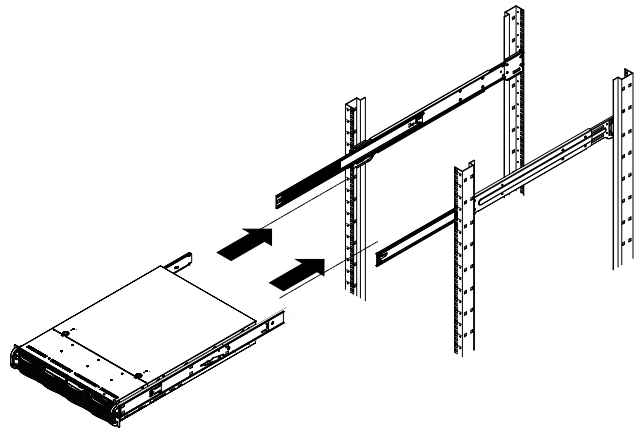


Figure 6-4: Installing the Chassis into the Rack

Note: figures are for illustrative purposes only. Always install servers into racks from the bottom up.

Installing the Chassis into a Rack

1. Extend the outer rails as illustrated above.

2. Align the inner rails of the chassis with the outer rails on the rack.

3. Slide the inner rails into the outer rails, keeping the pressure even on both sides. When the chassis has been pushed completely into the rack, it should click into the locked position.

4. Optional screws may be used to secure the to hold the front of the chassis to the rack.

Notes

Appendix A

SC825 Chassis Cables

A-1 Overview

This appendix lists supported cables for your chassis system. It only includes the most commonly used components and configurations. For more compatible cables, refer to the manufacturer of the motherboard you are using and our Web site at: www.supermicro.com.

A-2 Cables Included with SC825TQ Universal I/O Chassis

SC825TQ-R700U			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Cable	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0087	Ribbon, Round	20"	16 pin to 16 pin ribbon cable for control panel
CBL-0179L	Cable	70 cm	SATA cable
-	Cable	6'	Two regional power cords
CBL-0180L-01	SATA	various	Set for 4 SATA cables. Length varied to minimize airflow interference.

A-3 Cables Included with SC825TQ Chassis (SAS/SATA)

SC825TQ-R700RC2/R700RC			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Cable	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0191L	Cable	50 cm	20 pin to 20 pin cable for control panel
CBL-0179L	Cable	70 cm	SATA cable
-	Cable	6'	Two regional power cords
CBL-0180L	SATA	various	Set for 4 SATA Cables. Length varied to minimize airflow interference.

SC825TQ-R700LP			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Ribbon	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0087	Ribbon, Round	20"	16 pin to 16 pin ribbon cable for control panel
CBL-0979L	Cable	70 cm	SATA cable
-	Cable	6'	Two regional power cords
CBL-0180L-01	SATA	various	Set for 4 SATA Cables. Length varied to minimize airflow interference.

SC825TQ-R710LP			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Ribbon	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0084	Split cable	6"	16 pin front control split cable
CBL-0160L	Cable	---	Regional power cord
CBL-0180L	SATA	various	Set for 4 SATA cables. Length varied to minimize airflow interference.

SC825TQ-R720LP/ SC825TQ-R720U			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Ribbon	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0180L-01	SATA	various	SATA set of 4-70/59/48/38CM round S-RA, PBF
CBL-0044L	SATA	61cm	SATA cable, S-S
CBL-0082L	SATA	---	Y-split SATA power adapter
CBL-0296L	Cord	9"	Fan extension cord

SC825TQ-R740LPB			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Cable	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0071L	Round Cable	70 cm	16-pin TO 16 -pin ribbon FB cable 30
-	Cable	6'	Two regional power cords
CBL-0180L-01	SATA	various	Set for 4 SATA cables. Length varied to minimize airflow interference.

SC825TQ-560LP			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Ribbon	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0087	Ribbon, Round	20"	16 pin to 16 pin ribbon cable for control panel
CBL-0179L	Cable	70 cm	SATA cable
-	Cable	6'	Regional power cord
CBL-0180L	SATA	various	Set for 4 SATA Cables. Length varied to minimize airflow interference.

SC825TQ-R740WB			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Ribbon	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0044L	SATA	61cm	SATA cable, S-S
CBL-0082L	SATA	---	Y-split SATA power adapter
CBL-0296L	Cord	9"	Fan extension cord
CBL-0180L	SATA	various	Set for 4 SATA Cables. Length varied to minimize airflow interference.

SC825TQ-R500WB, SC825TQ-600WB,			
Part #	**Type**	**Length**	**Description**
CBL-0157L	Cable	9"	8 pin to 8 pin ribbon cable for SGPIO, PB free
CBL-0087	Ribbon, Round	20"	16 pin to 16 pin ribbon cable for control panel
CBL-0071L	Round Cable	70 cm	16-pin TO 16 -pin ribbon FB cable 30
-	Cable	6'	Two regional power cords
CBL-0180L-01	SATA	various	Set for 4 SATA cables. Length varied to minimize airflow interference.

A-4 Compatible Cables

These cables are compatible with the SC825 Chassis.

Alternate SAS/SATA Cables

Some compatible motherboards have different connectors. If your motherboard has only one SAS connector that the SAS/SATA cables must share, use one of the following cables. These cables must be purchased separately.

Cable Name: SAS Cable **Quantity:** 1

Part #: CBL-0175L
Alt. Name: "Big Four"

Description: This cable has one SFF-8484 (32 pin) connector on one end and 4 SAS connectors (7 pins each) at the other. This cable connects from the host (motherboard or other controller) to the backplane SAS hard drive port.

Cable Name: SAS Cable **Quantity:** 1

Part #: CBL-0116
Alt. Name: iPass or "Small Four"

Description: This cable has one ipass (SFF-8087/mini-sas) connector (36 pins) at one end and 4 SAS connectors on one end. This cable connects from the Host (motherboard or other controller) to the backplane SAS hard drive port.

Extending Power Cables

Although Supermicro chassis are designed to be efficient and cost-effective, some compatible motherboards have power connectors located in different areas.

To use these motherboards you may have to extend the power cables to the mother boards. To do this, use the following chart as a guide.

Power Cable Extenders		
Number of Pins	**Cable Part #**	**Length**
24 pin	CBL - 0042	7.9"(20 CM)
20 pin	CBL - 0059	7.9"(20 CM)
8 pin	CBL - 0062	7.9"(20 CM)
4 pin	CBL - 0060	7.9"(20 CM)

Front Panel to the Motherboard

The SC825 chassis includes a cable to connect the chassis front panel to the motherboard. If your motherboard uses a different connector, use the following list to find a compatible cable.

Front Panel to Motherboard Cable (Ribbon Cable)		
Number of Pins (Front Panel)	**Number of Pins (Motherboard**	**Cable Part #**
16 pin	16 pin	CBL - 0049
16 pin	20 pin	CBL - 0048
20 pin	20 pin	CBL - 0047
16 pin	various*	CBL - 0068
20 pin	various*	CBL - 0067

* Split cables: Use these cable if your motherboard requires several different connections from the front panel.

Notes

Appendix B

SC825 Power Supply Specifications

This appendix lists power supply specifications for your chassis system.

SC825 Series				
	500W	**560W**	**600W**	**R700W (Redundant)**
MFR Part #	PWS-501P-1R	PWS-561-1H20	PWS-605P-1H	PWS-702A-IR
Rated AC Voltage		100 - 240V 50 - 60Hz 8.5 - 4 Amp	---	100 - 240V 60-50Hz 10 - 4 Amp
AC Input	100-240 V, 50-60 Hz, 6.1-2.6 Amp	---	100-240 V, 50-60 Hz, 7.5 Amp max	---
DC Input Voltage		---	---	---
DC Output	4 Amp @ +5V standby 41.7 Amp @ +12V	---	---	---
With Power Distributor	+5V: 30 Amp +3.3V: 24 Amp -12V: 0.6 Amp	---	---	---
+5V standby		3 Amp	3 Amp	4 Amp
+12V		43.6 Amp	49 Amp	57 Amp
+5V		25 Amp	18 Amp	24 Amp
+3.3V		21 Amp	15 Amp	21 Amp
-12V		0.6 Amp	0.5	0.6 Amp

SC825 Series			
	710W DC-DC Power Supply	**R720W (Redundant)**	**740W**
MFR Part #	PWS-711-1R	PWS-721P-1R	PWS-741P-1R
Rated AC Voltage	---	---	100-240 V, 50-60 Hz 9-3.5 Amp
AC Input	---	100-240 V, 50-60 Hz, 4-9 Amp	---
DC Input Voltage	Voltage Range = -36V to -75V (24A - 11A) Nominal Voltage = -48V	---	---
DC Output	---	3 Amp @ +5V standby 59 Amp @ +12V	4 Amp @ +5V standby 61.7 Amp @ +12V
+5V standby	4 Amp	---	---
+12V	59 Amp	---	---
+5V	30 Amp	45 Amp	---
+3.3V	20 Amp	24 Amp	---
-12V	0.6 Amp	0.6 Amp	---

Appendix C

BPN-SAS-825TQ Backplane Specifications

To avoid personal injury and property damage, carefully follow all the safety steps listed below when accessing your system or handling the components.

C-1 ESD Safety Guidelines

Electrostatic Discharge (ESD) can damage electronic components. To prevent damage to your system, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

- Use a grounded wrist strap designed to prevent static discharge.
- Touch a grounded metal object before removing a component from the antistatic bag.
- Handle the backplane 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 card and peripherals back into their antistatic bags when not in use.

C-2 General Safety Guidelines

- Always disconnect power cables before installing or removing any components from the computer, including the BPN-SAS-825TQ backplane.
- Disconnect the power cable before installing or removing any cables from the BPN-SAS-825TQ backplane.
- Make sure that the BPN-SAS-825TQ backplane is securely and properly installed on the motherboard to prevent damage to the system due to power shortage.

C-3 An Important Note to Users

All images and layouts shown in this user's guide are based upon the latest PCB Revision available at the time of publishing. The card you have received may or may not look exactly the same as the graphics shown in this manual.

C-4 Introduction to the BPN-SAS-825TQ Backplane

The BPN-SAS-825TQ backplane has been designed to utilize the most up-to-date technology available, providing your system with reliable, high-quality performance.

This manual reflects BPN-SAS-825TQ Revision 2.0, the most current release available at the time of publication. Always refer to the Supermicro web site at www.supermicro.com for the latest updates, compatible parts and supported configurations.

C-5 Front Connectors and SAS Ports

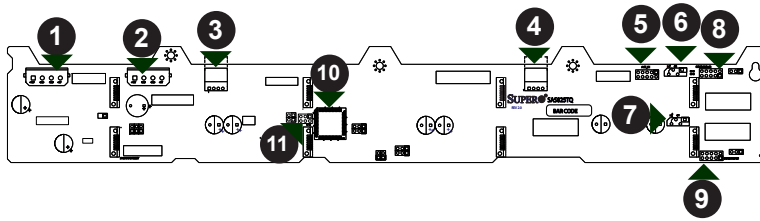


Figure C-1: Front Connectors

Front Connectors

1. 4-pin power connector: JP13
2. 4-pin power connector: JP10
3. CD-ROM/floppy connector: JP18
4. CD-ROM/floppy connector: JP17
5. SAS activity LED header: JP26
6. I²C connector #2: JP45
7. I²C connector #1: JP44
8. Sideband connector #2: JP52
9. Sideband connector #1: JP51
10. MG9072 chip
11. Upgrade header: JP46

SAS Ports

12. SAS Port #0
13. SAS Port #1
14. SAS Port #2
15. SAS Port #3
16. SAS Port #4
17. SAS Port #5
18. SAS Port #6
19. SAS Port #7

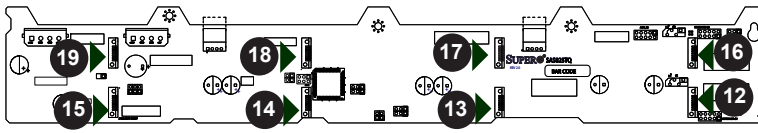


Figure C-2: Front SAS Ports

C-6 Front Connector and Pin Definitions

#1 and #2 Backplane Main Power Connectors

The 4-pin connectors, designated JP10, and JP13 provide power to the backplane. See the table on the right for pin definitions.

Backplane Main Power 4-Pin Connector

Pin#	Definition
1	+12V
2 and 3	Ground
4	+5V

#3 and #4 CD-ROM/Floppy Pin Connectors

Pin connectors designated J17 and J18, provide power to the CD-ROM and floppy drives. See the table on the right for pin definitions.

CD-ROM/FDD Power 4-Pin Connector

Pin#	Definition
1	+5V
2 and 3	Ground
4	+12V

#5 Activity LED Headers

The activity LED header, designated JP26 is used to indicate the activity status of each SAS drive. The activity LED header is located on the front panel. For the activity lead header to work properly, connect to it using a 10-pin LED cable. This is only used when the activity LED is not supported by the hard drive.

SAS Activity LED Header Pin Definitions

Pin #	Definition	Pin #	Definition
1	ACT IN#0	6	ACT IN#4
2	ACT IN#1	7	ACT IN#5
3	ACT IN#2	8	ACT IN#6
4	ACT IN#3	9	ACT IN#7
5	Ground	10	Empty

#6 and #7 I²C Connectors

The I²C Connectors, designated JP44 and JP45, are used to monitor the HDD activity and status. See the table on the right for pin definitions.

I²C Connector Pin Definitions

Pin#	Definition
1	Data
2	Ground
3	Clock
4	No Connection

#8 and #9 Sideband Headers

The sideband headers are designated JP51 and JP52. For SES-2 to work properly, you must connect an 8-pin sideband cable. See the table to the right for pin definitions.

Sideband Headers

Pin #	Definition	Pin #	Definition
2	SGPIO: SDIN; I²C: Backplane Addressing	1	Controller ID (SB6)
4	SGPIO: SDOUT; I²C: Reset	3	GND (SB2)
6	GND (SB3)	5	SGPIO: SLOAD; I²C: SDA
8	Backplane ID (SB7)	7	SGPIO: SCLOCK; 1²C: SCL
10	No Connection	9	No Connection

#10 MG9072 Chip

The MG9072 is an enclosure management chip that supports the SES-2 controller and SES-2 protocols.

#11 Upgrade Header

The upgrade header is designated JP46 and is used for manufacturing purposes only.

#12 to #19 SAS Ports

The SAS ports are used to connect the SAS drive cables. The eight ports are designated #0 - #7. Each port is also compatible with SATA drives.

C-7 Front Jumper Locations and Pin Definitions

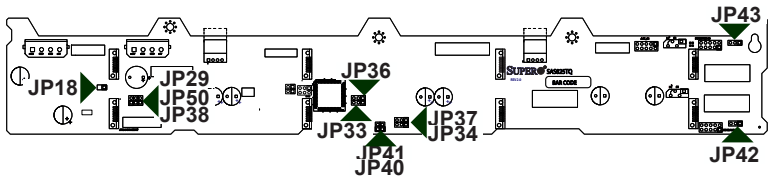
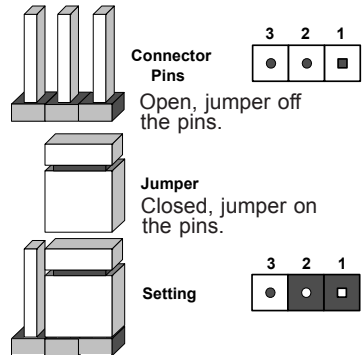


Figure C-3: Front Jumpers

Explanation of Jumpers

To modify the operation of the backplane, jumpers can be used to choose between optional settings. Jumpers create shorts between two pins to change the function of the connector. Pin 1 is identified with a square solder pad on the printed circuit board. **Note:** On two pin jumpers, "Closed" means the jumper is on and "Open" means the jumper is off the pins.



Jumper Settings		
Jumper	**Jumper Settings**	**Note**
JP29	Open (Jumper off the pins): Default Closed (Jumper on the pins): Reset	MG9072 chip reset
JP18	Open (Jumper off the pins): Default Closed (Jumper on the pins): Reset	Buzzer reset*

*The buzzer sound indicates that a condition requiring immediate attention has occurred.

The buzzer alarm is triggered by the following conditions:

1. Hard drive failure
2. System temperature over 45º Celsius.

SGPIO and I²C Modes and Jumper Settings

This backplane can utilize SGPIO or I²C, which is the default mode and can be used without making changes to your jumpers. The following information describes which jumper must be configured to use SGPIO mode.

SGPIO Settings		
Jumper	Jumper Setting	Notes
JP33	1-2	Controller ID #1
JP34	1-2	Backplane ID #1 1-2: ID#0
JP36	1-2	Controller ID #2
JP37	1-2	Backplane ID #2 1-2: ID#0
JP38	Open (Jumper off the pins)	I²C Reset #2
JP40	Closed (Jumper on the pins)	I²C Reset_SDOUT#1
JP41	Closed (Jumper on the pins)	I²C Reset_SDOUT#2
JP42	1-2	I²C Backplane ID_SDIN#1
JP43	1-2	I²C Backplane ID_SDIN#2
JP50	Open (Jumper off the pins)	I²C Reset #1

I²C Settings (Default)		
Jumper	Jumper Setting	Notes
JP33	Pins 2-3	Controller ID #1
JP34	Pins 1-2	Backplane ID #1 1-2: ID#0 2-3: ID#1
JP36	Pins 2-3	Controller ID #2
JP37	Pins 2-3	Backplane ID #2 1-2: ID#0 2-3: ID#1
JP38	Closed (Jumper on the pins)	I²C Reset #2
JP40	Open (Jumper off the pins)	I²C Reset_SDOUT#1
JP41	Open (Jumper off the pins)	I²C Reset_SDOUT#2
JP42	Pins 2-3	I²C Backplane ID_SDIN#1
JP43	Pins 2-3	I²C Backplane ID_SDIN#2
JP50	Closed (Jumper on the pins)	I²C Reset #1

SAS Port Connections in I²C and SGPIO Settings

Use the following chart when connecting this backplane. If the SAS ports are connected out of order, it is not easy to identify drives using the LED function.

SAS Port Connections in I²C and SGPIO Settings		
Port #	**I²C**	**SGPIO**
# 0 - 3	I²C #1	Sideband #1
# 4 - 7	I²C #2	Sideband #2

Front LED Indicators

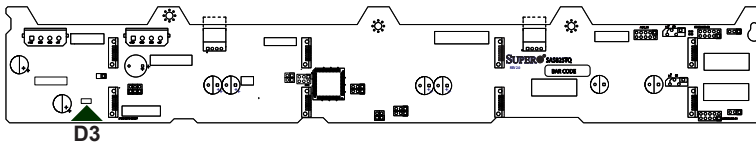


Figure C-4: Front LED

Front Panel LEDs		
LED	**State**	**Specification**
D3	On	Overheat/drive failure LED indicator. (Red light: Flashing. Buzzer: On, if activated)

C-8 Rear Connectors and LED Indicators

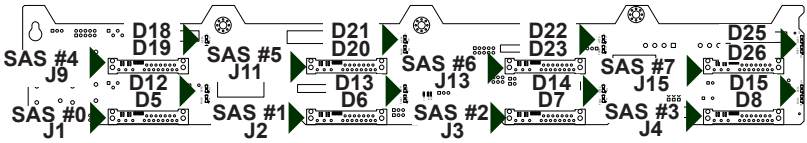


Figure C-5: Rear Connectors and LEDs

Rear SAS/SATA Connectors			
Rear Connector	**SAS Drive Number**	**Rear Connector**	**SAS Drive Number**
SAS #0 J1	SAS/SATA HDD #0	SAS #4 J9	SAS/SATA HDD #4
SAS #1 J2	SAS/SATA HDD #1	SAS #5 J11	SAS/SATA HDD #5
SAS #2 J3	SAS/SATA HDD #2	SAS #6 J13	SAS/SATA HDD #6
SAS #3 J4	SAS/SATA HDD #3	SAS #7 J15	SAS/SATA HDD #7

Rear LED Indicators		
Rear LED	**Hard Drive Activity**	**Failure LED**
SAS #0	D12	D5
SAS #1	D13	D6
SAS #2	D14	D7
SAS #3	D15	D8
SAS #4	D18	D19
SAS #5	D21	D20
SAS #6	D22	D23
SAS #7	D25	D26

Notes

Disclaimer (cont.)

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.