

CHENBRO



User's Manual

SK23502 **3-to-5 SCSI HDD** **Storage Kit**

Version 1.0

May / 26 / 2008

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Technical Support

CHENBRO works hard to offer our customers maximum performance from our chassis. But in case you have any problem with our product you can find supports from the following resources.

Web Support

Detail information of our products is in our website. You can find technical updates, installation guides, FAQs, Technical specifications and more. Our web address is: www.chenbro.com.

Email Support

You can also fill out the technical support from at our [Technical Support](#) page. Your technical issue inquiries will be sent directly to our support professionals.

Phone Support

You can also contact CHENBRO HQ or branch office for immediate support; their contact information is as following:

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Revision History


Date	Modifications
May / 26 / 2008	● First Release

Safety Information

- Read the installation instructions before connecting SK23502 to the power source.
- Only trained and qualified personnel should be allowed to install, replace or service this equipment.
- Never install this product in a wet environment.
- Position system cables and power cables carefully; route system cable and the power cable and plug so that they cannot be stepped on or tripped over. Be sure that nothing rests on your system components' cables or power cable.

Conventions Used in this Manual

The following conventions are used in this manual.

	Note Icon: Provides more information on the current topic.
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	Important Icon: Provides important information on the current topic that must not be overlooked.
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Getting Start with the SK23502 Storage Kit

Thank you for purchasing SK23502! This section covers unpacking and identifying components.

Unpacking and Checking the Contents

The complete SK23502 package includes the following items:

Item Description	Quantity
SK23502 Storage Cage	1
Hot-swap 3.5" Hard Disk Drive (HDD) Tray	5
USB Cable, 750mm	1
SCSI Cable, 500mm	1
SCSI Terminator	1
Screw: #6-32 (6mm) for tray and HDD assembling	20
Screw: M3 (6mm) for Storage Cage and chassis assembling	12

Technical Specifications

Occupancy	3 x 5.25" Drive Bays
Capacity	5 x Ultra320 SCSI HDDs
Cooling Subsystem	1 x 80mm (T32mm) Exhaust Fan
System Monitoring	<ul style="list-style-type: none"> ● Fan Fail Detection LED and Alarm ● Overheat LED and Alarm ● HDD Failure LED and Alarm
Front Access	Two USB ports on the front panel
Dimensions (WxHxD)	146 x 127.3 x 218.2 (mm) 5.75 x 5.01 x 8.59 (inch)
Weight (Fan included)	2.2 kg

Compatible CHENBRO Chassis

- RM31300 / RM41100 / RM41500 / RM42200
- SR105 / SR107 / SR108 / SR209

Introduction

The CHENBRO SK23502 can house five 3.5" HDDs in a three 5.25" bays converter (Depth of 9.5" recommended). The ability for conversion allows existing servers to perform the maximum HDD density while keeping the flexibility. All in all, SK23502 is the best solution as value added feature and performance.

Functional Specification

General

- Support Ultra320 SCSI SCA (80pin) interface
- Compatible with 3.5" Ultra320 SCSI drive
- SCSI ID is based on "group" and configured by a DIP switch without ID conflict check
- 2-digit DIP switch to control HDD spin up: AUTO, DELAY, and COMMAND
- Individual activity signals for each HDD

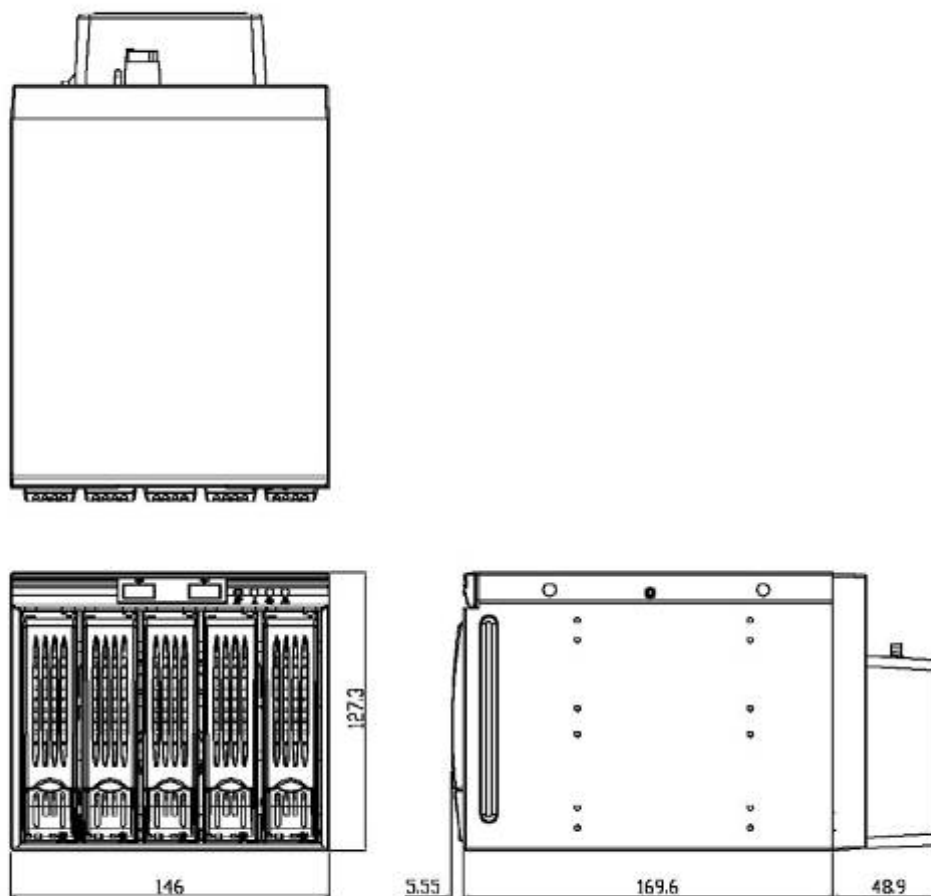
Host / Drive / Power Interfaces

- 5x Ultra-320 SCSI HDDs on backplane with 80-pin SCA2 connectors for internal connection
- 2x HDCI SCSI in / out 68-pin connectors for backplane cascading, external device and terminator.
- 2x USB access ports
- 2 x DC power connectors in 4-pin D-type

Monitoring Function

- 1x Fan 3P3C jack with speed monitoring
- Fan monitoring can be disabled
- 2x temperature sensors for HDD overheat monitoring
- Overheat alarm temperature is selectable : 55°C or 65°C
- Support one buzzer for audible alarm, three fail LED output for fan / overheat / HDD failure events, one alarm mute button for disabling audible alarm

Mechanical Dimension



unit: mm

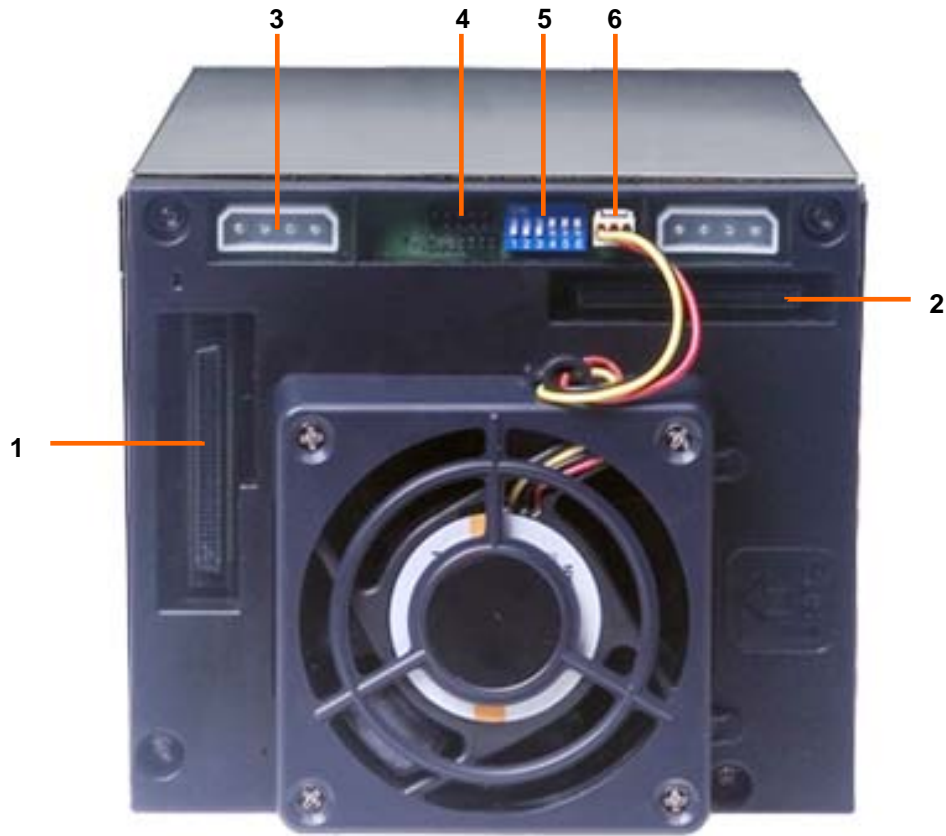
Components Description

Front View



	Device	Function
1	USB jack	Front USB port
2	Alarm mute button	Click to stop the system failure alarm
3	Overheat Warning LED	Red LED On - Temperature overheat
4	Fan failure LED	Red LED On - Fan failure
5	Reserved LED	Reserved
6	3.5" HDD Hot-swap Tray	Refer to Page 13
7	HDD activity LED	Green LED On - HDD active
8	HDD Power LED	Blue LED On - HDD Power On

Rear View



	Devices	Function
1	SCSI jack	SCSI Out jack
2	SCSI jack	SCSI In jack
3	Power jacks	4P jack for power input
4	USB jack	USB interface between front bezel & motherboard
5	Multifunctional Switch	Refer to Page 11
6	Fan jack	Connecting 80mm fan

Multifunctional Switch Definition

[DIP1/DIP2] : HDD Spin-up option

DIP1	DIP2	Function	Remark
Off	Off	Spin up when power is apply	Default
Off	On	Spin up on start command	
On	Off	Spin up after delay	
On	On	Reserved	



SW1 Default Setting

[DIP3] : HDD ID setting

DIP3	HDD ID (HDD1 – HDD5)	Remark
On	8 ~ 12	
Off	0 ~ 4	Default

[DIP4] : Fan1 monitoring alarm setting

DIP4	Fan1	Remark
On	Alarm Enable	Default
Off	Alarm Disable	

[DIP5] : Temperature monitoring alarm setting

DIP5	Temperature	Remark
On	65°C	Default
Off	55°C	

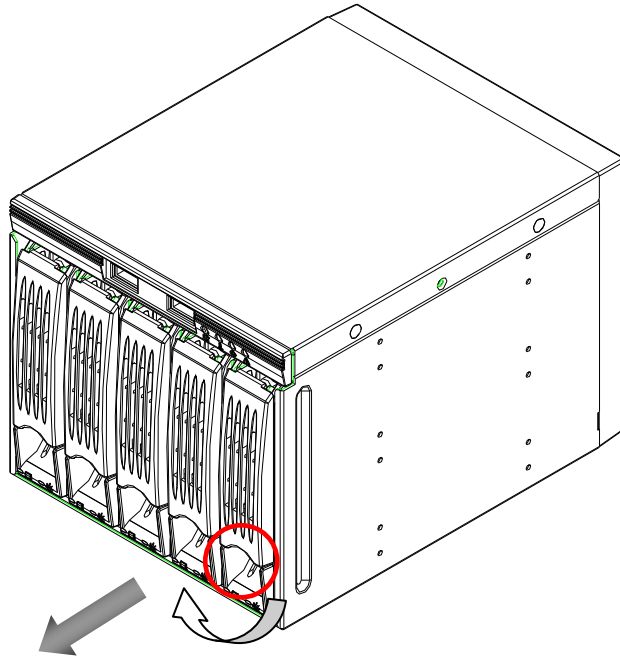
[DIP6] : Reserved

Installation Procedures

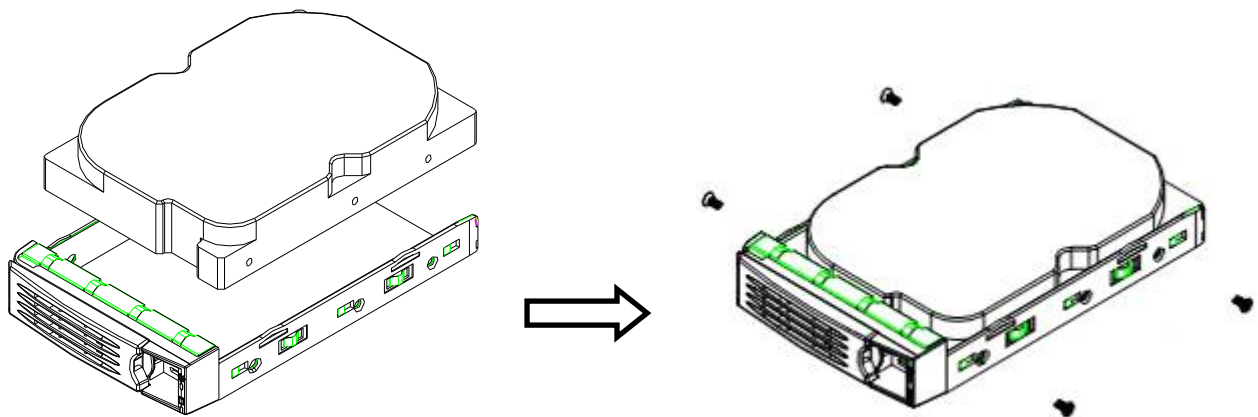
The following is the installation procedures for HDD and rear cover assembly.

Hot-swap HDD Assembly

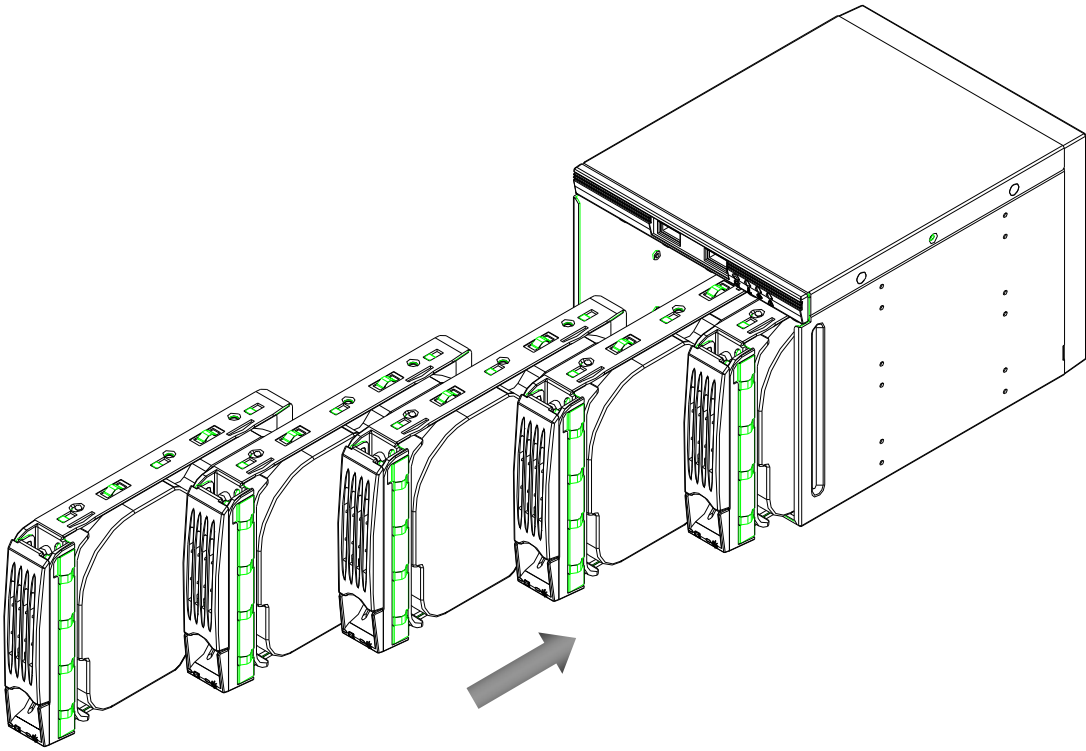
- a. Push the blue latch on HDD tray and pull it out from the cage



- b. Attach HDD with four screws per tray

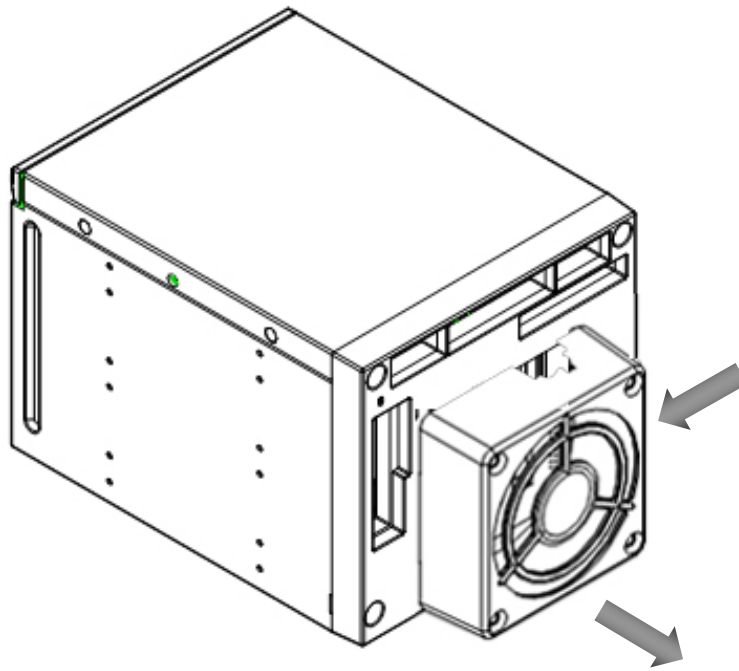


c. Insert HDD tray to the cage

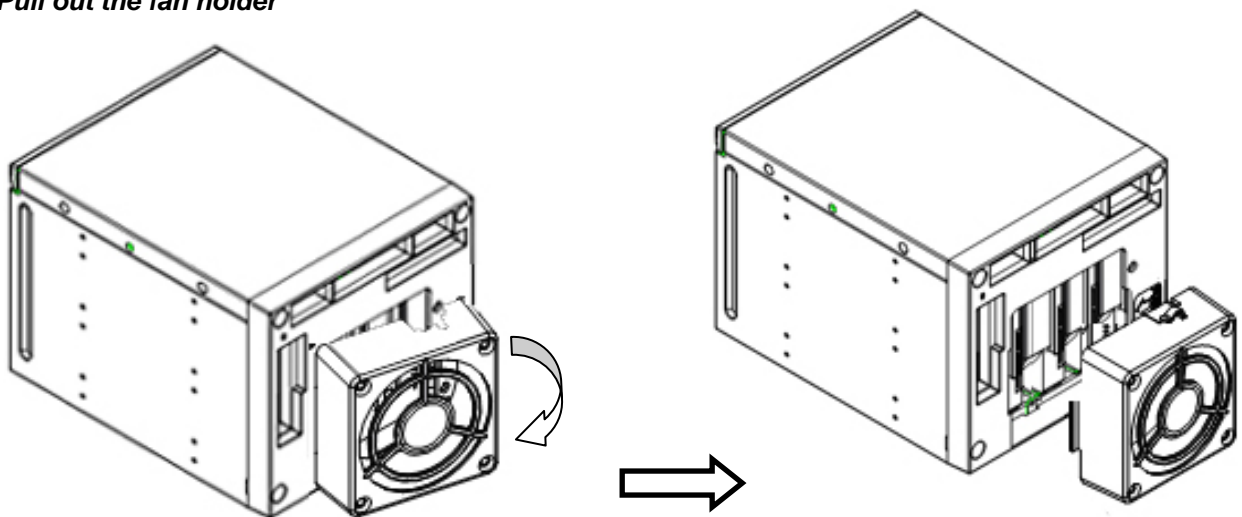


Accessing the exhaust fan

- a. Unplug the fan power connector
- b. Push the tab on the right side (where have "PUSH" mark on the rear cover)

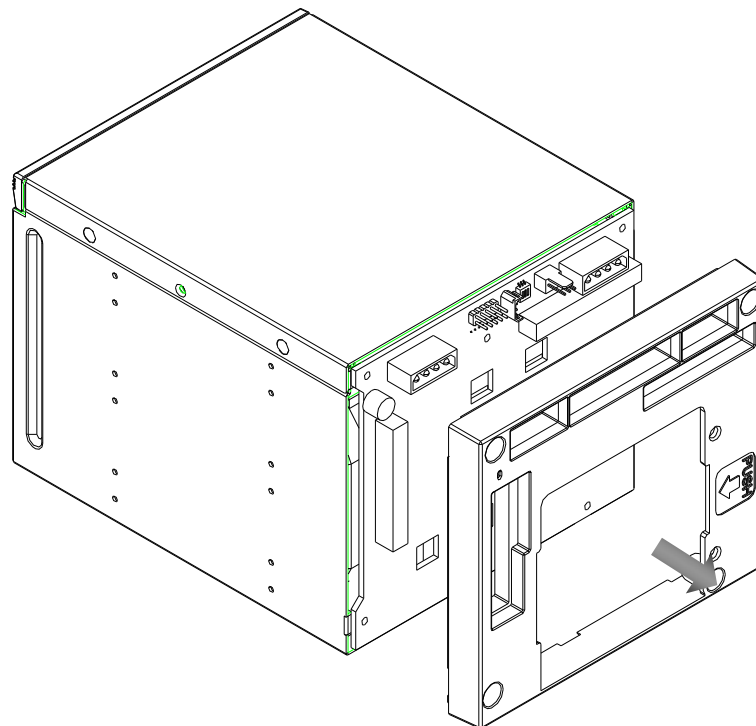
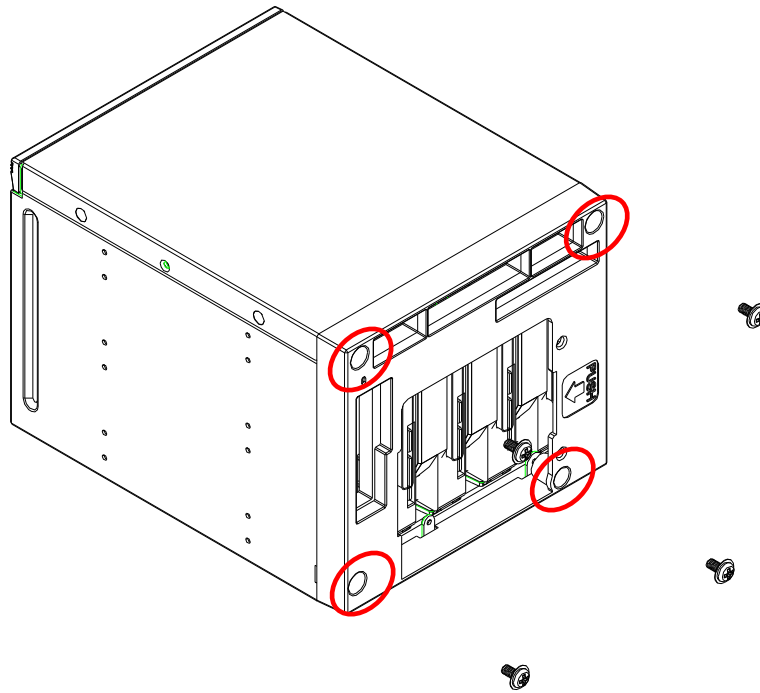


- c. Pull out the fan holder

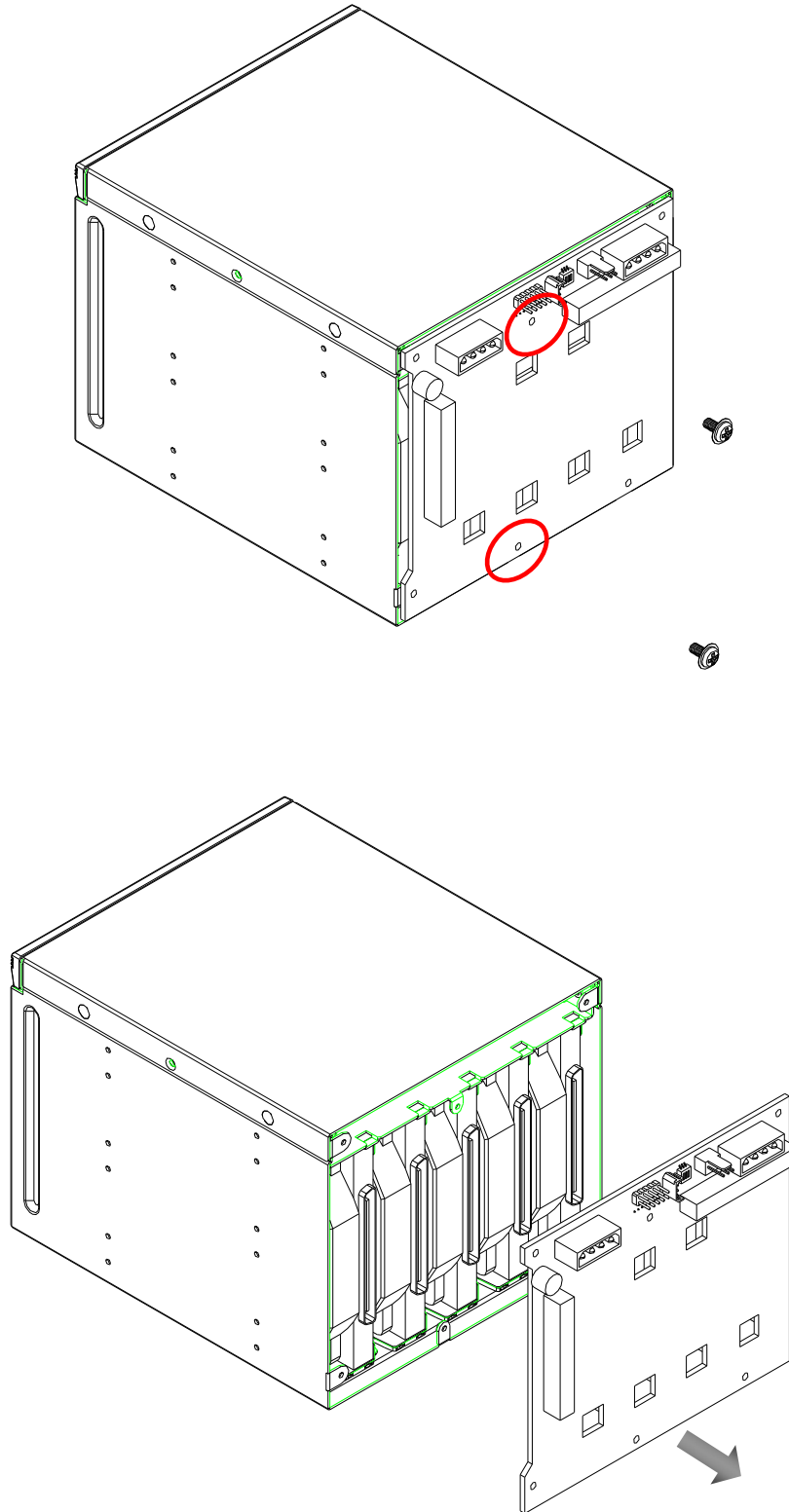


Accessing backplane assembly

a. After removing the rear exhaust fan, unscrew four screws to remove the rear cover



b. Remove two screws on the backplane



Relative Part Number List

CHENBRO Part Number	Description	Unit	Remark
80H035335-001	LED Board	pcs	
80H105235-002	SK23502 SCSI Backplane	pcs	
26H073214-003	SCSI Cable, 500mm	pcs	
26H033219-002	USB Cable, 750mm	pcs	
31H040000-006	SCSI Terminator	pcs	
30H080032-102	80mm (Thickness 32mm), Ball Bearing Fan	pcs	
83H555335-011	Hot-swap HDD Tray	pcs	