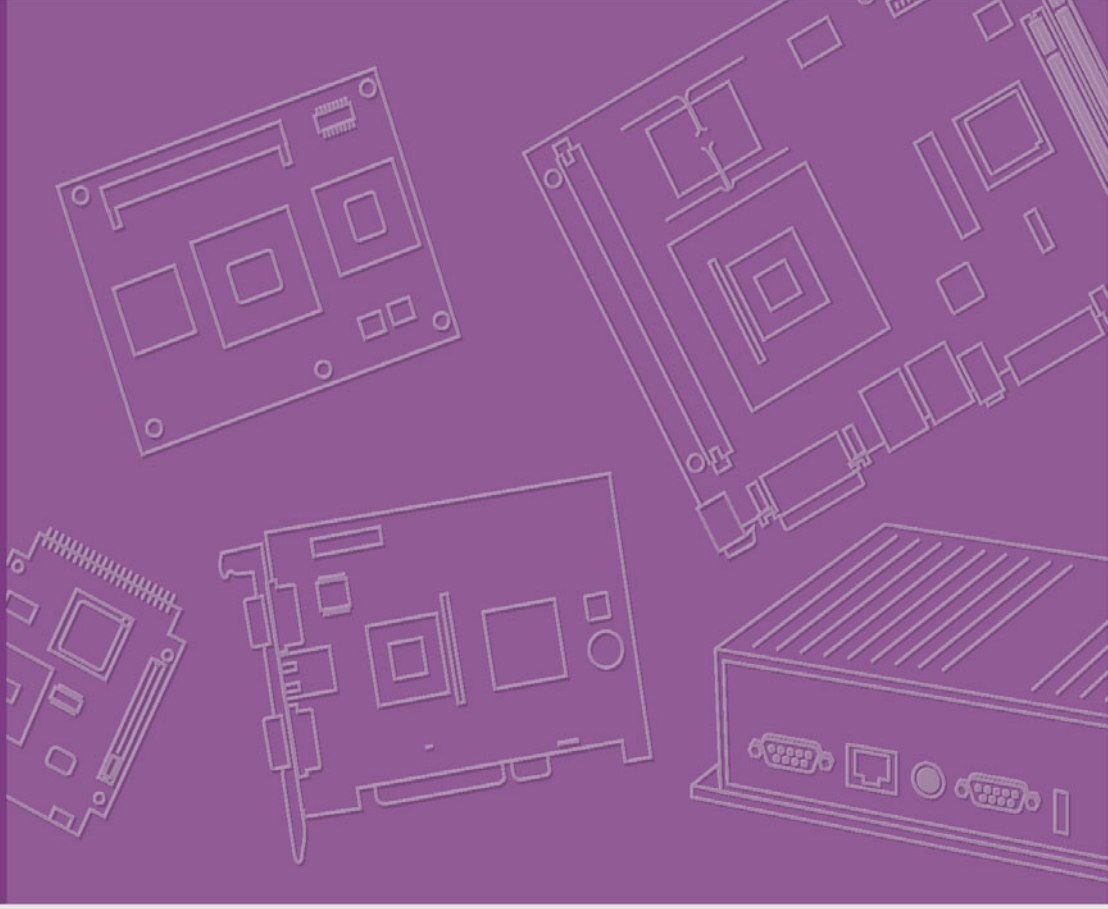

User Manual

ACP-1320BP

1U Rackmount IPC Chassis with Dual SATA Storage Trays

Trusted ePlatform Services

ADVANTECH

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On-line Technical Support

For technical support and service, please visit our support website at:

http://www.advantech.com/support

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Safety Instructions

1. Read these safety instructions carefully.
2. Keep this user manual for later reference.
3. Disconnect this equipment from AC outlet before cleaning. Do not use liquid or spray detergents for cleaning.
4. For pluggable equipment, the power outlet shall be installed near the equipment and shall be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. Do not leave this equipment in an environment unconditioned where the storage temperature under 0° C (32° F) or above 40° C (104° F), it may damage the equipment.
8. The openings on the enclosure are for air convection hence protect the equipment from overheating. DO NOT COVER THE OPENINGS.
9. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
10. Place the power cord in a way that people can not step on it. Do not place anything over the power cord. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product.
11. All cautions and warnings on the equipment should be noted.
12. If the equipment is not used for a long time, disconnect it from the power source to avoid being damaged by transient over-voltage.
13. Never pour any liquid into ventilation openings. This could cause fire or electrical shock.
14. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
15. If any of the following situations arises, get the equipment checked by service personnel:
    a. The power cord or plug is damaged.
    b. Liquid has penetrated into the equipment.
    c. The equipment has been exposed to moisture.
    d. The equipment does not work well or you cannot get it to work according to user manual.
    e. The equipment has been dropped and damaged.
    f. The equipment has obvious signs of breakage.
16. CAUTION: The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.
17. THE COMPUTER IS PROVIDED WITH CD DRIVES COMPLY WITH APPROPRIATE SAFETY STANDARDS INCLUDING IEC 60825.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT

18. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
    (1) this device may not cause harmful interference, and
    (2) this device must accept any interference received, including interference that may cause undesired operation.
19. CAUTION: Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges.
20. CAUTION: Always ground yourself to remove any static charge before touching the motherboard, backplane, or add-on cards. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis.
21. CAUTION: Any unverified component could cause unexpected damage. To ensure the correct installation, please always use the components (ex. screws) provided with the accessory box.

A Message to the Customer

Advantech customer services

Each and every Advantech product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new Advantech equipment is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name Advantech has come to be known. Your satisfaction is our primary concern. Here is a guide to Advantech's customer services.

To ensure you get the full benefit of our services, please follow the instructions below carefully.

Technical support

We want you to get the best performance possible from your products. If you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone.

Please consult this manual first. If you still cannot find the answer, gather all the information or questions that apply to your problem, and with the product close at hand, call your dealer. Our dealers are well trained and ready to give you the support you need to get the most from your Advantech products. In fact, most problems reported are minor and can be easily solved over the phone.

In addition, free technical support is available from Advantech engineers every business day. We are always ready to give advice about application requirements or specific information on the installation and operation of any of our products.

Product Warranty (2 years)

Advantech warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Advantech, or which have been subject to misuse, abuse, accident or improper installation. Advantech assumes no liability under the terms of this warranty as a consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
3. If your product is diagnosed as defective, obtain an RMA (return merchandise authorization) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Initial Inspection

When you open the carton, please make sure that the following materials have been shipped:

- ACP-1320BP Chassis
- User Manual
- Warranty Card
- Accessory box with a package of screws (for fastening the backplane, disk drives)

If any of these items are missing or damaged, contact your distributor or sales representative immediately. We have carefully inspected the ACP-1320BP mechanically and electrically before shipment. It should be free of marks and scratched and in perfect working order upon receipt. As you unpack the ACP-1320BP, check it for signs of shipping damage. (For example, damaged box, scratches, dents, etc.) If it is damaged or it fails to meet the specifications, notify our service department or your local sales representative immediately. Also notify the carrier. Retain the shipping carton and packing material for inspection by the carrier. After inspection, we will make arrangements to repair or replace the unit.

Contents

Chapter 1

General Information

This chapter provides general information about the ACP-1320BP.

Sections include:

- Introduction
- Specifications
- Power supply options
- Environment specifications
- Dimension diagram

1.1 Introduction

ACP-1320BP is a compact, rugged 19” rackmount industrial computer chassis designed for space-conscious applications. With only 1U height, ACP-1320BP can accept versatile 3-slot passive backplanes and two full-sized PCI cards via backplanes.

Dual front-accessible SATA HDD trays

ACP-1320BP comes with two easy-to-maintain SATA HDD trays, which provides the most economic solution for data mirroring. Users can easily replace a SATA HDD without opening the chassis top cover. Other data storage options include one slim-type optical disk drive and one 3.5” HDD bays with shock-resistant protection. Also, the front accessible USB I/O interfaces can be connected with various peripheral devices for data input, backup, and transferring.

Unique alarm detection and notification to reduce system down time

ACP-1320BP has the unique alarm module. This module automatically detects the system operating conditions, such as HDD, FAN, and system temperature, and it shows the system status on the front LED indicators. Once any failure happens, the module also gives both audible and visible alarm to notify users to take necessary actions.

And more

ACP-1320BP comes with a 300W ATX 1U power supply; a 250W power supply is available for customized projects. Streamlined with an efficient cooling design, the in-chassis airflow keeps the system from over-heating. All these outstanding features make ACP-1320BP the best choice for price, performance, and total cost of ownership.

1.2 Specifications

- **Construction:** Heavy-duty steel
- **Disk drive capacity:** Two front-accessible SATA trays, one slim-type optical disk drive, and one 3.5” drive bay for FDD or HDD
- **I/O interfaces on front panel:** Dual USB ports
- **I/O interfaces on rear panel:** One D-SUB 9-pin opening
- **Indicators on front panel:** LEDs for Power, HDD, TEMP, FAN LAN 1 and LAN 2
- **Switches on front panel:** ATX system switch, system reset and alarm reset
- **Cooling fans:** Three 4 cm x 4 cm (24 CFM) + one 4 cm x 4 cm (14 CFM) cooling fans
- **Expansion:** Supports two full-sized add-on cards
- **Weight:** 8.2 Kg (18.1 lb) with 300W power supply
- **Dimensions:** 480 mm (W) x 44 mm (H) x 620 mm (D) (19" x 1.7" x 24.3")

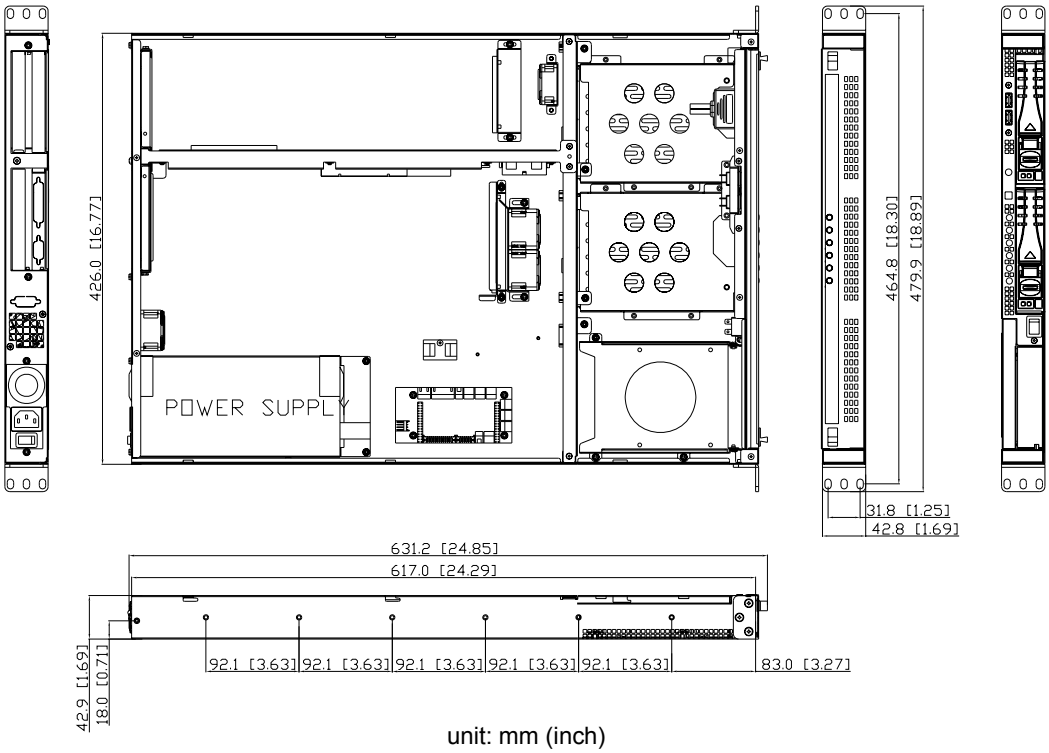
1.3 Power Supply Options

Table 1.1: Power supply options for BACKPLANE version		
Model Name	**1757001797**	**1757000160G**
Watt	250 W max. (ATX, PFC) (single power)	300 W (ATX, PFC) (single power)
Input Rating	100 ~ 240 Vac (Full range)	100 ~ 240 Vac (Full range)
Output Voltage	+5 V @ 23 A, +3.3 V @ 14 A, +12 V @ 16 A, -12 V @ 0.5 A, -5 V @ 0.2 A, +5 Vsb @ 2 A	+5 V @ 25 A, +3.3 V @ 14 A, +12 V @ 16 A, -12 V @ 1 A, -5 V @ 0.5 A, +5 Vsb @ 2 A
Minimum Load	+5 V @ 3 A, +3.3 V @ 1 A, +12 V @ 2 A, -12 V @ 0.1 A, -5 V @ 0 A, +5 Vsb @ 0.1 A	+5 V @ 3 A, +3.3 V @ 1 A, +12 V @ 2 A, -12 V @ 0.05 A, -5 V @ 0.05 A, +5 Vsb @ 0.1 A
MTBF	114,000 hours @ 25° C	100,000 hours @ 25° C
Safety	CE/UL/TUV/CB/CCC	CE/UL/TUV/CB/CCC

1.4 Environmental Specifications

Table 1.2: Environment specifications		
Environment	**Operating**	**Non-operating**
Temperature	0 to 40° C (32 to 104° F)	-20 to 60° C (-4 to 140° F)
Humidity	10 to 85% @ 40° C non-condensing	10 to 95% @ 40° C non-condensing
Vibration (5 ~ 500Hz)	0.5G rms	2 G
Safety	CE compliant	

1.5 Dimension Diagram



unit: mm (inch)

Figure 1.1 Dimension diagram

Chapter 2

System Setup

This chapter introduces the installation process.

Sections include:

- Installing a backplane
- Installing add-on cards
- Installing disk drives

2.1 Introduction

The following procedures are provided to assist you in installing a backplane, CPU card, drives, and add-in cards into ACP-1320BP chassis. Please also refer to the Appendix A, Exploded Diagram, for the parts naming in this manual.

2.2 Removing the Top Cover

To remove the top cover of the ACP-1320BP, please refer to Figure 2-1. Remove screws; slide cover back; lift cover up.

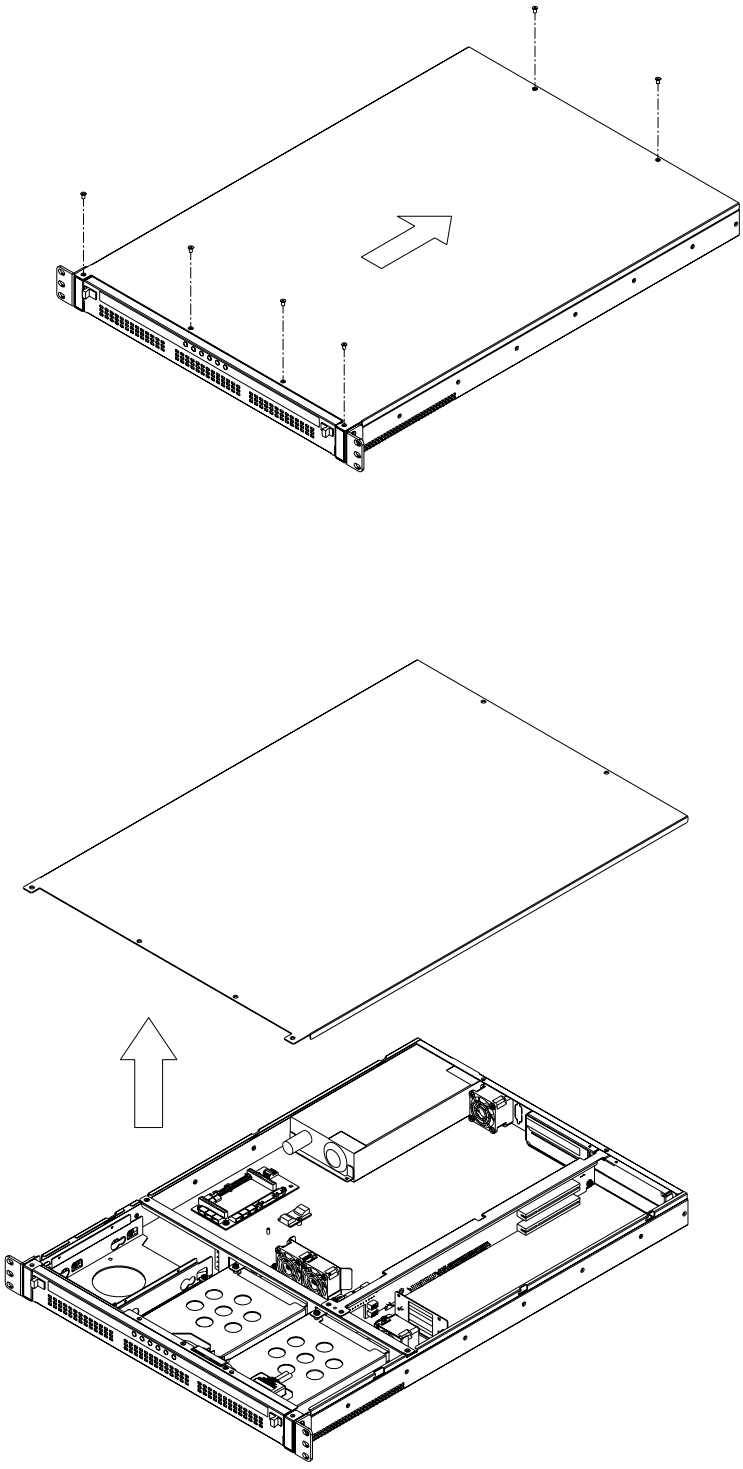


Figure 2.1 Removing the top cover

2.3 Installing the Backplane and the CPU Card

ACP-1320BP accepts a 3-slot backplane. To install the backplane, refer to the figures and proceed as follows:

Note! *To ensure the best air flow inside the chassis, choosing a CPU cooler which is lower than 22 mm is highly recommended.*

1. Fix the backplane to the backplane holder (T-bar) of chassis with screws.
2. Fix the CPU card (with CPU, cooler, RAM and necessary cables installed) on the backplane and card guide with screws.
3. Fix the backplane holder (include CPU card and backplane) on the SATA BP bracket and card guide on the chassis simultaneously with screws.
4. Plug in the 20/24-pin ATX power connector and +12 V power connector from the power supply, also the 9-pin USB connectors from the front panel of the chassis.
5. Connect the POWER SW, RESET SW, LAN LED from chassis to the backplane and HDD LED cables from the alarm board to the backplane.

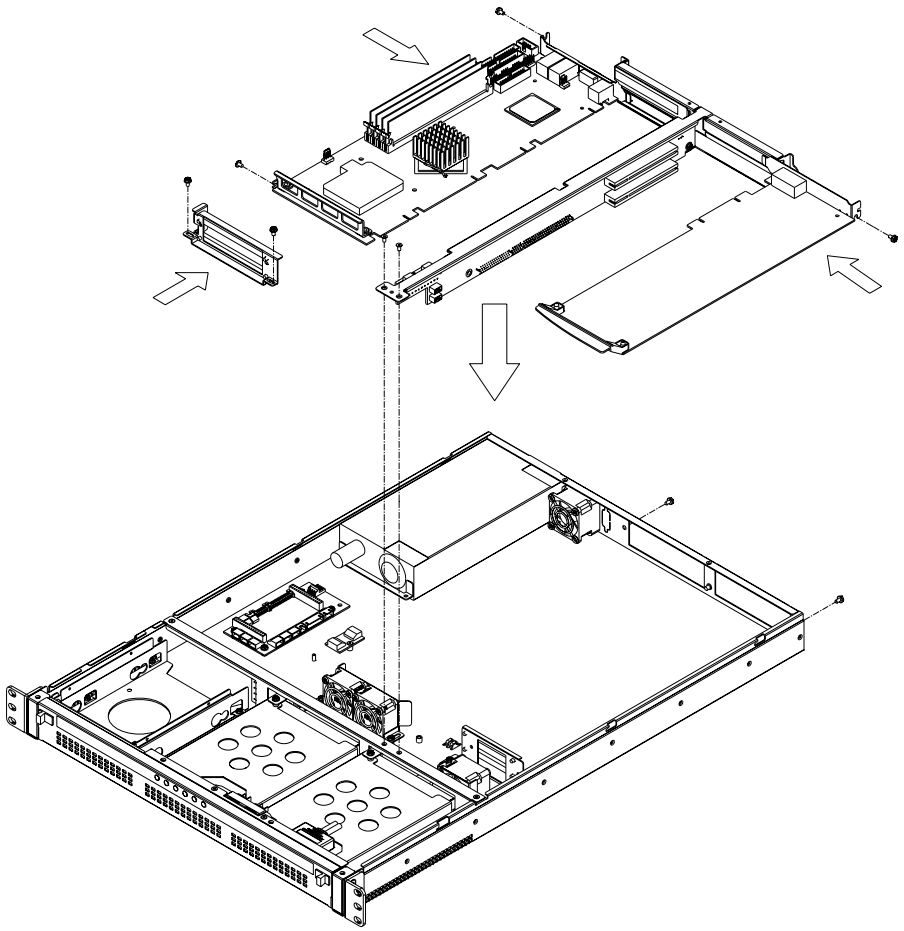


Figure 2.2 Installing a backplane, CPU card and add-on card

2.4 Installing Add-on Cards

ACP-1320BP can accept one PCI/PCIe add-on card on the backplane. To install an add-on card, also refer to Figure 2.2 and proceed as follows:

1. Plug in the add-on card until the card's gold fingers have been inserted in an PCI/PCIe slot of the backplane completely.
2. Make sure that the card bracket has been inserted properly and the other edge of the card has been fixed in the guiding rail.
3. Fasten the card at the top of the bracket with a screw.

2.5 Installing Disk Drives

ACP-1320BP comes with two easy-to-maintain SATA HDD trays; it also accepts one slim type optical disk drive and one 3.5" HDD/FDD. To install any of these disk drives, refer to Figures 2.3 ~ 2.6 and proceed as follows:

2.5.1 Installing a SATA HDD in the SATA HDD tray

ACP-1320BP accepts both SATA and SATA II HDD. It is not necessary to remove ACP-1320BP's cover when installing a SATA HDD in any of the SATA HDD trays.

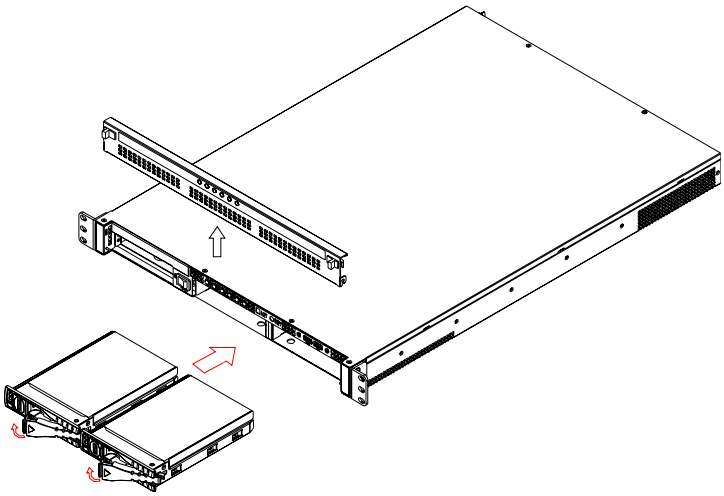


Figure 2.3 Removing the front cover and the mobile trays

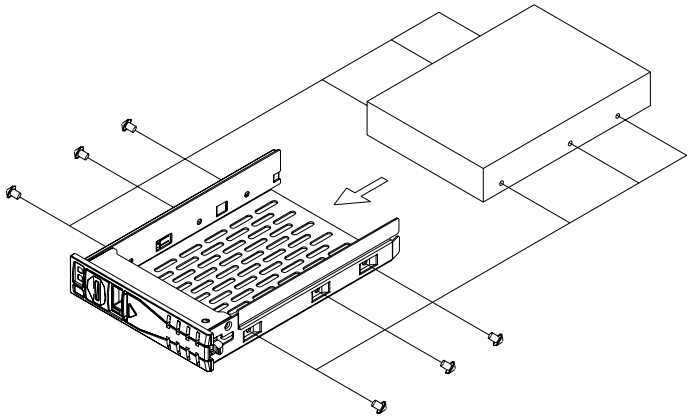


Figure 2.4 Installing a SATA HDD

1. Open the front cover by pushing the latches.
2. Left-shift the key latch of one SATA HDD tray to unlock the tray. Hold the handle of the tray and draw it out from the chassis.
3. Slide one SATA disk drive into the proper location in the tray and fix it with 4 ~ 6 screws.
4. Return and push the SATA tray to the chassis until the handle of tray is moving back. Right-shift the key latch of the HDD tray to lock the tray.
5. Repeat Steps 2 to 4 if there is the 2nd SATA HDD to be installed.

2.5.2 Installing 3.5” HDD/FDD and slim-type ODD

1. Remove the four screws, which mount the slim-type optical disk drive and 3.5” HDD brackets on the chassis.
2. Insert the hard drive disk into the proper location in the drive bay and fix it with 4 screws.
3. Connect a suitable cable from the motherboard to an ATA (IDE) HDD or a SATA cable to a SATA HDD.
4. Find a small PCB converter and connect it to the slim-type optical disk drive. Then fix it in place by tightening the two screws provided.
5. Insert slim-type optical disk drive into the proper location, and fix it with 4 screws.
6. Insert the proper power connector into each drive.
7. Return the HDD drive and slim-type optical disk drive with the bracket on the chassis and fix it with four screws.
8. Connect the 40-pin IDE flat cable from the CPU card to the optical disk drive.

Figure 2.5 Small converter for slim-type optical disk drive

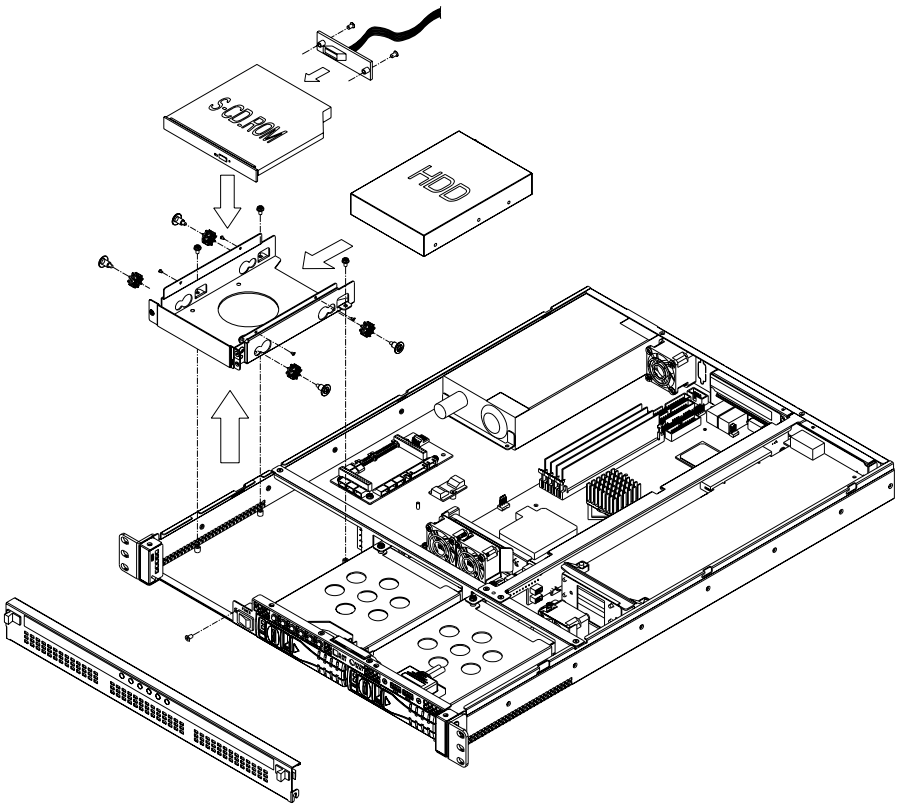


Figure 2.6 Installing HDD/FDD and slim-type ODD

Chapter 3

Operation

This chapter introduces the system operation information.

Sections include:

- The front panel
- Replacing the cooling fan
- Replacing the power supply

3.1 The Front Panel

The front panel features six LED indicators. The user can close the door with the user-friendly latch. When the door is open, one sees a momentary power switch, a System Reset button, an Alarm Reset button, and a dual USB port. Their individual functions are described as below.

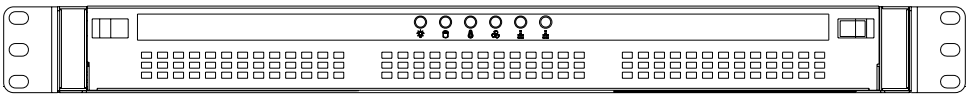


Figure 3.1 Front view with door closed

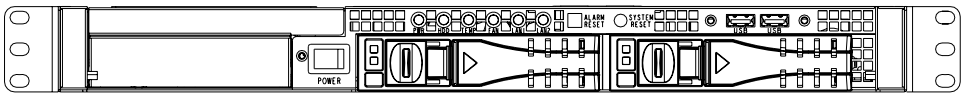


Figure 3.2 Front view with door open

3.1.1 Switch, Button and I/O Interfaces

Momentary Power switch:

Press this switch to turn the system power on or off. Please use system shutdown or press this switch for few seconds to turn off the system ATX power.

System Reset button:

Press this button to reboot the system.

Alarm Reset button:

Whenever a fault occurs in the system (e.g., fan failure or the chassis is overheated), the audible alarm will be activated. Pressing this button will stop the alarm from beeping.

Dual USB ports:

For connecting a wide range of USB devices for data transfer, backup or input.

3.1.2 LED indicators

Six LEDs are placed in the middle of the front panel to indicate system health and activity. Please refer to Table 3.1 for the LED definition summary.

Table 3.1: LED indicator functions

LED	Description	Green	Red	Orange
Power 	System power	Normal	N/A	N/A
Fan 	Cooling fan status	Normal	Abnormal	N/A
Temperature 	Temperature in the chassis	Normal	Abnormal	N/A
Hard Disk 	Hard disk drive activity	N/A	No light	Normal
LAN 	LAN1 & LAN2 status	Normal	No light	N/A
	Data transmit through LAN	Blinking		

When the system power is on, the power LED is always **GREEN**.

When the fan LED is **RED**, it indicates a failed cooling fan, and the alarm is also activated. To stop the alarm beep, press the **Alarm Reset** button and replace the failed fan with a good one immediately.

If the temperature LED is **RED**, it means that the inside of the chassis is overheated (more than 50° C). An audible alarm will be activated. To stop the alarm beep, press the **Alarm Reset** button. Inspect the fan filter and the rear section of the chassis immediately. Make sure the airflow inside the chassis is smooth and not blocked by dust or other particles.

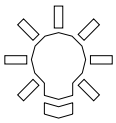
If the HDD LED stays **ORANGE**, it means the data is transmitting and HDD LED turns into blinking.

If the LAN1/LAN2 LED stays **GREEN**, it means the network connection is working normally. When data is transmitting through the network, the LAN LED blinks. When the LAN1/LAN2 LED fails to light up, inspect the LAN cable and the connections.

3.1.3 LED Indicators for SATA HDD Power & Status

Each SATA HDD tray has a pair of LED indicators for displaying the SATA HDD power and the activity status. Please refer to Table 3.2 for the LED definition summary.

Table 3.2: Table 3.2: SATA HDD LED indicators function for ACP-1320

LED	Description	Green	Blue
	power of HDD	HDD power on	N/A
	Status of HDD	N/A	Data access

When the system power is on and the SATA HDD is connected well, the HDD power LED is **GREEN**. If it fails to light up, check if you connected the SATA HDD well. Or please ask the technician to inspect the related cables in the chassis.

When the SATA HDD is transmitting some data, the status LED is blinks **BLUE**.

3.2 Replacing the Cooling Fan

There are two fans close to the rear window of the chassis.

1. Un-plug the fan power connector.
2. Remove the two screws, which mount the fan bracket on the chassis, and take it out.
3. Remove the screws, which mount the failed fan to the fan bracket, and take out the fan.
4. Place a new fan on the fan bracket, then fasten them with two screws.
5. Place the fan bracket back to the drive bay and fasten it with screws.
6. Plug in the fan power connector.

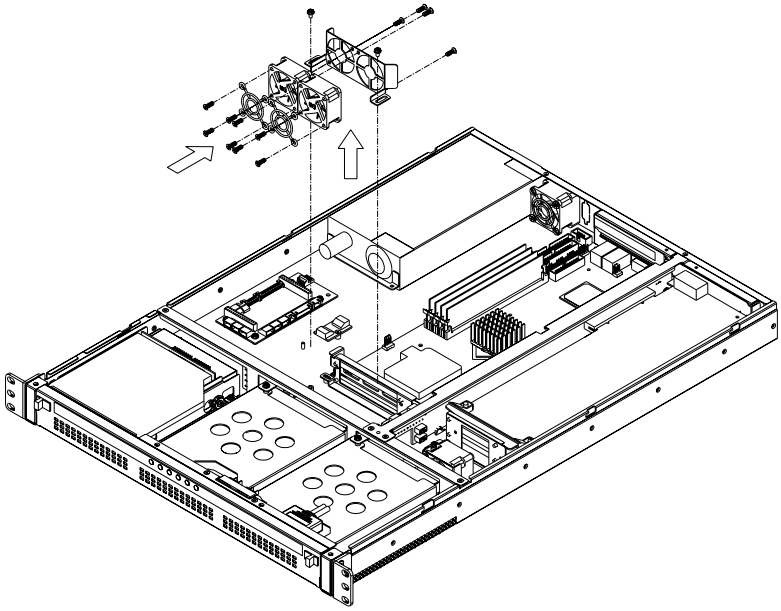


Figure 3.3 Replacing the cooling fan

3.3 Replacing the power supply

ACP-1320BP supports a single 1U-high power supply. To change the power supply, refer to Figure 3.4 and proceed as follows:

1. Un-plug the AC inlet from the power supply.
2. Remove the top cover.
3. Unplug the ATX power connector and +12V power connector from the CPU card, and the peripheral power connector(s) from the drive disk(s).
4. Remove the two screws, which mount the power supply bracket to the chassis, and the other two screws, which mount the fan bracket on the chassis, then lift the power supply.
5. Place a new power supply into the chassis and fasten it with the four screws.
6. Plug the ATX power connector and +12V power connector to the CPU card, and the peripheral power connector(s) to the proper drive disks.
7. Return the top cover and plug in the AC inlet.

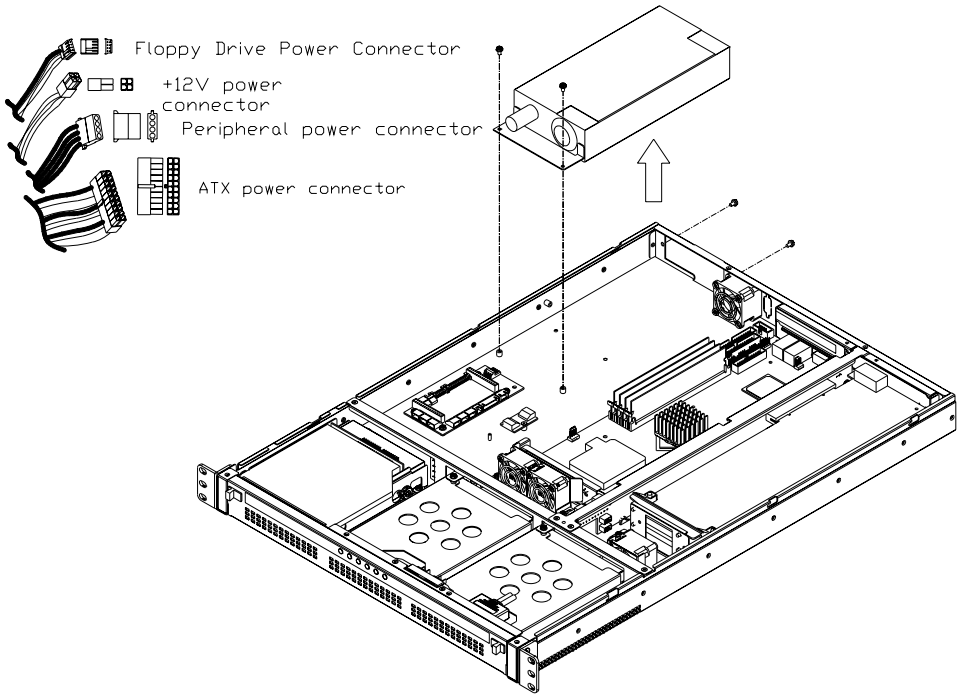


Figure 3.4 Replacing the power supply

Chapter 4

Alarm Board

This chapter introduces the alarm board and thermal sensor specifications.

Sections include:

- Alarm board layout
- Alarm board specifications
- Thermal sensor
- Sensor I.D. number setting

4.1 Introduction

The alarm board is located in the middle section, between the driver bay and the power supply. The alarm board gives an audible alarm when:

- A cooling fan fails
- Chassis internal temperature is too high

To stop the alarm beep, simply press the Alarm Reset button on the front panel, then take the necessary actions to remedy the situation.

4.2 Alarm Board Layout

The layout and detailed specification of the alarm board are given below:

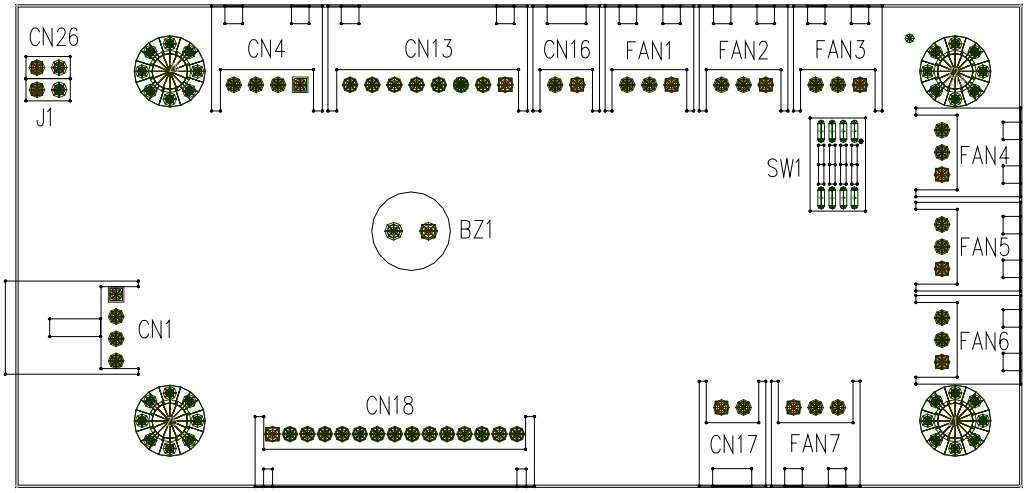


Figure 4.1 Alarm board layout

4.3 Alarm Board Specifications

Input Power: +5 V, +12 V

Input Signals:

- 7 fan connectors
- One ‘thermal sensor’ connector (supports up to 8 thermal sensors in series)
- One ‘power good’ input
- One ‘alarm reset’ input
- One ‘voltage signal’ connector (connect from the backplane, and support six voltages: ±12 V, ±5 V, +3.3V, +5 Vsb)
- One ‘hard disk LED’ connector (connect from the CPU card or the motherboard)

Output Signals:

- One ‘LED board’ connector
- One ‘buzzer’ output

4.3.1 Connectors, Jumper and Pin Definition

Table 4.1: CN1, Auxiliary external power connector, standard mini 4-Pin power connector			
Pin 1	+12 V	Pin 3	GND
Pin 2	GND	Pin 4	+5 V

Table 4.2: CN4, Thermal sensor (LM75) connector			
Pin 1	+5 V	Pin 3	T_SDAT
Pin 2	T_SCLK	Pin 4	GND

Table 4.3: CN13, Voltage detect input connector			
Pin 1	+5 Vsb	Pin 5	+5 V
Pin 2	GND	Pin 6	+3.3 V
Pin 3	GND	Pin 7	-12 V
Pin 4	-5 V	Pin 8	+12 V

Table 4.4: CN16, Power good input connector			
Pin 1	Power Good	Pin 2	GND

Table 4.5: CN17, Alarm reset connector			
Pin 1	ALARM RESET	Pin 2	GND

Table 4.6: CN18, Output connector to LED board			
Pin 1	GND	Pin 9	Temperature Good
Pin 2	+5 V signal	Pin 10	Temperature Fail
Pin 3	+12 V signal	Pin 11	FAN Good
Pin 4	-5 V signal	Pin 12	FAN Fail
Pin 5	-12 V signal	Pin 13	N/A
Pin 6	HDD_1	Pin 14	+3.3 V signal
Pin 7	Power Good	Pin 15	+5 Vsb signal
Pin 8	Power Fail		

Table 4.7: CN26, External HDD LED connector			
Pin 1	HLED_ACT	Pin 2	N/A

Table 4.8: FAN1~FAN7, Fan connectors			
Pin 1	GND	Pin 3	FAN_DEC
Pin 2	+12 V		

Table 4.9: J1, External buzzer			
Pin 1	Buzzer	Pin 2	+5 V

Table 4.10: SW1, Fan number select switch			
Pin 1	GND	Pin 5	GND
Pin 2	FAN_SEL1	Pin 6	FAN_SEL3
Pin 3	GND	Pin 7	GND
Pin 4	FAN_SEL2	Pin 8	RESET

4.3.2 Switch Settings

The alarm board is designed to connect with up to 7 fans. User can set the fan number by adjusting the switch, SW1, on the alarm board.

Table 4.11: SW1. Fan number setting

Fan Number	SW 1-1	SW 1- 2	SW 1- 3	SW 1- 4
0	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4(default)	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF

Note! *Connect the fan connectors in the correct sequence: If two fans are set on SW1, the correct method is to connect them into connectors FAN1 and FAN2. If the two fans are connected to other fan connectors, out of sequence, such as FAN1 and FAN3 or FAN2 and FAN3 or FAN3 and FAN4, then the alarm will not function correctly.*

4.4 Thermal Sensor

The ACP-1320 is configured with a thermal sensor located at the rear plate of the chassis. (see Figure 4.2) Please refer to Figure 4.3 for a diagram of the thermal sensor module layout.

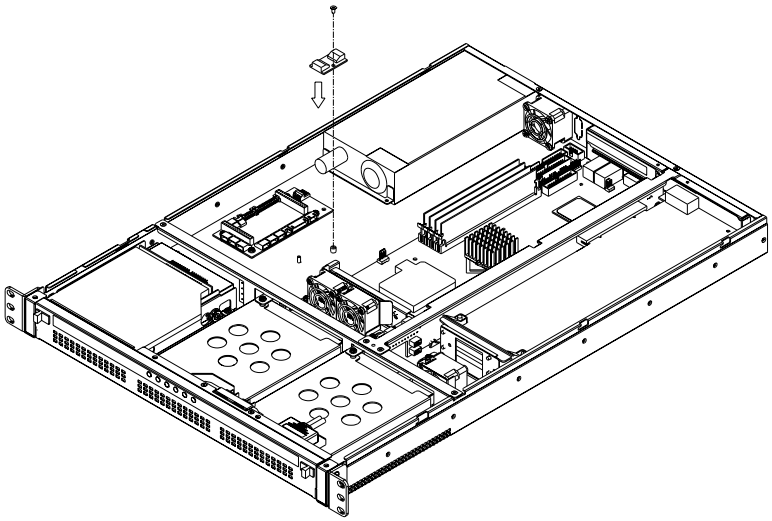


Figure 4.2 Thermal sensor location

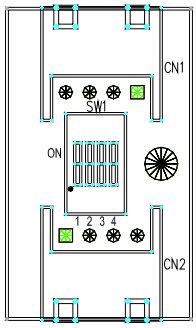


Figure 4.3 Thermal sensor module

The default sensor I.D. number is 1. Users can refer to Table 4.13 to set the sensor I.D. number by adjusting switch SW1 on the sensor module.

Table 4.12: CN1 & CN2, Temperature sensor connector

Pin 1	+5 V	Pin 3	T_SDAT
Pin 2	T_SCLK	Pin 4	GND

Table 4.13: SW1, Thermal sensor I.D. number setting

Sensor I.D. No.	SW 1 -1	SW 1 - 2	SW 1 - 3	SW 1 - 4
1 (default)	OFF	OFF	OFF	ON
2	OFF	OFF	ON	ON
3	OFF	ON	OFF	ON
4	OFF	ON	ON	ON
5	ON	OFF	OFF	ON
6	ON	OFF	ON	ON
7	ON	ON	OFF	ON
8	ON	ON	ON	ON

Appendix A

Exploded Diagram & Parts List

A.1 Exploded Diagram

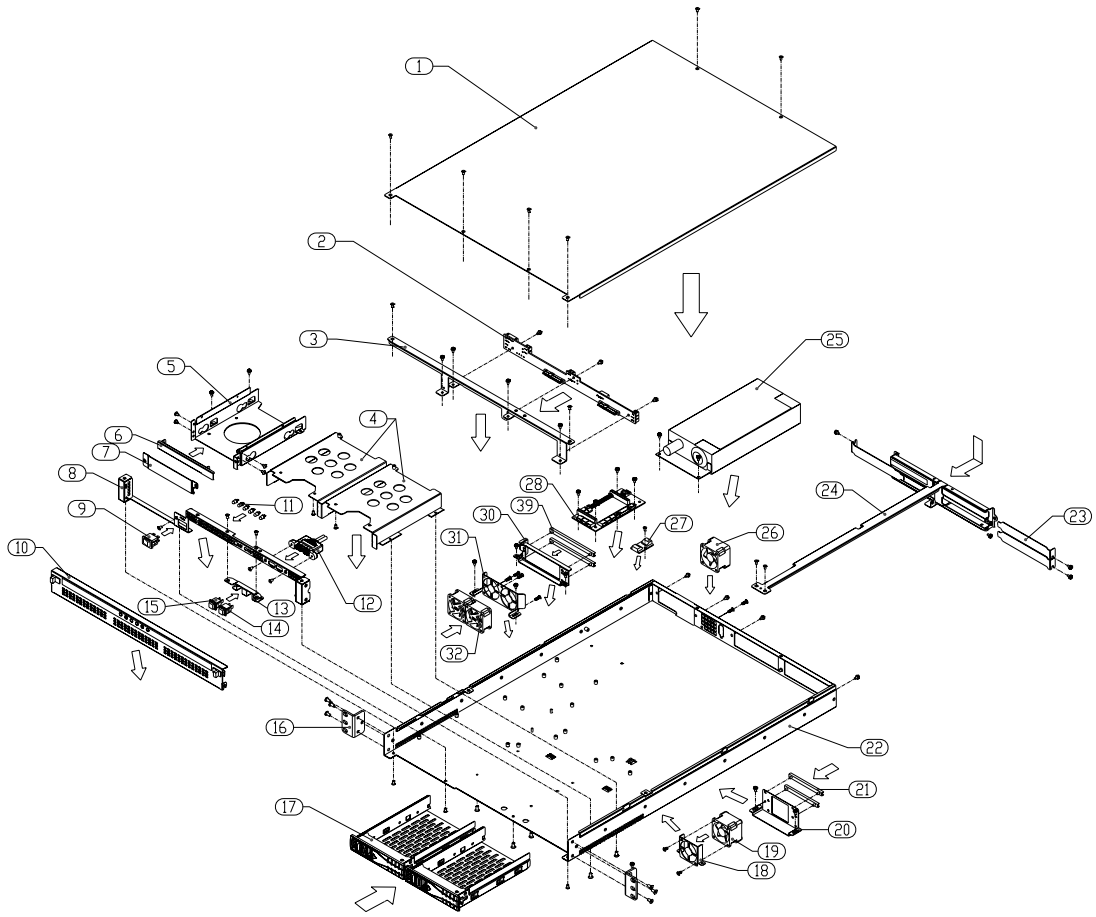


Figure A.1 Exploded Diagram

Table A.1: Parts List			
1	Top cover	17	HDD drawer
2	SATA BP	18	Fan holder I
3	SATA BP bracket	19	System fan x 1(40*15mm)
4	Tray Bay	20	Card Guide holder
5	Driver Bay	21	PCB guide rail
6	Slim FDD cover	22	Chassis
7	3.5” drive cover	23	Adapter bracket
8	Bezel	24	Card support ASM
9	Power switch	25	Power
10	Front door	26	System fan x 1 (40*28mm)
11	LED housing	27	Thermal board
12	USB cable	28	Common alarm
13	Switch holder	29	PCB guide rail
14	System Reset Switch	30	Card guide
15	Alarm Reset Switch	31	Fan holder 2
16	Rack mount bracket	32	Dual system fan (40*28mm)

Appendix B

Backplane Options

B.1 Backplane Options

ACP-1320BP supports a variety of PICMG 1.0/1.3 backplanes. Please contact a local sales representative for detailed information.

Table B.1: PICMG1.3 Backplane Options

Model Name	Segment	Slots Per Segment			
		SHB*	PCIe x 16	PCIe x 4	PCI
PCE-5B03V-01A1E	Single	1	1	-	1
PCE-5B03V-00A1E	Single	1	1	1	-

*System Host Board

Table B.2: PICMG1.0 Backplane Options

Model Name	Segment	Slots Per Segment		
		SHB*	PCI	PCI-X
PCA-6103P2V-0A2E	Single	1	2	-
PCA-6103P2VX-B2E	Single	1	-	2

*System Host Board

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