RHX

SERIES

USER'S MANUAL

ZIPPY TECHNOLOGY CORP.
[POWER DIVISION]

User's manual
Redundant Switching Power System
Model : RHX series

User's manual

Index

1. INTRODUCTION

Thank you for your interest in our nice product, the Redundant Switching Power System in different model (suffixed by character D / H / I individually) but of the same major structure and functions. As for the form factor shall be identical with our earlier model RPD,RAH,RPI.
Please refer to drawings in Section 1.3.for the housing and dimension in different models..

Model RH**X,** a redundant switching power supply system, consists of:

(1) Complete metallic frame (optional)
(2) Two sets of PS/2 power supplies with HOT-PLUGGABLE capability
(3) Redundant power control board
(4) Power supply unit housing,
(5) A set of wire harness (according to customer's choice for different motherboard requirements)

Model RH**X** is of the **hot-plug-in capability** and full safety redundant (**hot-swappable)** function with easy installation / operation / maintenance and more reliable Power Supply system to your computer system than ever you could have.

Two identical power modules are used in one system to backup each other if any one of them becoming defective and the audio and visual warning signals, such as **LED display, buzzer alarm, power defective signal**, etc are initiated simultaneously.

One additional set of AC inlet is to provide users capable of using two different power sources for each module and sharing the risk of any AC power sources failure.

For the purpose of remote false detection, the warning signals such as: AC input false detection for each module are provided herein. Signals to be generated in case of abnormal AC input power module.
Power module - available detection: power module available signals output as soon as the power module is plug-in seat..
Power Good signal: Power Good Signal output for modules normal voltage outputs only.

Load share should be balanced when these two modules are both in normal operating condition, The reliability of power supply system can be therefore greatly increased.

Please read this manual carefully so you can operate the power system with a master hand.

1.2 PACKING

The contents of a RH**X** box package shall be at least consisted of the following format :

(A) 1 x RH**X**
(B) 1 x Screws pack
(C) 1 x User's manual
(D) Output wire (1 set)

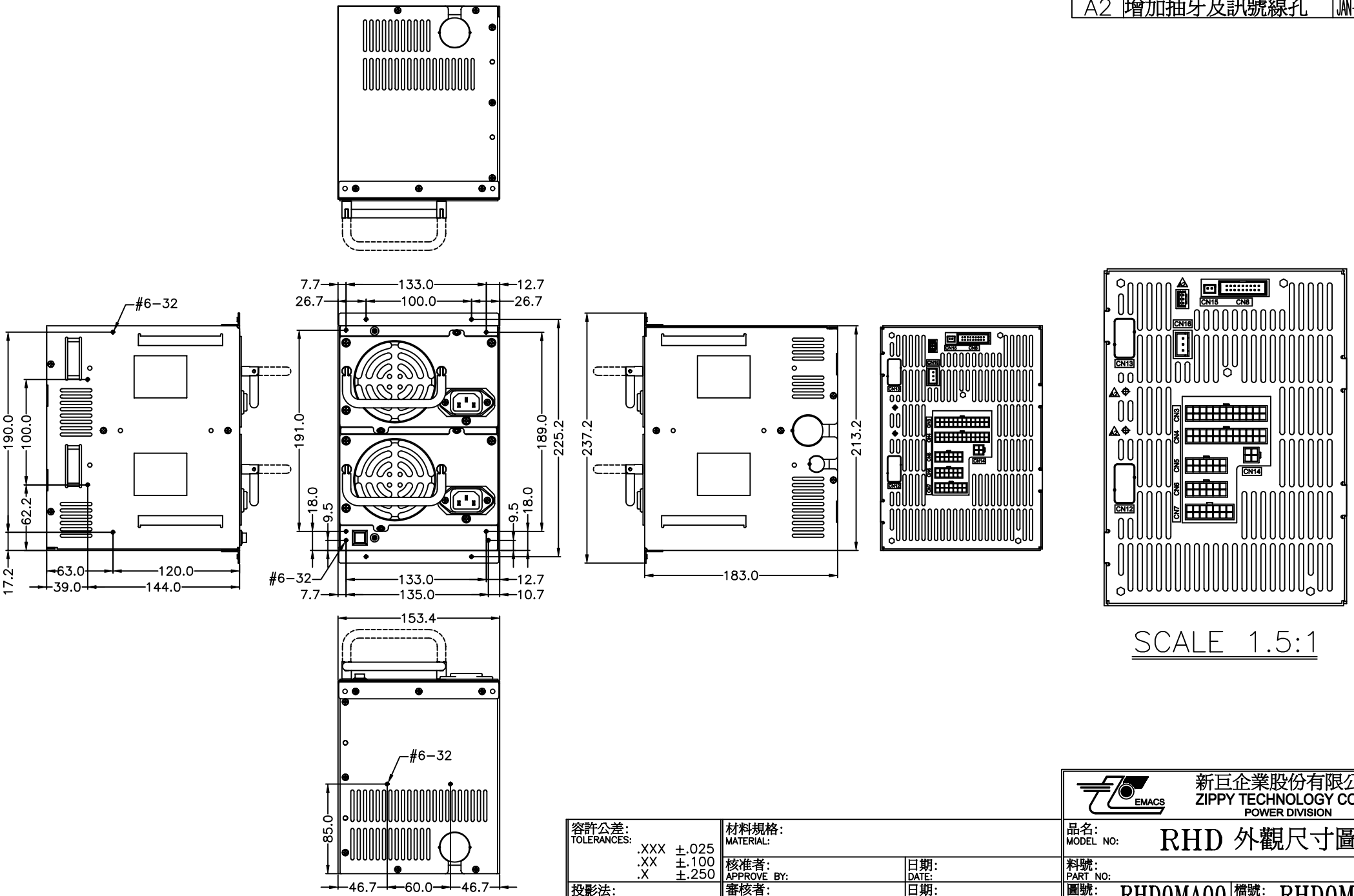
1.3 DRAWING

MODEL NUMBER IDENTIFICATION:

RH X - X XXX X [X X]

RH ---- REDUNDANT POWER SUPPLY
FIRST **X** ---- D / H or I ETC.
SECOND **X** ---- **4** STAND FOR 4 DC OUTPUTS (5 / 12 / -5 / -12V)
6 STAND FOR 6 DC OUTPUTS (5 / 12 / -5 / -12V / 3.3V / +5vsb)
THIRD **XXX** ---- OUTPUT WATTS (400 / 460)
FOURTH **X** ---- **P** STAND FOR WITH ACTIVE POWER FACTOR CORRECTION

修訂 REVISIONS		
版次 REV.	記述 DESCRIPTION	日期 DATE
A2	增加抽牙及訊號線孔	JAN-28-2002



SCALE 1.5:1

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	核准者: APPROVE BY:	日期: DATE:	料號: PART NO:
投影法: PROJECTION: 第三角法	審核者: CHECK BY:	日期: DATE:	圖號: DRAW NO: RHD0MA00 / 檔號: FILE NO: RHD0MA00
	繪圖者: DRAW BY:	日期: DATE: JAN-28-2002	單位: UNITS: mm / 版次: REV. NO: A2 / 規格: SPEC.: A0 / 編號: SHEET: 0F

新巨企業股份有限公司
ZIPPY TECHNOLOGY CORP.
POWER DIVISION

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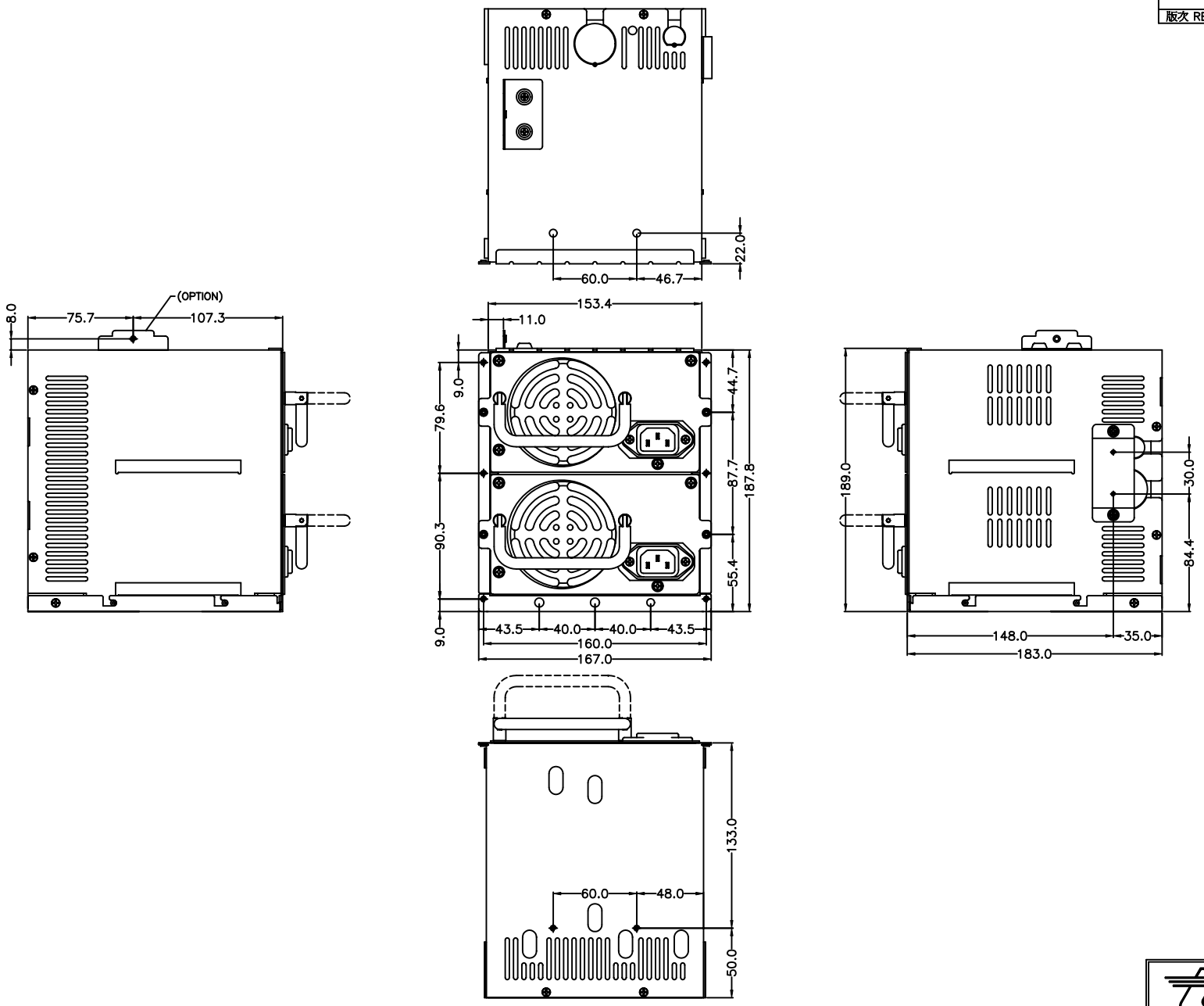
版次 REV.	記述 DESCRIPTION	日期 DATE



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			單位: UNITS: mm 版次: REV. NO: A1 規格: SPEC.: A0 編號: SHEET: 0F

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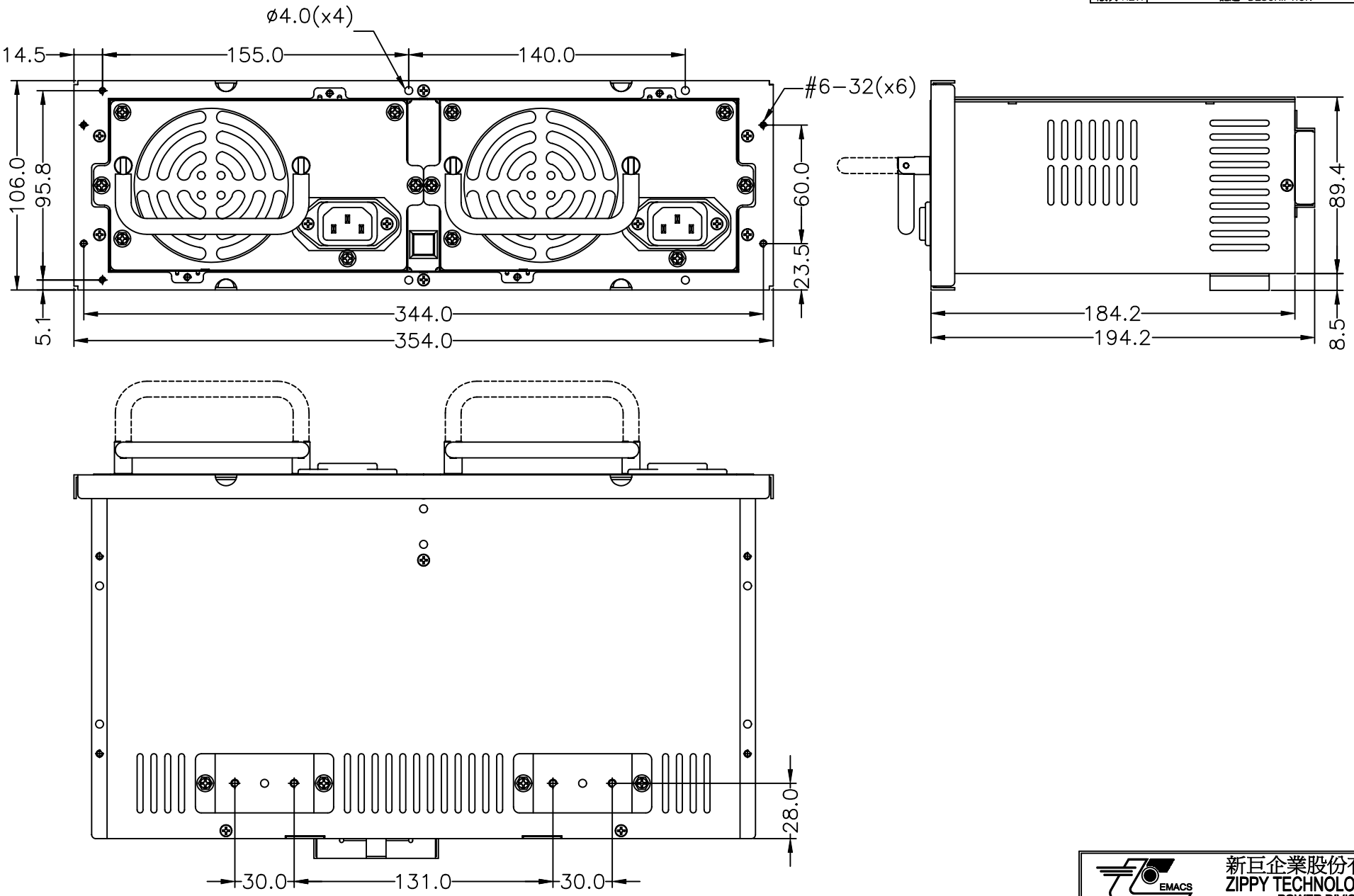

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1.4 FEATURES

REDUNDANCY	Redundant function of the power system will take place in a zero transfer time and back up the module output for each other,
HOT-SWAP FUNCTION	The power system provides a Hot-Swap function. You can easily replace the defective unit without any interference to the system when either one of the redundant power supply module fails or breaks down
BUZZER	A buzzer alarm will sound up whenever one of the power supply units fails. The alarm can be reset by a reset switch either located on the front control panel or from the rear of units. Remote control function is also available.
POWER DEFECTIVE SIGNAL	The power supply system provides a power defective signal through a power monitor card (PMC-21 / 22) to acknowledge the system.
LED'S	The 2 green LED lights (on/off) either on the control panel or from the rear of the power system indicate if any one of the two power modules is failed.
AC IN DETECTION (AC/PS1, 2) FOR EACH POWER MODULE	This signal output is a " LOW" level, at normal AC input for each power module. (It's not provided for RHH series)
EACH POWER MODULE IS IN (PD1, 2)	As the power module is plugged - in, we have a "LOW" level signal output. (It's not provided for RHH series)
POWER GOOD (PG1, 2) SIGNAL FOR EACH MODULE	As normal voltages output from the power module, we have a "LOW" level signal output.
DUAL OVP	OVER VOLTAGE PROTECTION circuit is available basically in each module, now one more OVP circuit after the ORING DIODE is provided additionally, they are used to protect unit failure due to any mistakes in connection at terminal blocks by user.

REMOTE SENSE for OUTPUT VOLTAGE +5V,+3.3V	To compensate the voltage outputs drop caused by the copper loss in longer cable run, two sets of VOLATGE REMOTE SENSE (+5V,+3.3V) are provided in RHX series.
NON - DISTINCTION OCP	The OCP designs are identical in either one of power module or both of two modules of the RHX series power supply system.
+12 V BUILT-IN SMART REGULATOR	A high efficiency, linear smart regulator is built in for each +12V output.
SOFT SWITCH	A 2.54 pitch and 3 pin connector is provided to match the control switch which endures extremely small current (Including two different mode of operation: One Remote On / Off Disable mode and another always On mode). Please refer to Section 1.8 "Soft Switch On / Off installation" for more details.
HOT - PLUG - in FUNCTION	A Hot-Plug-in function is provided in this system, It allows the power supply units in either Disk Array or File Servers to be removed or inserted with ease without opening and closing from chassis.
SAFETY (CHECK VENDOR)	Since the power supply unit in Disk Array / File Server are all of DC , (Including power for I / O Switch , and some other drives), it prevents a person from being shocked down by high AC voltage during any installation or Hot-Swap procedure.
AC INPUT FULL RANGE	No worry about failure of power supply unit because of your different power sources. Full range of input voltage for each RHX POWER MODULE is available covering from 90V to 264V single phase AC voltage..
ACTIVE POWER FACTOR CORRECTOR	Active POWER FACTOR CORRECTOR in RHX design is useful to reduce more than 63% of input RMS current better than any conventional power supply unit, and to upgrade the power source utilization, which is recognized by the EN61000-3-2 regulation.
ELECTRO-MAG NETIC INTERFERENCE	Our Built - in EMI suppression circuit to eliminate any electro - magnetic interference are fully complying with **CISPR 22 (EN 55022) ,及 FCC code.**
COMPATIBILITY (RHD only)	The enclosure of RHD power supply system is designed identical to the Big L form factor power supply, so that the Big L form factor and the redundant power system can be compatible under the proper arrangement.

1.5 SPECIFICATIONS

PRODUCT SPECIFICATIONS
MODEL：RHD/H/I-4400P
400 WATT HIGH PERFORMANCE POWER SUPPLY with ACTIVE POWER FACTOR CORRECTION

A、INPUT CHARACTERISTICS：

1、VOLTAGE： FULL RANGE, SINGLE PHASE, 90 264VAC
2、FREQUENCY： 47 63HZ
3、INPUT CURRENT： 2.5A（RMS）FOR 230VAC
7A（RMS）FOR 115VAC
4、INRUSH CURRENT： 65A MAX. FOR 115 VAC PER MODULE
125A MAX. FOR 230 VAC PER MODULE

B、OUTPUT CHARACTERISTICS：

OUTPUT	OUTPUT CURRENT		OUTPUT VOLTAGE REGULATION				OUTPUT RIPPLE & NOISE (p-p)
VOLTAGE	MIN.	MAX.	RANGE	MIN	NOM	MAX	MAX.
+5V	5.0A	35 A	±5%	+4.75	+5.00	+5.25	60mV
-5V	0A	0.8A	±5%	-4.75	-5.00	-5.25	100mV
+12V	2.5A	20A	±5%	+11.40	+12.00	+12.60	100mV
-12V	0A	1A	±5%	-11.40	-12.00	-12.60	100mV

TOTAL POWER: 400W (MAX.)
NOISE BANDWIDTH : DC TO 20MHZ.

C、SPECIFICATION

TEMPERATURE RANGE： OPERATING 0℃ 40℃，STORAGE -20℃ 80℃
HOLD UP TIME： 16ms MIN.
DIELECTRIC WITHSTAND： INPUT/OUTPUT 1500 VAC FOR 1 minute
INPUT TO FRAME GROUND 1500 VAC FOR 1 minute

HUMIDITY： 10 90%RH
EFFICIENCY： 70% TYPICAL AT 115V，AT FULL LOAD
POWER GOOD SIGNAL： ON DELAY 100ms TO 500ms，OFF DELAY 1ms
OVER LOAD PROTECTION： 110 150% MAX
OVER CURRENT PROTECTION : **+5V→44A 60A，+12V→29.1A 40.5A**
OVER VOLTAGE PROTECTION：**+5V→5.7V 6.5V，+12V→13.6V 15V**
EMI: **FCC CLASS B , CISPR 22 CLASS B**
SAFETY： EACH POWER UNIT SHALL BE FULLY COMPLYING WITH THE **UL / CSA / TÜV APPROVAL**
ALARM METHOD: 1) AUDIO ALARM 2) FAULT LED INDICATOR
3) POWER DEFECTIVE SIGNAL.
HOT- SWAPPABLE AND HOT- PLUG - IN CAPABILITY
MEET **IEC-1000-3-2 CLASS D (ACTIVE PFC)**
DIMENSION： 213mm*183mm*154mm (D*W*H)

PRODUCT SPECIFICATIONS
MODEL：RHD/H/I-4460P
460WATT HIGH PERFORMANCE REDUNDANT
POWER SUPPLY (ACTIVE POWER FACTOR CORRECTION)

A、INPUT CHARACTERISTICS：

1、VOLTAGE： FULL RANGE,SINGLE PHASE, 90 264VAC
2、FREQUENCY： 47 63HZ
3、INPUT CURRENT： 4A （RMS）FOR 230VAC
8A （RMS）FOR 115VAC
4、INRUSH CURRENT： 65A MAX. FOR 115 VAC PER MODULE
125A MAX. FOR 230 VAC PER MODULE

B、OUTPUT CHARACTERISTICS：

OUTPUT	OUTPUT CURRENT		OUTPUT VOLTAGE REGULATION				OUTPUT RIPPLE AND NOISE (p-p)
VOLTAGE	MIN.	MAX.	RANGE	MIN	NOM	MAX	MAX.
+5V	5.0A	40 A	±5%	+4.75	+5.00	+5.25	60mV
-5V	0A	0.8A	±5%	-4.75	-5.00	-5.25	100mV
+12V	2.5A	27A	±5%	+11.40	+12.00	+12.60	100mV
-12V	0A	1A	±5%	-11.4	-12.00	-12.60	100mV

TOTAL POWER: 460W (MAX.)
NOISE BANDWIDTH : DC TO 20MHZ.

C、SPECIFICATION

TEMPERATURE RANGE：OPERATING 0℃ 40℃，STORAGE -20℃ 80℃
HOLD UP TIME： 16ms MIN.

DIELECTRIC WITHSTAND： INPUT/OUTPUT 1500 VAC FOR 1 minute
INPUT TO FRAME GROUND 1500 VAC FOR 1 minute
HUMIDITY： 10 90%RH
EFFICIENCY： 70% TYPICAL AT 115V，AT FULL LOAD
POWER GOOD SIGNAL： ON DELAY 100ms TO 500ms，OFF DELAY 1ms
OVER LOAD PROTECTION： 110 150% MAX
OVER CURRENT PROTECTION : **+5V→44A 60A，+12V→27.5A 37.5A**
OVER VOLTAGE PROTECTION：**+5V→5.7V 6.5V，+12V→13.6V 15V**
EMI: **FCC CLASS B , CISPR 22 CLASS B**
SAFETY： EACH POWER UNIT SHALL BE FULLY COMPLYING WITH THE **UL / CSA / TÜV APPROVAL**
ALARM METHOD: 1) AUDIO ALARM 2) FAULT LED INDICATOR
3) POWER DEFECTIVE SIGNAL
HOT-SWAPPABLE & HOT-PLUGGABLE CAPABILITY
MEET **IEC-1000-3-2 CLASS D (ACTIVE PFC)**
DIMENSION： 213mm*183mm*154mm (D*W*H)

PRODUCT SPECIFICATIONS
MODEL：RHD/H/I -6400P
400WATT ATX HIGH PERFORMANCE REDUNDANT
POWER SUPPLY (ACTIVE POWER FACTOR CORRECTION)

A、INPUT CHARACTERISTICS：

1、VOLTAGE： FULL RANGE, SINGLE PHASE, 90 264VAC
2、FREQUENCY： 47 63HZ
3、INPUT CURRENT： 2.5A（RMS）FOR 230VAC; 7A（RMS）FOR 115VAC
4、INRUSH CURRENT： 65A MAX. FOR 115 VAC PER MODULE
125A MAX. FOR 230 VAC PER MODULE

B、OUTPUT CHARACTERISTICS：

OUTPUT	OUTPUT CURRENT		OUTPUT VOLTAGE REGULATION				OUTPUT RIPPLE & NOISE (p-p)
VOLTAGE	MIN.	MAX.	RANGE	MIN	NOM	MAX	MAX.
+5V	5.0A	35 A	±5%	+4.75	+5.00	+5.25	60mV
-5V	0A	0.8A	±5%	-4.75	-5.00	-5.25	100mV
+12V	2.5A	20A	±5%	+11.40	+12.00	+12.60	100mV
-12V	0A	1A	±5%	-11.4	-12.00	-12.60	100mV
+3.3V	1.0A	28A	±5%	+3.13	+3.33	+3.47	60mV
+5VSB	0.1A	2A	±5%	+4.75	+5.00	+5.25	60mV

TOTAL POWER: 400W (MAX.)
NOISE BANDWIDTH : DC TO 20MHZ.

C、SPECIFICATION

TEMPERATURE RANGE： OPERATING 0℃ 40℃，STORAGE -20℃ 80℃
HOLD UP TIME： 16ms MIN.
DIELECTRIC WITHSTAND： INPUT/OUTPUT 1500 VAC FOR 1 minute
INPUT TO FRAME GROUND 1500 VAC FOR 1 minute
HUMIDITY： 10 90%RH
EFFICIENCY： 67% TYPICAL AT 115V，AT FULL LOAD
POWER GOOD SIGNAL： ON DELAY 100ms TO 500ms，OFF DELAY 1ms
OVER LOAD PROTECTION： 110 150% MAX
OVER CURRENT PROTECTION :**+5V→44A 60A; +3.3V→33A 45A; +12V→29.1A 40.5A**
OVER VOLTAGE PROTECTION：**+5V→5.7V 6.5V; +3.3V→3.9V 4.3V;**
+12V→13.6V 15V
EMI: **FCC CLASS B , CISPR 22 CLASS B**
SAFETY： EACH POWER UNIT SHALL BE FULLTY COMPLYING WITH THE **UL / CSA / TÜV APPROVAL**
ALARM METHOD: 1) AUDIO ALARM 2) FAULT LED INDICATOR
3) POWER DEFECTIVE SIGNA
HOT-SWAPPABLE & HOT-PLUGABLE CAPABILITY
MEET **IEC-1000-3-2 CLASS D (ACTIVE PFC)**
DIMENSION： 213mm*183mm*154mm (D*W*H)

PRODUCT SPECIFICATIONS
MODEL：RHD/H/I -6460P
460WATT ATX HIGH PERFORMANCE
REDUNDANT POWER SUPPLY (ACTIVE POWER FACTOR CORRECTION)

A、INPUT CHARACTERISTICS：

1、VOLTAGE： ULL RANGE, SINGLE PHASE, 90 264VAC
2、FREQUENCY： 47 63HZ
3、INPUT CURRENT： A RMS）FOR 230VAC; 8A（RMS）FOR 115VAC
4、INRUSH CURRENT： 65A MAX. FOR 115 VAC PER MODULE
125A MAX. FOR 230 VAC PER MODULE

B、OUTPUT CHARACTERISTICS：

OUTPUT	OUTPUT CURRENT		OUTPUT VOLTAGE REGULATION				OUTPUT RIPPLE & NOISE (p-p)
VOLTAGE	MIN.	MAX.	RANGE	MIN	NOM	MAX	MAX.
+5V	5.0A	40 A	±5%	+4.75	+5.00	+5.25	60mV
-5V	0A	0.8A	±5%	-4.75	-5.00	-5.25	100mV
+12V	2.5A	27A	±5%	+11.40	+12.00	+12.60	100mV
-12V	0A	1A	±5%	-11.4	-12.00	-12.60	100mV
+3.3V	1.0A	30A	±5%	+3.13	+3.33	+3.47	60mV
+5VSB	0.1A	2A	±5%	+4.75	+5.00	+5.25	60mV

TOTAL POWER: 460W (MAX.).
NOISE BANDWIDTH : DC TO 20MHZ.

C. SPECIFICATION

TEMPERATURE RANGE： OPERATING 0℃ 40℃，STORAGE -20℃ 80℃
HOLD UP TIME： 16ms MIN.
DIELECTRIC WITHSTAND： INPUT/OUTPUT 3000 VAC FOR 1 minute
INPUT TO FRAME GROUND 1500 VAC FOR 1 minute
HUMIDITY： 10 90%RH
EFFICIENCY： 67% TYPICAL AT 115V，AT FULL LOAD
POWER GOOD SIGNAL： ON DELAY 100ms TO 500ms，OFF DELAY 1ms
OVER LOAD PROTECTION： 110 150% MAX
OVER CURRENT PROTECTION : **+5V→44A 60A; +3.3V→27.5A 37.5A;**
+12V→29.1A 40.5A
OVER VOLTAGE PROTECTION：**+5V→5.7V 6.5V; 3.3V→13.6V 15V;**
+12V→13.6V 15V
EMI: **FCC CLASS B , CISPR 22 CLASS B**
SAFETY: EACH POWER UNIT SHALL BE FULLY COMPLYING WITH THE **UL / CSA / TÜV APPROVAL**
ALARM METHOD: 1) AUDIO ALARM 2) FAULT LED INDICATOR
3) POWER DEFECTIVE SIGNAL
HOT- SWAPPABLE & HOT-PLUGGABLE CAPABILITY
MEET **IEC-1000-3-2 CLASS D (ACTIVE PFC)**
DIMENSION： 213mm*183mm*154mm (D*W*H)

1.6 INSTALLATION & TESTING

1. Please bear in mind never plug in AC outlet at first place.
2. Installation of power supply into the chassis by using mounting hardware, care should be taken that all mounting holes of power supply should be matched up with those inside the chassis.
3. Connect the output wires into the right connecting position (identified as CN3, CN4, CN5..) of the control board.
4. Attach the 6-pin (for AT system), 20-pin or 24-pin connectors (for ATX system) with correct pin assignments into different motherboards, following the motherboard instructions. They should all to be matched each other, **otherwise unpredictable damage could be happened.**
5. Attach the remaining power supply connectors to various peripherals in needed off. These are important to keep good connections with outside world.
6. Please attach to the CN16 aerial connector, should be any ATX REMOTE ON function available.

Soft Power Function:
Perhaps you would like to test the redundancy function before covering in your system chassis. Be sure to Short the CN16 (PIN 1), AND (PIN2) terminals at first, Please refer to fig. 9. for Further details.

You will notice that all LED , external warning LEDs are light in GREEN1 color, if the power unit is operating properly. Warning Buzzer in a power supply system will sound if any one of the power cord is removed,. the individual LED (on the rear side or on the front of control panel) indicating the power supply's status will not light neither, and the power system will continue to backup the power output without any effecting normal operation of the computer system.

Users can reset the Warning Buzzer by pressing a buzzer reset switch at the rear side or the front control panel in the system chassis while the Buzzer continues warning. Refer to some drawing on Sec. 1.3. The reset switch can also be opereated by connection wires provided with the power supply system (Please refer to Sec. 1.9).

After plug in the power cord disconnected for power supply system testing purpose before, now the Warning Buzzer silenced, external warning LED turn on GREEN again. You can begin to test another power supply by performing the same procedure mentioned above.

If you want to use the power defective signa for certain purpose, there is a two pins connector (refer to the drawing in Sec. 1.3 and table in Sec. 1.9). It should be connected to the PMC card (for NOVELL system) or faulty alert board (FAB-5, for Windows NT) properly.
Please refer to the PMC or FAB-5 User's Manual for details.

Turn off power supplies and main on / off switch, put on the cover of chassis and tighten all screws retained before. Now, you have already completed the installation of a RH**X** redundant power supply system.

1.7 HOT-SWAP PROCEDURES

Please check with the following items at the very beginning against a defective power supply unit.

Locate the defective power supply by examining the indication of the individual LED or the LED on the front control panel . (Power unit is defective if LED is extinguished,.)

B) **Unplug** the power cord of defective power supply unit from AC inlet.

C) **Unscrew** all mounting screws fixing the defective power supply unit.

D) Pulling out the defective unit

E) Replace with a new power supply unit .

F) **Plug in the power cord.**

Check the LED indicators which shows the total power system status. It must be from FLASHING status to light GREEN or from RED to GREEN color. OTHERWISE, PLEASE CONTACT your local distributor / agent.

H) Screwing all mounting screws to fix the new power supply unit .

I) If you want to simulate the defective symptom of a NEW power supply unit, please refer to Section 1.6 INSTALLATION & TESTING.

1.8 SOFT SWITCH ON / OFF INSTALLATION

There is a new design of CN16 (2.54 *3 PIN) PIN ASSIGNMENT on the RHX backplane per as shown in Fig.2. Two kind of SOFT SWITCH ON / OFF function are available :

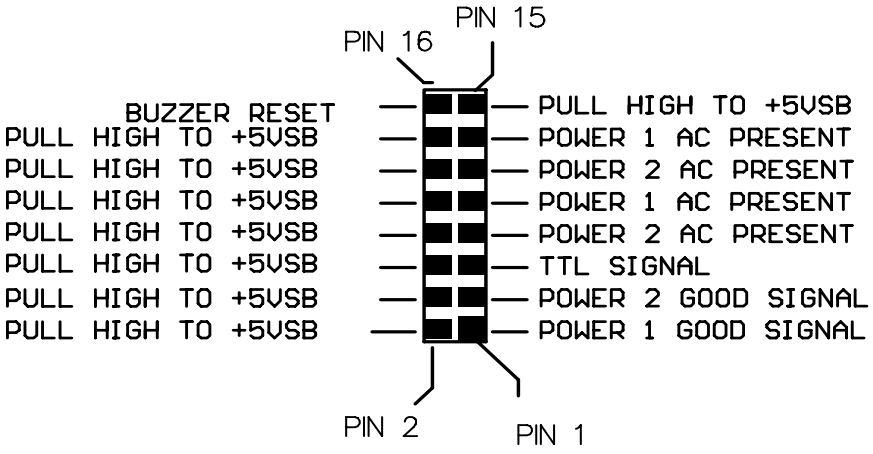
MODE 1: REMOTE ON/OFF DISABLE

If REMOTE ON/OFF function is available in your system (such as model ATX) Users can switch the power unit by using different connections of PIN 1and PIN3. Power On/Off can be controlled from the system motherboard by shorting the PIN 1 and PIN3, In an open circuit between PIN 1 and PIN3, under no way to control Power ON /OFF by system motherboard and neither to start Power On of the power supply unit. PIN 1 and PIN3 is of short condition if user do not want the SOFT SWITCH FUNCTION.

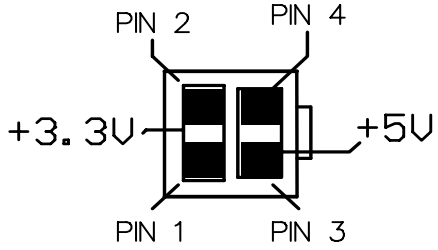
MODE 2 : Suppose the REMOTE ON/OFF function is NOT available of the system (such as model AT) user can use different connection of PIN1 and PIN2 to control Power On/Off. Power is always On by shorting the PIN 1 and PIN 2 , Otherwise, Power is in Off condition by keeping the PIN 1 and PIN 2 open.

1.9 PINOUTS AND FUNCTION OF CONNECTORS

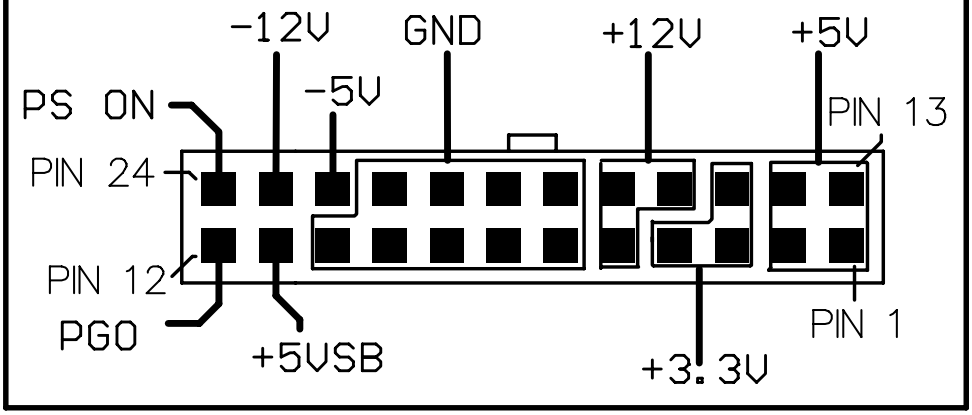
CN8 CONNECTOR PIN ASSIGNMENT



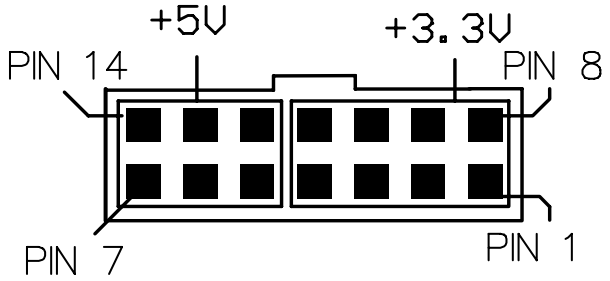
CN14 CONNECTOR PIN ASSIGNMENT



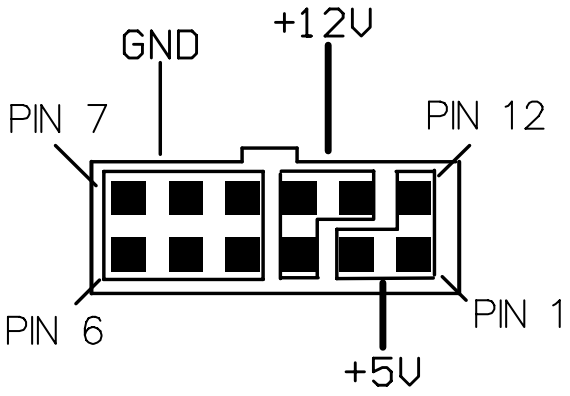
CN3 , CN4 CONNECTOR PIN ASSIGNMENT



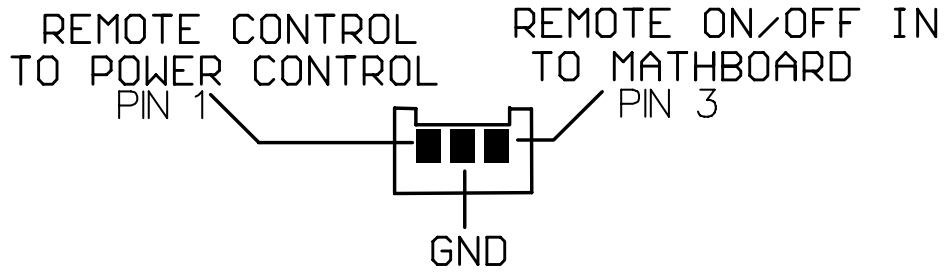
CN7 CONNECTOR PIN ASSIGNMENT



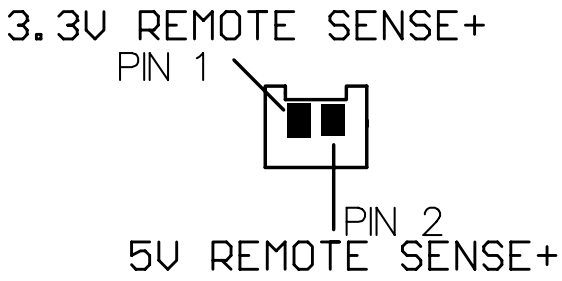
CN5&CN6 CONNECTOR PIN ASSIGNMENT



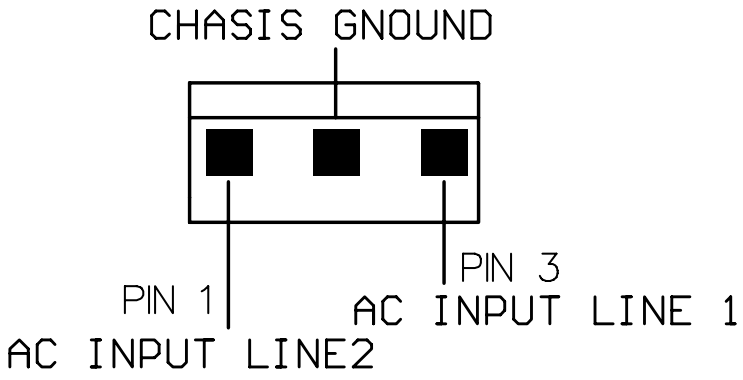
CN16 CONNECTOR PIN ASSIGNMENT



CN15 CONNECTOR PIN ASSIGNMENT



CN12 , CN13 CONNECTOR PIN ASSIGNMENT



1.10 TROUBLE SHOOTING

A "ticking" or "hissing" sound can be heard or the computer does not work. Please check it in following steps :

1. Check all of the connections (correct connector- plug-in , loose connection, wrong direction, etc.)
2. Make sure if each power cord been well plugged into the inlet. firmly.

Check for any short-circuits or defective peripherals by unhooking each peripheral once a time. Any time the system running properly, you have got it.

Once a buzzer sounds or the LED in RED light (or LED is flashing), please take care of it:

a. Over the **maximum** load condition (please refer to SEC. 1.5 specification)?

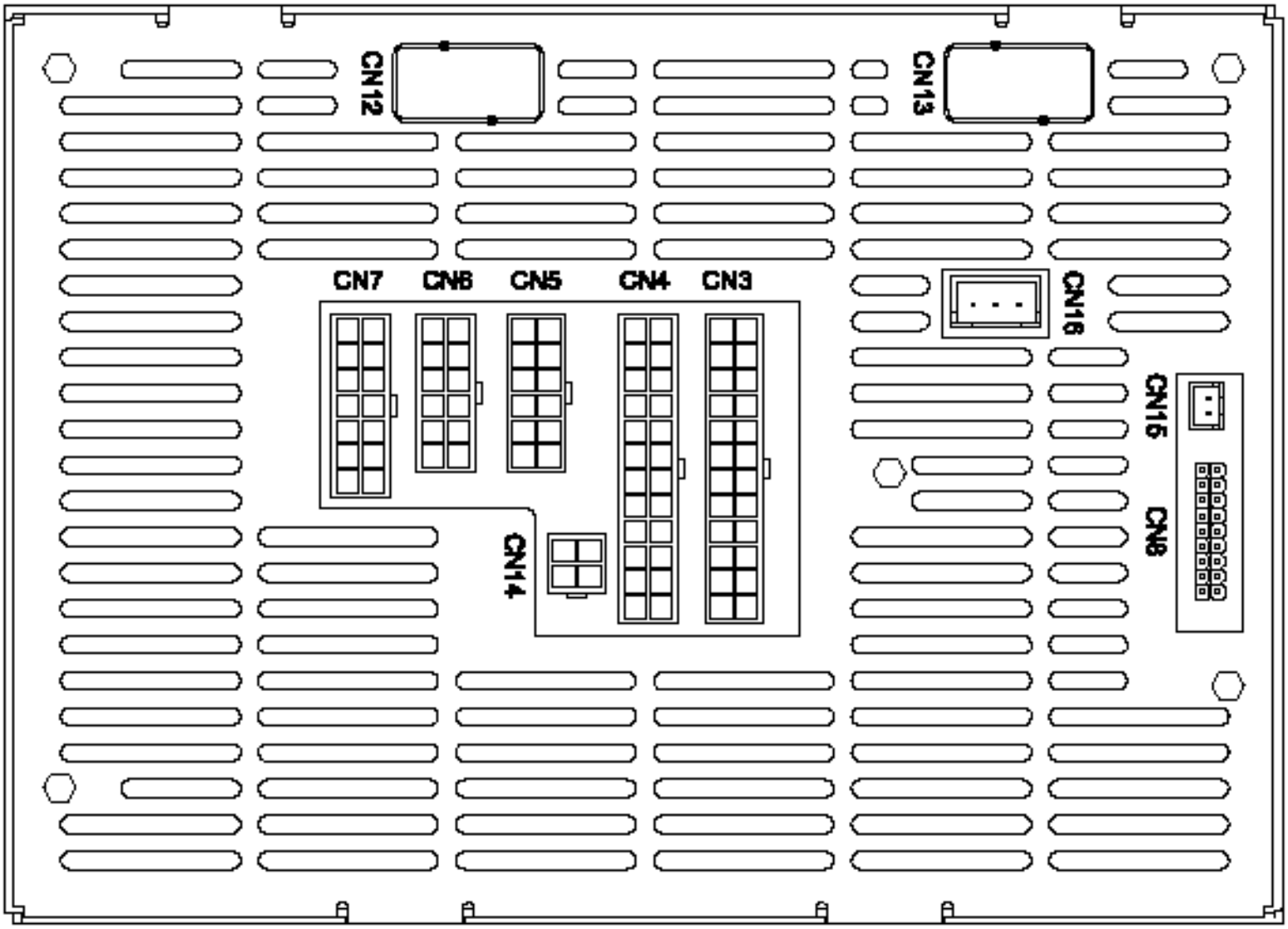
b. Is power cord plug in inlet firmly?

Should any of such condition be happened, please wait for 10 - 20 more seconds firstly to release the **protective status of the power supply unit**, then try some other steps .

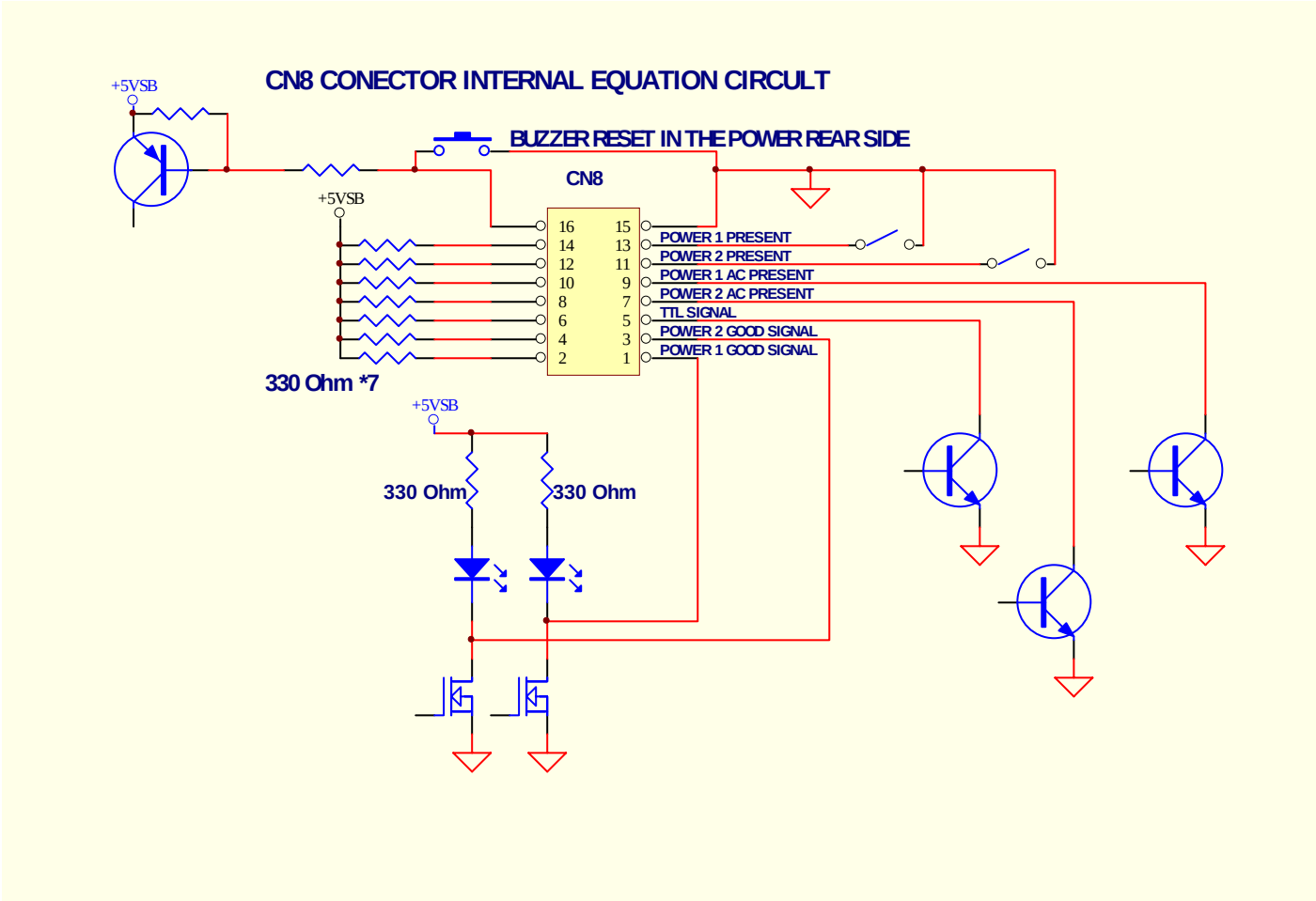
IF buzzer still sound or the LED indicates module defective, please locate the defective Power Unit by examining which LED is extinguished and perform hot-swap procedure by turning off the on / off switch, unplug the power cord of the defective unit, then replace it with a new power supply unit, (please keep the on / off switch of the new power unit to "OFF" position) . Plug the power cord and turn on the on / off switch after the unit is fixed properly. Please refer to the HOT-SWAP PROCEDURES for more detailed description, or return the defective power supply unit to your vendor for RMA operation.

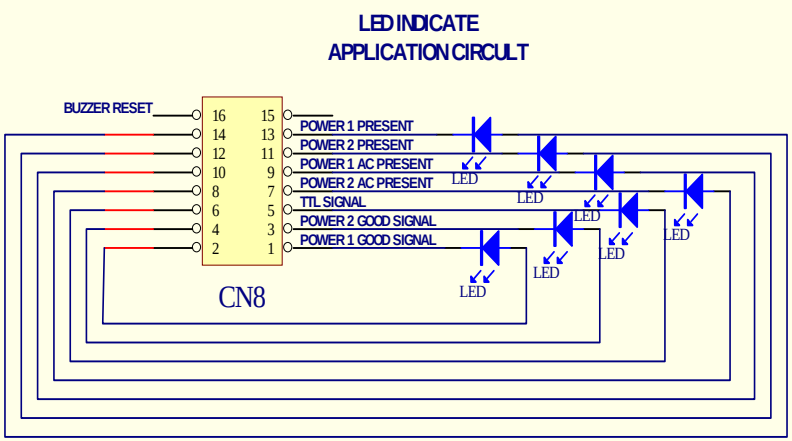
The description stated herein is subject to change without prior notice.

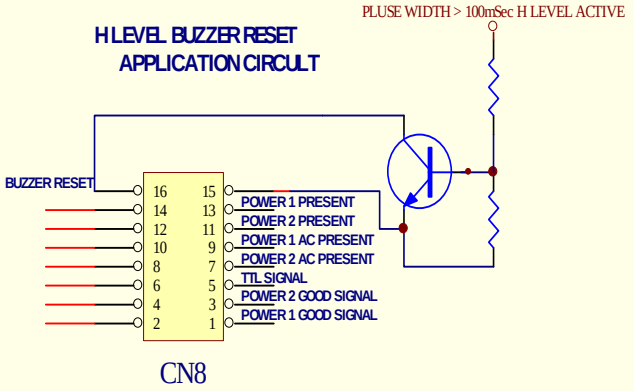
Appendix A一 Output Connector Pin Assignment

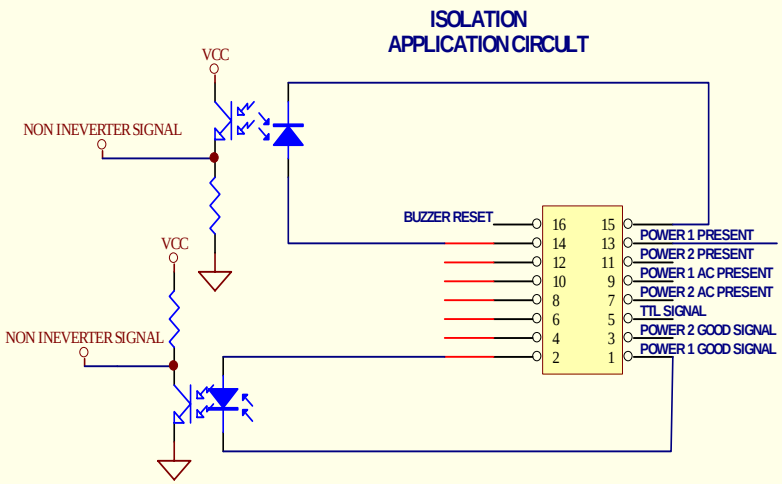


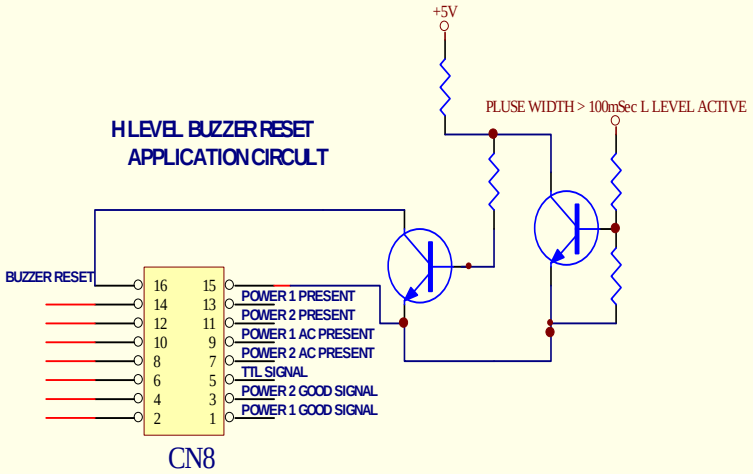
Appendix B —CN8 Connector Internal Equation Circuit




LED INDICATE
APPLICATION CIRCULT
BUZZER RESET
16 15
14 13
12 11
10 9
8 7
6 5
4 3
2 1
POWER 1 PRESENT
POWER 2 PRESENT
POWER 1 AC PRESENT
POWER 2 AC PRESENT
TTL SIGNAL
POWER 2 GOOD SIGNAL
POWER 1 GOOD SIGNAL
LED
CN8


PLUSE WIDTH > 100mSec H LEVEL ACTIVE
H LEVEL BUZZER RESET
APPLICATION CIRCULT
BUZZER RESET
16 15
14 13
12 11
10 9
8 7
6 5
4 3
2 1
POWER 1 PRESENT
POWER 2 PRESENT
POWER 1 AC PRESENT
POWER 2 AC PRESENT
TTL SIGNAL
POWER 2 GOOD SIGNAL
POWER 1 GOOD SIGNAL
CN8


ISOLATION
APPLICATION CIRCULT
VCC
NON INEVERTER SIGNAL
VCC
NON INEVERTER SIGNAL
BUZZER RESET
16 15
14 13
12 11
10 9
8 7
6 5
4 3
2 1
POWER 1 PRESENT
POWER 2 PRESENT
POWER 1 AC PRESENT
POWER 2 AC PRESENT
TTL SIGNAL
POWER 2 GOOD SIGNAL
POWER 1 GOOD SIGNAL


+5V
PLUSE WIDTH > 100mSec L LEVEL ACTIVE
H LEVEL BUZZER RESET
APPLICATION CIRCULT
BUZZER RESET
16 15
14 13
12 11
10 9
8 7
6 5
4 3
2 1
POWER 1 PRESENT
POWER 2 PRESENT
POWER 1 AC PRESENT
POWER 2 AC PRESENT
TTL SIGNAL
POWER 2 GOOD SIGNAL
POWER 1 GOOD SIGNAL
CN8

THE "RELIABILITY" SOLUTION TO - APPLICATION

新巨企業股份有限公司

ZIPPY TECHNOLOGY CORP.

POWER DIVISION

10F, NO.50, MIN-CHYUAN RD., SHIN TIEN CIRY,

TAIPEI,HSIEN, TAIWAN, R.O.C.

TEL: 886-2-29188512

FAX: 886-2-29134969

http://www.zippy.com.tw

E-mail: powersales@zippy.com.tw