

CHENBRO

6-Port 6Gb/s Mini-SAS Backplane

80H10321711A0

User's Manual

September / 2010

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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.

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Phone Support

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

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Safety Instruction

CAUTION:

Informs the user of conditions that might result in damage to hardware, corruption of customer data or application software, or long-term health hazard to people. A caution always precedes the information to which it relates.

WARNING:

Alerts the user to conditions that might result in injury or death. A warning always precedes the information to which it pertains.

Revision History

Date	Modifications
September / 30 / 2010	● First release

6Gb/s Backplane Specification

P/N: 80H10321711A0

Host Interface	2 x Mini-SAS interface (SFF-8087) for host side (w/lock housing), port distribution should be "4+2"
HDD Interface	SAS (15+7+7) and SATA-II (15+7) compatible with 3.5" HDD
Hot-Swap	Hard drives can be replaced during the system on
Display	LED indicates HDD status (Defined by Chenbro) Power LED – Blue light (HDD is on) Access LED – Green flash (HDD is working) Error indicator – Red light (HDD is abnormal)
Cooling	3-pin fan connector x 4
Power Connector	Standard +5V and +12V 4-pin power connector x 2
Other Connectors	2-pin power alarm connector x 1 2-pin alarm mute connector x 1 6-dip function switch for monitoring fan and temp 2-dip SGPIO function switch 4-pin HDD fail connector x 2 7-pin function connector for fan fail LED / power mute LED / global mute switch
Dimension	257.3 mm (Length) x 80.0 mm (Width) x 2.4 mm (Thickness)
Material	FR4 6 layer

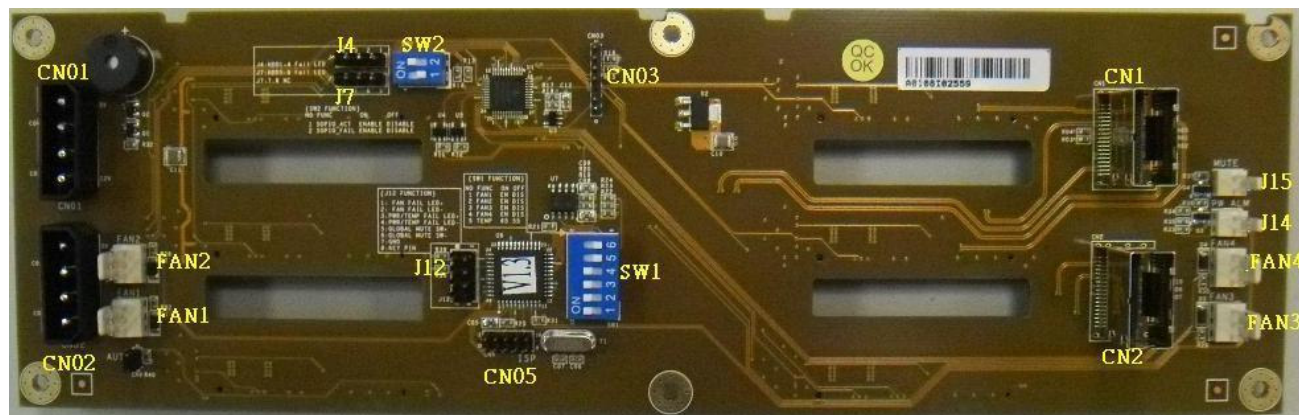
Accommodation Chassis

- RM21706

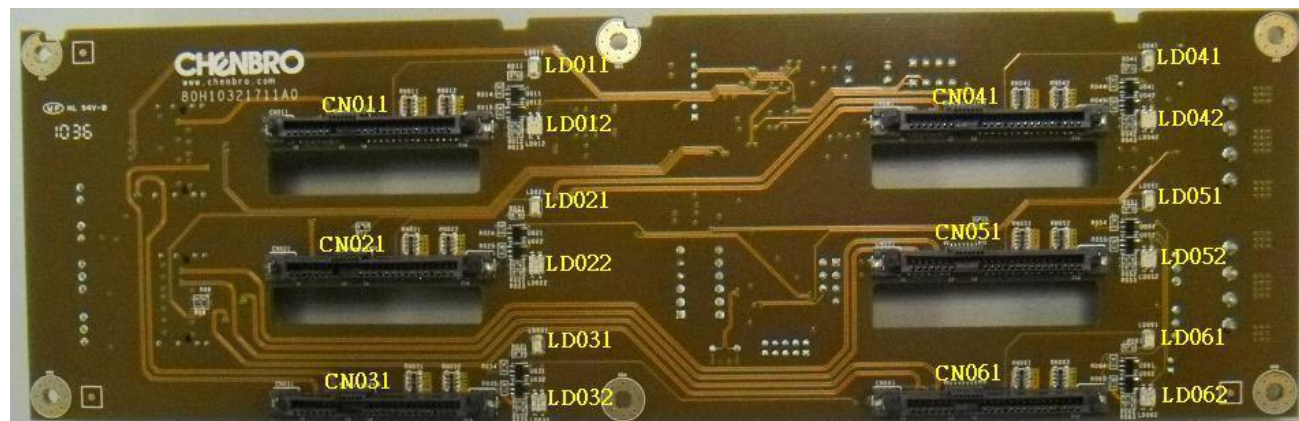
Backplane Layout

Backplane Connectors

Front View



Rear View

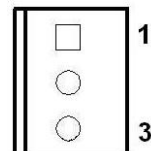


- (1) [LD011 / LD021 / LD031 / LD041 / LD051 / LD061] : “Blue lights on” indicated hard drive is power on.
- (2) [LD012 / LD022 / LD032 / LD042 / LD052 / LD062] :
“Green lights flash” indicated hard drive is working.
“Red lights on” indicated hard drive is abnormal or malfunction.

(3) [JF1 / JF2 / JF3 / JF4] : Fan connector (3pin)



Pin Number	Descriptions
1	GND
2	12V
3	FAN Clock Input



(4) [CN01 / CN02] : Power connector (+5V and +12V 4pin)



Pin Number	Descriptions
1	12V
2	GND
3	GND
4	5V

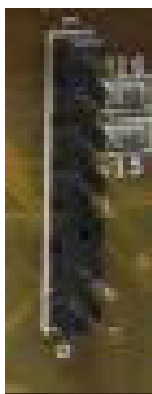
(5) [J15] : Alarm mute connector (To redundant power supply)



(6) [J14] : Power supply abnormal alarm connector (From redundant power supply)



(7) [CN03 / CN6] : Reserved for Chenbro use only.



(8) [SW1] : Fan and Temp function switch.



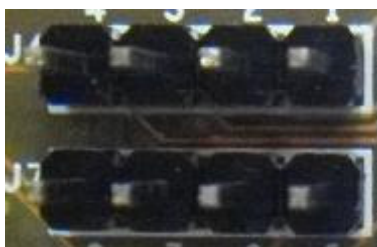
Pin Number	Monitor	On	Off
1	Fan1	Enable	Disable
2	Fan2	Enable	Disable
3	Fan3	Enable	Disable
4	Fan4	Enable	Disable
5	TEMP	65 degC	55 degC
6		NC	NC

(9) [SW2] : SGPIO function switch.



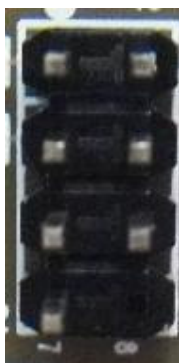
Pin Number	SGPIO	On	Off
1	SGPIO Active	Enable	Disable
2	SGPIO Fail	Enable	Disable

(10) [J4 / J7] : HDD fail connector (From raid card)



Pin	4	3	2	1
Define	HDD 4	HDD 3	HDD 2	HDD 1
Pin	8	7	6	5
Define	N/A	N/A	HDD 6	HDD 5

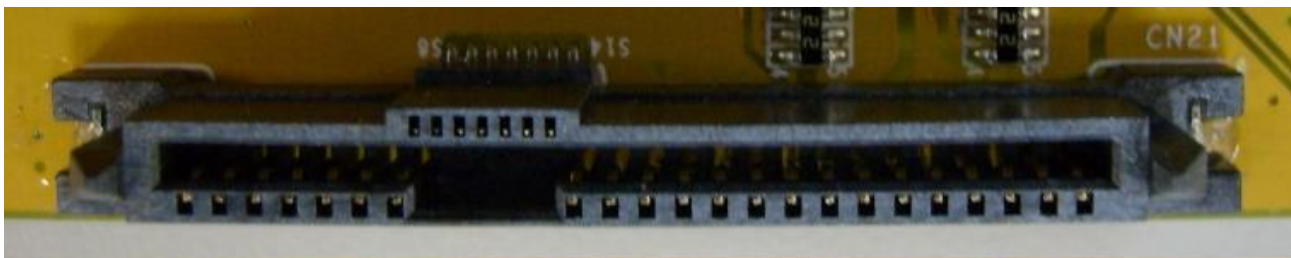
(11) [J12] : Connector of fan fail LED & Power temp fail LED & Global mute switch



Pin	1	2	3	4
Definition	FAN FAIL LED +	FAN FAIL LED -	POWER / TEMP FAIL LED +	POWER / TEMP FAIL LED -
Pin	5	6	7	8
Definition	GLOBAL MUTE SWITCH +	GLOBAL MUTE SWITCH -	GND	Key pin

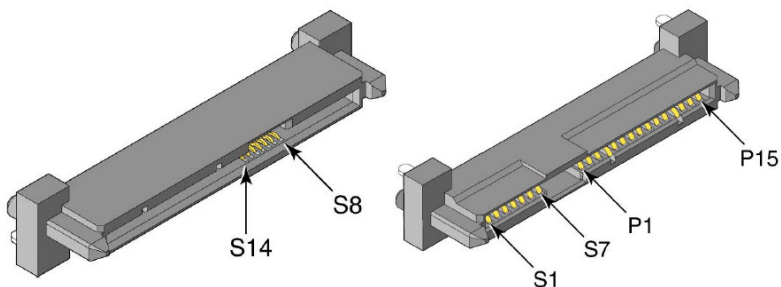
(12) [CN011 / CN021 / CN031 / CN041 / CN051 / CN061] :

To connect with hard drives (22-pin SATA-II or 29-pin SAS).



The CN011 & CN021 & CN031 & CN041 are controlled by MiniSAS CN1.

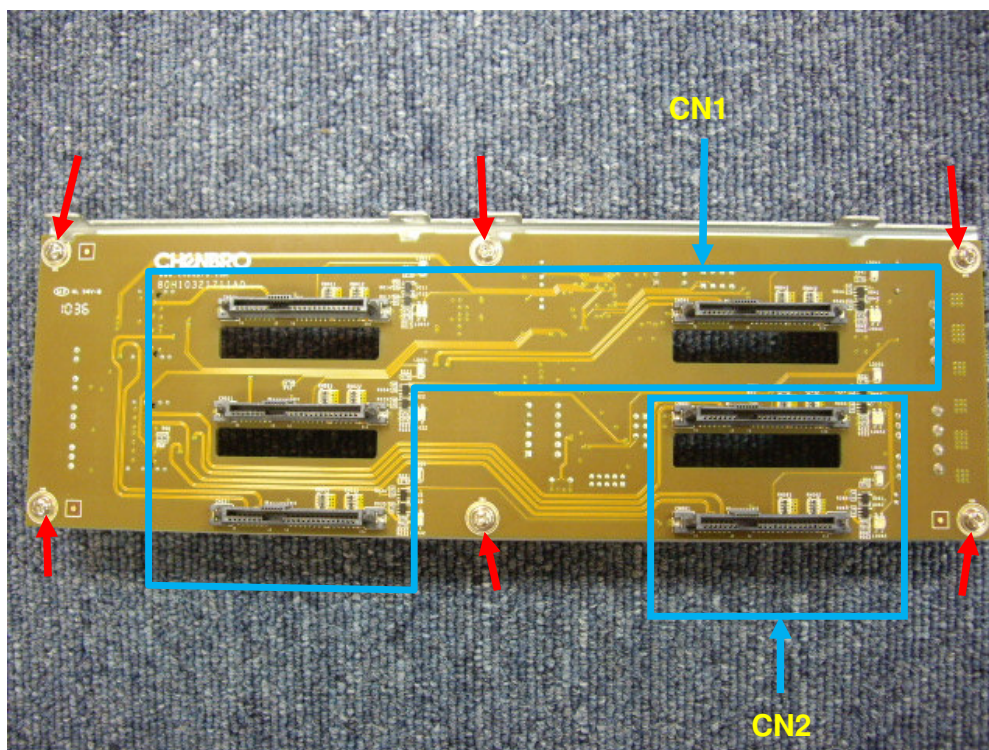
The CN051 & CN061 are controlled by MiniSAS CN2.



Pin NO.	Descriptions	Pin NO.	Descriptions
S1	GND	P1	NC
S2	RP	P2	NC
S3	RN	P3	NC
S4	GND	P4	GND
S5	TN	P5	POWER ENABLE
S6	TP	P6	GND
S7	GND	P7	5V PRE-CHARGE
S8	NC	P8	5V
S9	NC	P9	5V
S10	NC	P10	GND
S11	NC	P11	ACCESS SIGNAL
S12	NC	P12	GND
S13	NC	P13	12V PRE-CHARGE
S14	NC	P14	12V
		P15	12V

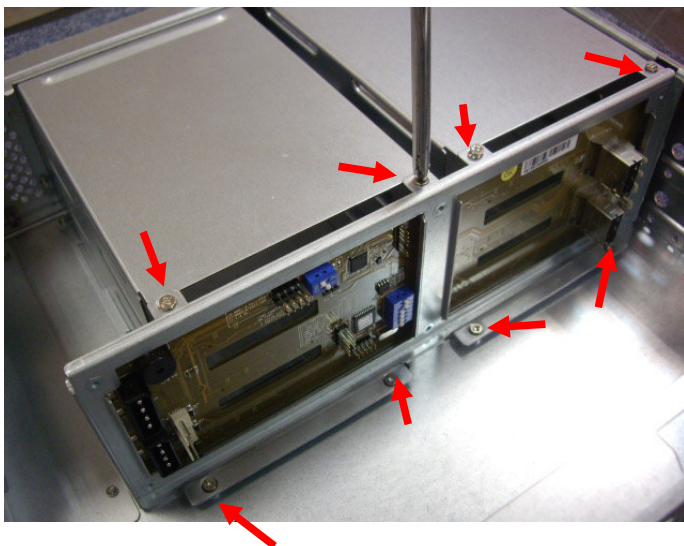
Fabricate sequence

1. Screw the backplane with the bracket.

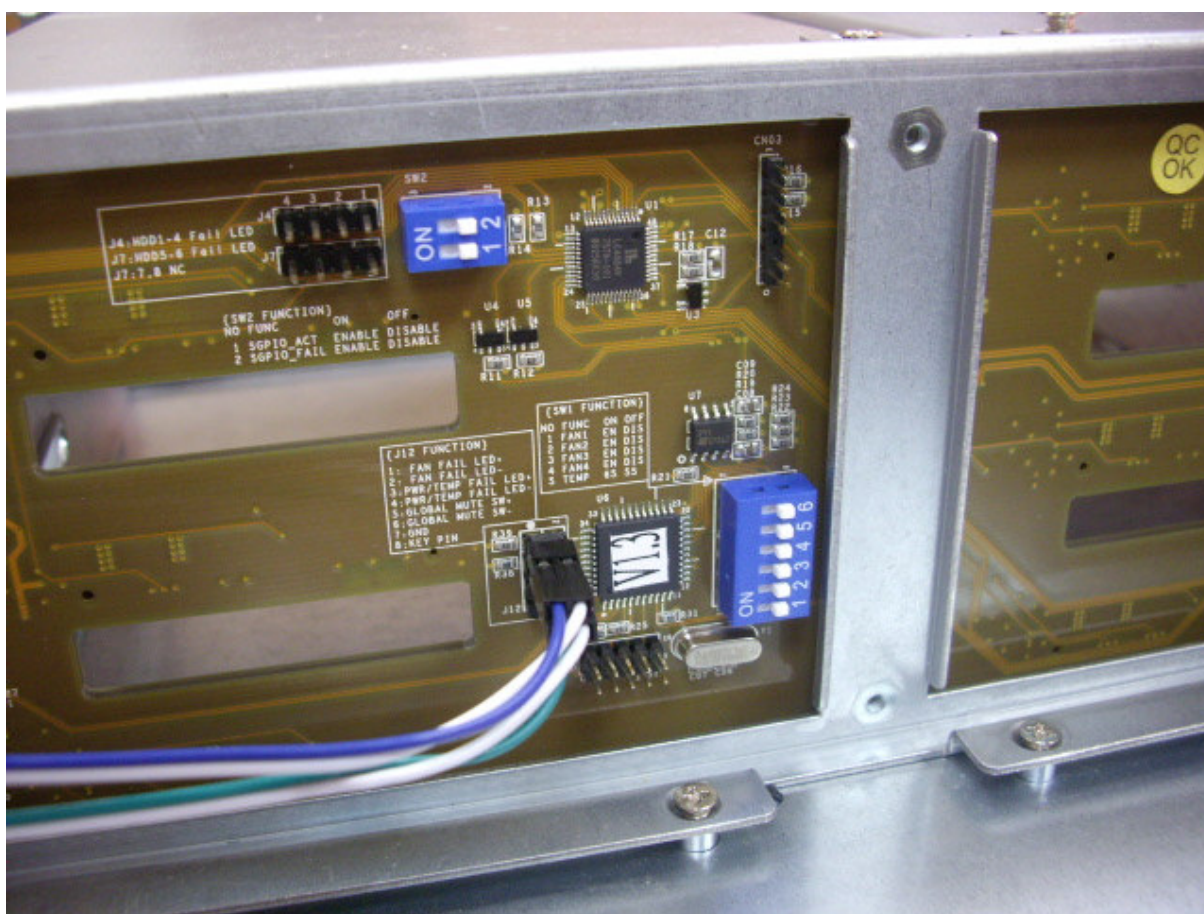


Note: HDD grouping definition responds to above blue mark

2. Screw the backplane bracket with the hard drive cage.

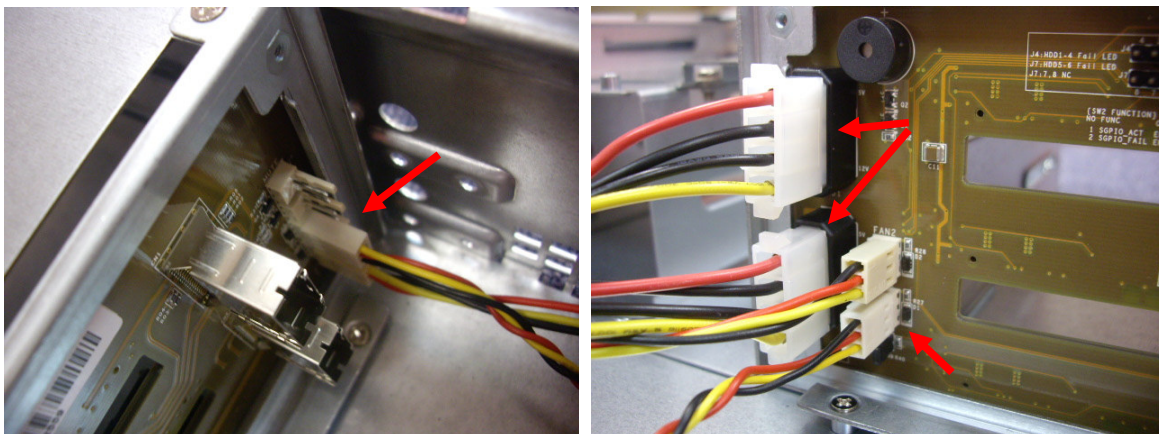


3. The front LED board is connected with the fan fail LED & power temp LED & global mute switch to backplane. [\[J12\]](#)



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- The middle fans and power are connected to the header on backplane. [JF1 / JF2/JF3 / JF4 & CN01 / CN02]



- The MiniSAS connectors are connected with the MiniSAS cables. [CN1 / CN2]

