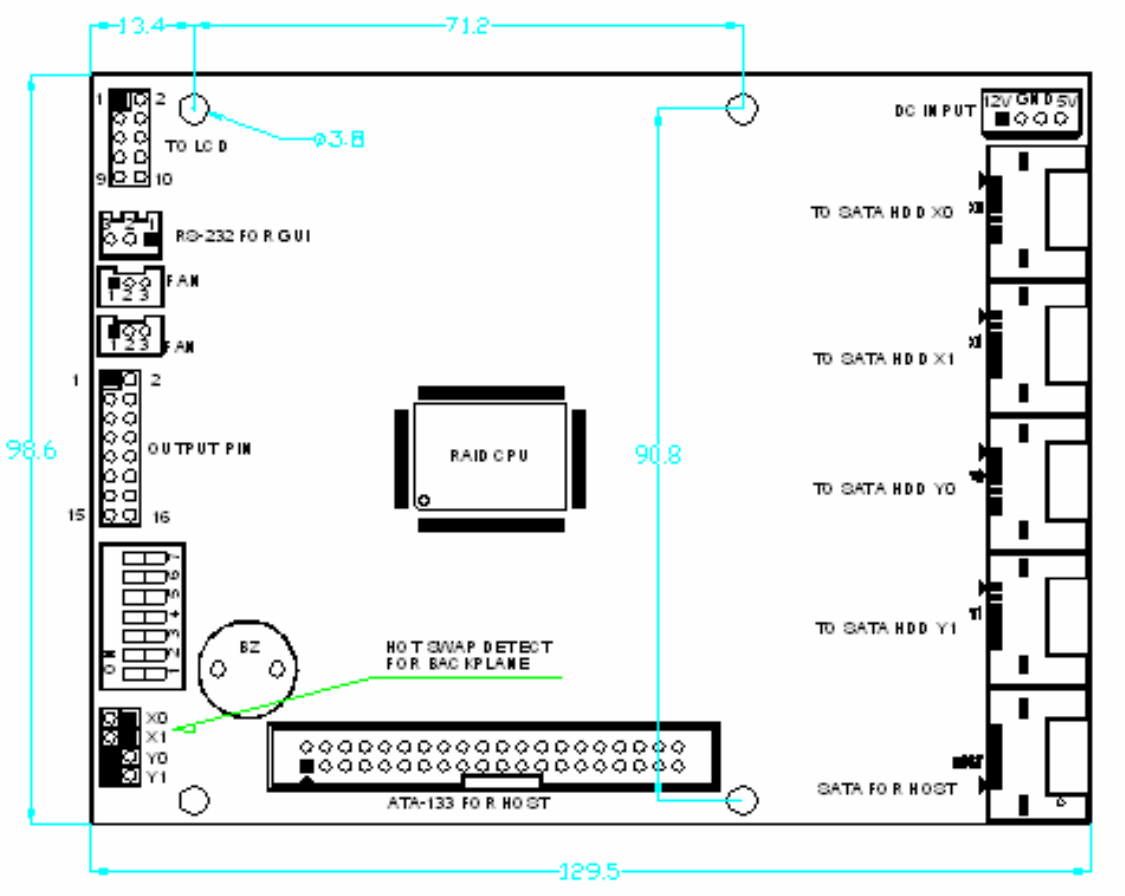
XtendLan

XtendLan RAID SATA 4C
User's Guide

1. System Board



2. Setting and Connecting

2.1. DC INPUT=> connect power connector of DC power in order to provide the power to RAID-SATA-4C.

2.2. RS232 =>GUI software is used for connecting the OS from HOST to monitor RAID-SATA-4C status.

PIN 1	TX
PIN 2	RX
PIN 3	GND

2.3. SATA TO HOST / ATA-133 FOR HOST =>
Please select SATA or ATA-133 to connect with HOST. Is not possible to connect both simultaneously.

2.4. BZ => The buzzer warning sound if HDD and fan failed

2.5. SW => Total for 7 sets of functions as below instruction:

Setting Mode

	SW1	SW2	SW3	SW4	SW5	SW6	SW7
ON	Master	Cable Select	Upgrade	N.C	Software	/	/
OFF	Slave	Default	Default	Default	Hardware	/	/

SW1 … Adjust HOST as MASTER or SLAVE
SW2 … Default OFF, if adjust to CABLE SELECT, then set SW1 at MASTER
SW3 … Default OFF, when upgrade firmware need to switch to ON
SW4 … Default OFF
SW5 … Set ON, works as JBOD, SW6, SW7 without
Set OFF, works as independent hardware RAID, mode is selected by SW6 –SW7.
SW6 - SW7 …
Use 4 HDD on X0/X1/Y0/Y1 – When SW6 = OFF & SW7=OFF, RAID mode is RAID 0 (striping)
Use 4 HDD on X0/X1/Y0/Y1 – When SW6 = OFF & SW7=ON, RAID mode is RAID 0+1
Use 4 HDD on X0/X1/Y0/Y1 – When SW6 = ON & SW7=OFF, RAID mode is NRAID
Use 4 HDD on X0/X1/Y0/Y1 – When SW6 = ON & SW7=ON, RAID mode is JBOD

2.6. FAN => There is two sets of fan, which use 3 wires 12V DC fan. The pin assignment definition is as below:

PIN 1	GND
PIN 2	12V
PIN 3	CLK

2.7. HOT SWAP DECTECT = Design for Hot Swap Function, Jumpers X0/X1/Y0/Y1

When hot-swap function demanded and hot-swap trays available then set for HDD-1 jumper X0 to ON (set Jumper). Same setting for HDD-2 (Y0 to ON), HDD-3 (X1 to ON), HDD-4 (Y1 to ON).

However, if you do not have hot swap assembly for HDD, please short circuit on X0 AND X1 AND Y0 AND Y1

2.8 Output PIN header

PIN	Title	Description
PIN 1	N.C	N.C
PIN 2	N.C	N.C
PIN 3	N.C	N.C
PIN 4	N.C	N.C
PIN 5	HDD-X1- Access	When HDD X1 R/W, is able to connect LED
PIN 6	HDD-X0- Access	When HDD X0 R/W, is able to connect LED
PIN 7	HDD-Y0- Access	When HDD X0 R/W, is able to connect LED

PIN 8	HDD-Y1- Access	When HDD X1 R/W, is able to connect LED
PIN 9	Power LED	Able to connect with power indicated LED
PIN 10	Access LED	Able to connect with HDD reading & writing LED
PIN 11	Buzzer Power	Control Buzzer to be ON or OFF mode
PIN 12	Total Fail	If any failure happen then pin is set to high and is possible connect with LED.
PIN 13	Temp Sensor	Able to connect with one set of thermal resistance sensors.
PIN 14	GND	(GND) Ground
PIN 15	3.3V	Able to provide 3.3V / 100 mA power
PIN 16	5V	Able to provide 5V / 500 mA power

2.9 LCD header

Connecting with 4 bit LCD module that is able to monitor RAID-SATA-4C status by LCD.

PIN.	PIN OUT	Level	Description
1	DB7	H/L	Data Bit7
2	DB6	H/L	Data Bit6
3	DB5	H/L	Data Bit5
4	DB4	H/L	Data Bit4
5	E	H,H=>L	Enable Signal
6	RS	H/L	Register Select
7	Vo	---	Contrast Adj
8	VSS	0V	Power Supply Ground
9	VCC	5V	Power Supply Voltage
10	K	0V	LED Power Supply Ground

3. Notice:

3.1 Please set HDD jumper at Master mode.

3.2 If output Pin need to be use as externally which is able to connect with 3.3V~5V LED and not necessary daisy chain resistance.