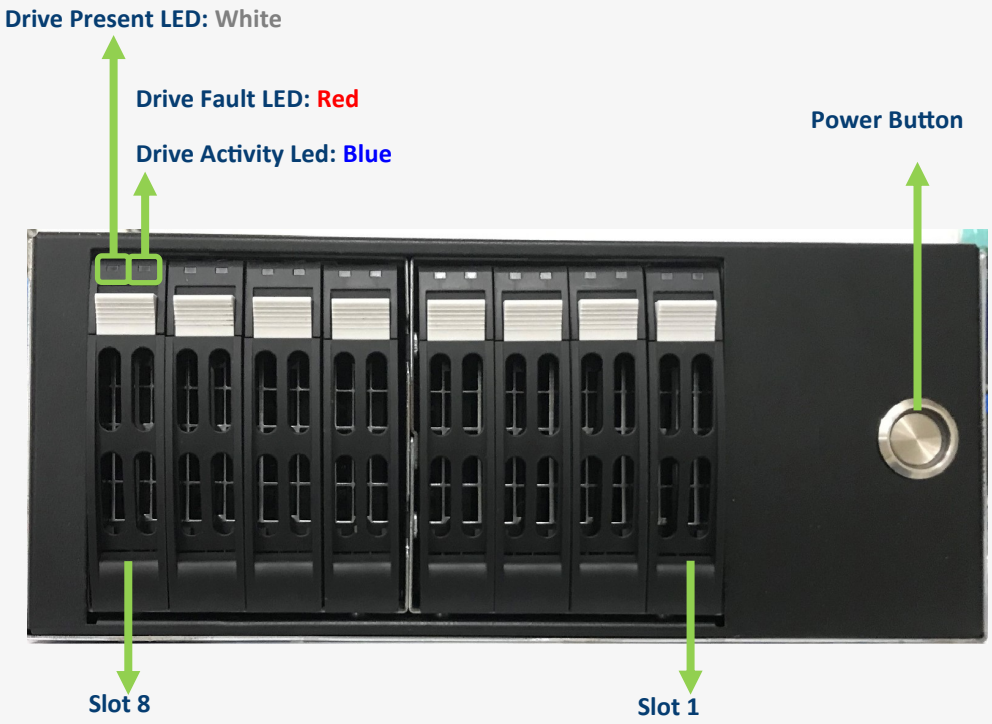
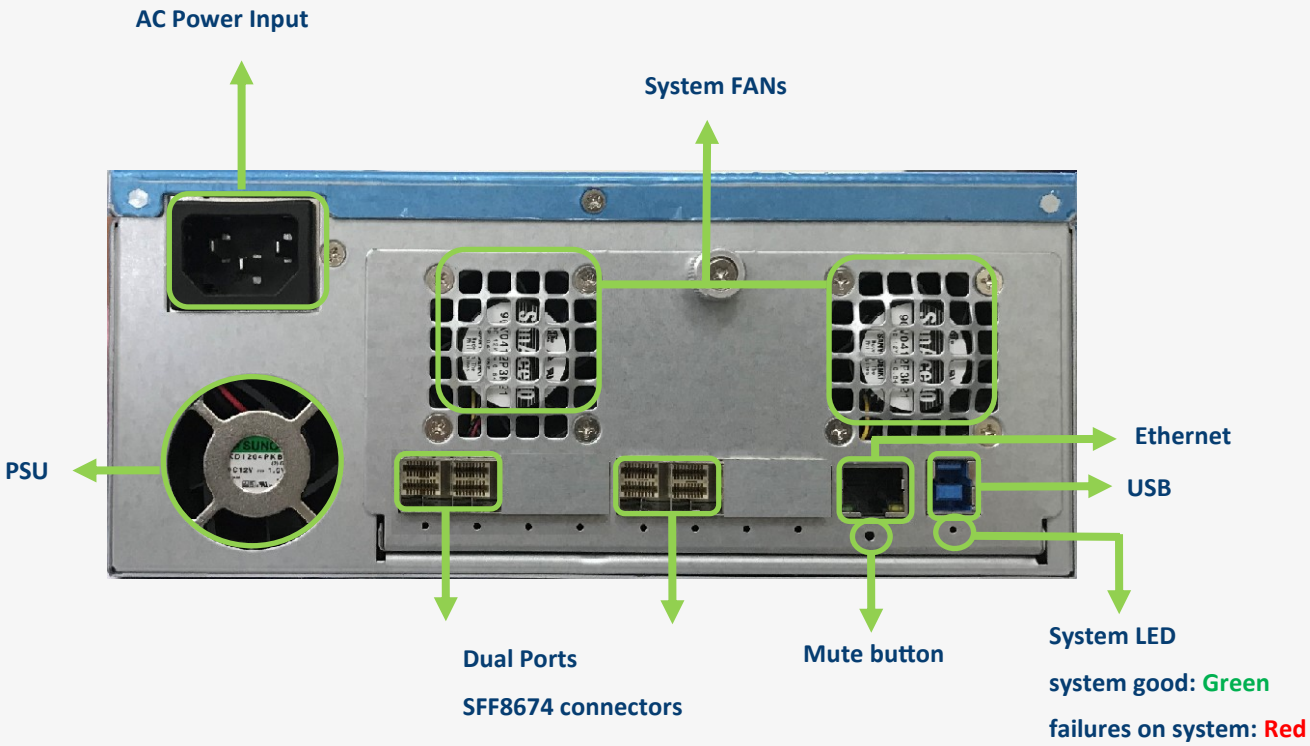
SAS4 8bay Passive JBOD

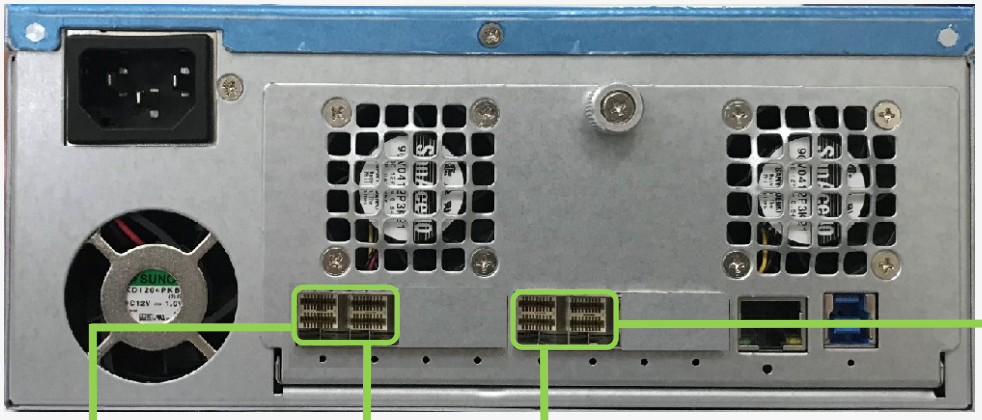
Front Panel



Rear I/O



SFF8674 Pin Definition and Mapping



SLOT [1:4] SAS 1st PHY

SLOT [1:4] SAS 2nd PHY

SLOT [5:8] SAS 1st PHY

SLOT [5:8] SAS 2nd PHY

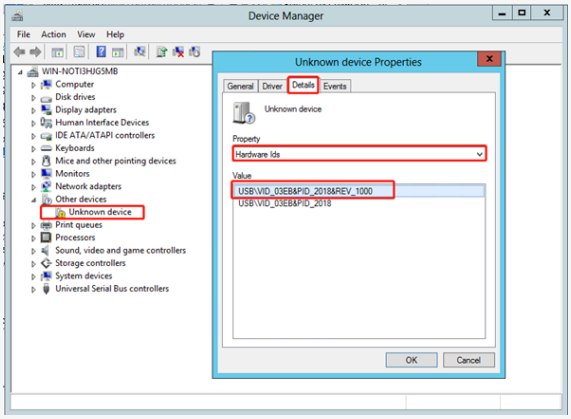
Dual Port SFF8674 connector				Dual Port SFF8674 connector			
Pin	Pin Names	Pin	Pin Names	Pin	Pin Names	Pin	Pin Names
A4	SLTO1_1st_RXP	A4	SLTO1_2ND_RXP	A4	SLTO5_1st_RXP	A4	SLTO5_2ND_RXP
A5	SLTO1_1st_RXN	A5	SLTO1_2ND_RXN	A5	SLTO5_1st_RXN	A5	SLTO5_2ND_RXN
A7	SLTO4_1st_RXP	A7	SLTO4_2ND_RXP	A7	SLTO8_1st_RXP	A7	SLTO8_2ND_RXP
A8	SLTO4_1st_RXN	A8	SLTO4_2ND_RXN	A8	SLTO8_1st_RXN	A8	SLTO8_2ND_RXN
B4	SLTO2_1st_RXP	B4	SLTO2_2ND_RXP	B4	SLTO6_1st_RXP	B4	SLTO6_2ND_RXP
B5	SLTO2_1st_RXN	B5	SLTO2_2ND_RXN	B5	SLTO6_1st_RXN	B5	SLTO6_2ND_RXN
B7	SLTO3_1st_RXP	B7	SLTO3_2ND_RXP	B7	SLTO7_1st_RXP	B7	SLTO7_2ND_RXP
B8	SLTO3_1st_RXN	B8	SLTO3_2ND_RXN	B8	SLTO7_1st_RXN	B8	SLTO7_2ND_RXN
C4	SLTO1_1st_TXP	C4	SLTO1_2ND_TXP	C4	SLTO5_1st_TXP	C4	SLTO5_2ND_TXP
C5	SLTO1_1st_TXN	C5	SLTO1_2ND_TXN	C5	SLTO5_1st_TXN	C5	SLTO5_2ND_TXN
C7	SLTO4_1st_TXP	C7	SLTO4_2ND_TXP	C7	SLTO8_1st_TXP	C7	SLTO8_2ND_TXP
C8	SLTO4_1st_TXN	C8	SLTO4_2ND_TXN	C8	SLTO8_1st_TXN	C8	SLTO8_2ND_TXN
D4	SLTO2_1st_TXP	D4	SLTO2_2ND_TXP	D4	SLTO6_1st_TXP	D4	SLTO6_2ND_TXP
D5	SLTO2_1st_TXN	D5	SLTO2_2ND_TXN	D5	SLTO6_1st_TXN	D5	SLTO6_2ND_TXN
D7	SLTO3_1st_TXP	D7	SLTO3_2ND_TXP	D7	SLTO7_1st_TXP	D7	SLTO7_2ND_TXP
D8	SLTO3_1st_TXN	D8	SLTO3_2ND_TXN	D8	SLTO7_1st_TXN	D8	SLTO7_2ND_TXN

Install USB Driver

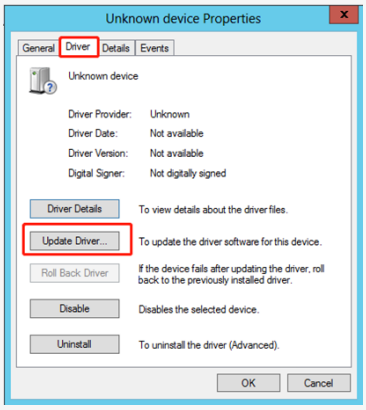
Step1: Download and install the CDC driver for unidentified device (VID_03EB&PID_2018)
Available at:

https://www.serialcables.com/wp-content/uploads/2018/11/SynergyUSBCDC_20180518.rar

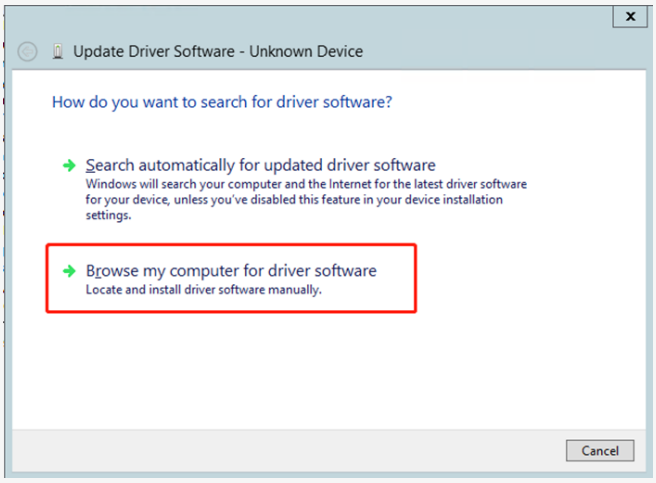
Note: No USB driver is required for Windows 10 and Linux



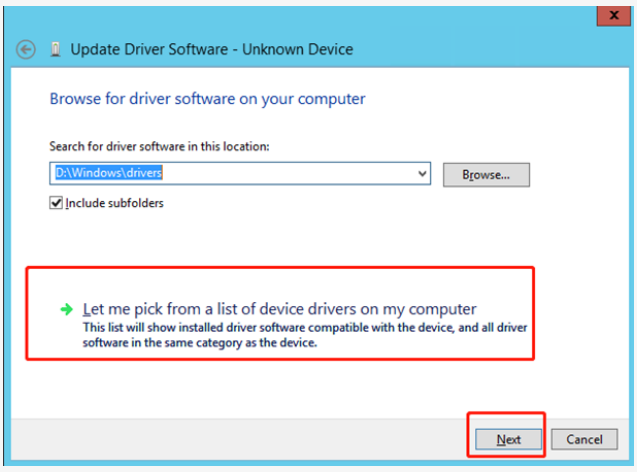
[Figure 1]



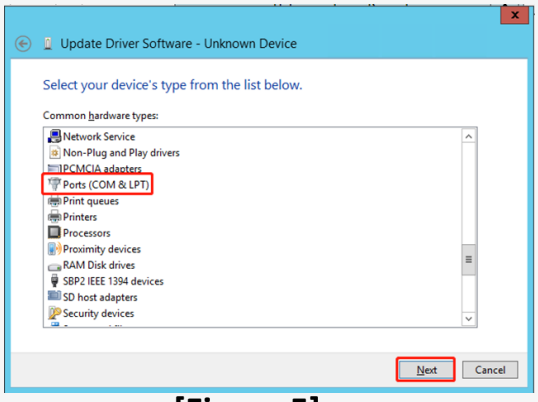
[Figure 2]



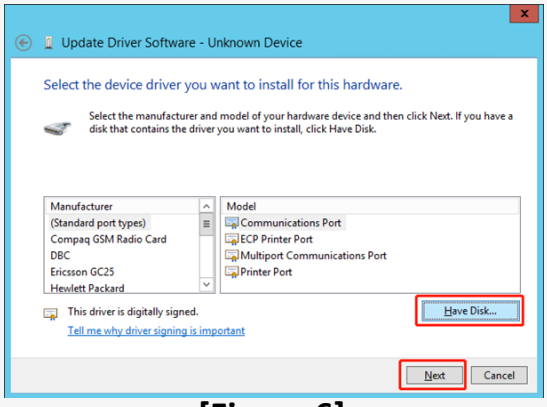
[Figure 3]



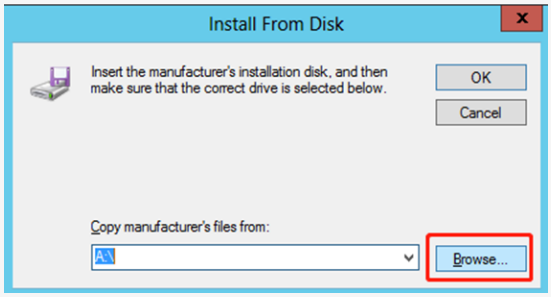
[Figure 4]



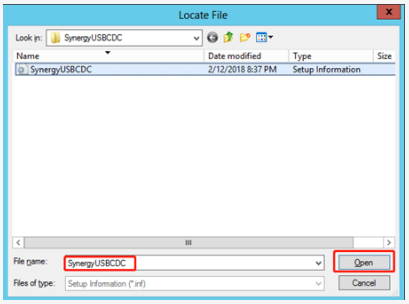
[Figure 5]



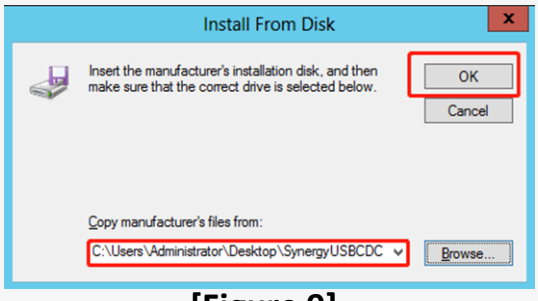
[Figure 6]



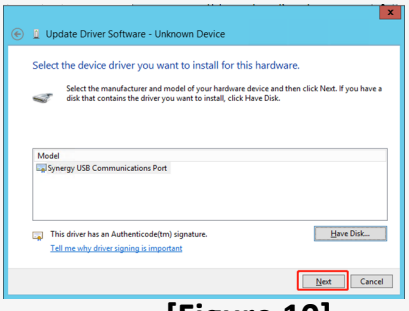
[Figure 7]



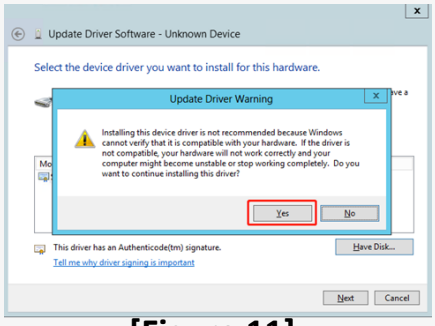
[Figure 8]



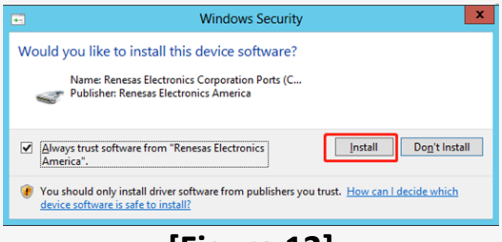
[Figure 9]



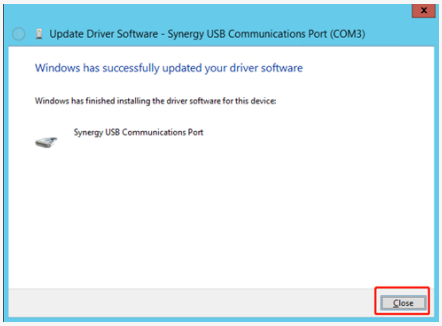
[Figure 10]



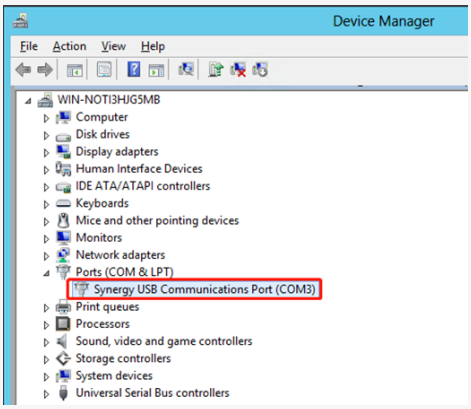
[Figure 11]



[Figure 12]



[Figure 13]

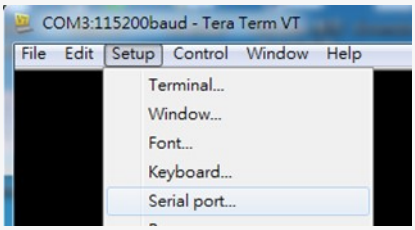


[Figure 14]

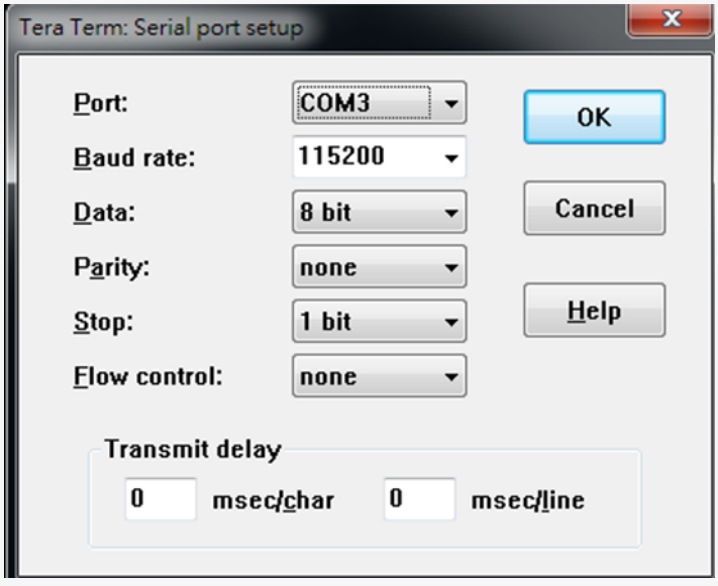
CLI Setup

Step 1. Install and launch Tera Term application
(or Hyper Terminal requires version 3.0 or higher).

Step 2: To ensure proper communications between SAS4 8bays passive JBOD controller and the VT100 Terminal emulation, please configure the VT100 Terminal emulation settings to the values shown below:



Step 3:
For “Port”, select COM3 in this example. (Depend on which COM port used on Host)
For “Baud rate”, select 115200.
For “Data”, select 8 bit. For “Parity”, select none.
For “Stop”, select 1 bit. For “Flow control”, select: none.
Click OK when you have finished your selections.



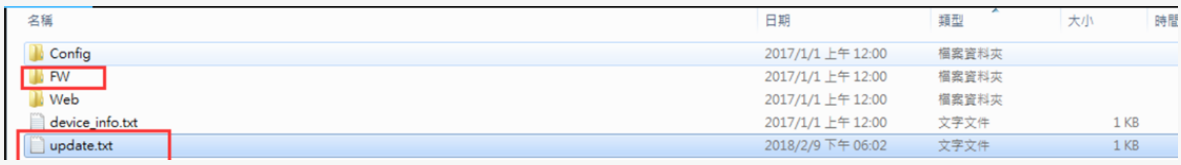
FW Upgrading

Step 1. Connect the USB port of JBOD to PC or laptop.

Step 2. Press the mute button in the rear of JBOD, then power on the JBOD.

Step 3.

a.) it will show an added USB device in PC or laptop.
b.) Put upgrading FW(i.e SAS4_MPB_JBOD_v0.0.2.srec) into the folder of FW.
c.) Put update.txt in the root folder.



Step 4. Power cycle JBOD to apply the new FW.

CLI Commands

help Command

This command provides an online table of contents, providing brief description of the supported command groups and built-in commands.

Usage: help

eth Command

Set Ethernet IP configuration.

Usage: eth <ipaddr(*)> <subnet(*)> <gateway(*)>

```
File  Edit  Setup  Control  Window  Help

Cmd>eth 192.168.100.211 255.255.255.0 0.0.0.0

 Set Ethernet - save configuration ok
Cmd>
```

```
File  Edit  Setup  Control  Window  Help

Cmd>eth

================================================================================
    Physical Address . . . . . : 2E-09-0A-00-76-C7
    Ethernet Link Status . . . . . : Up
    IP Address . . . . . : 192.168.100.211
    Subnet Mask . . . . . : 255.255.255.0
    Gateway . . . . . : 0.0.0.0
    MTU . . . . . : 1500
================================================================================
```

setmac Command

Set Ethernet MAC (Media Access Control) address.

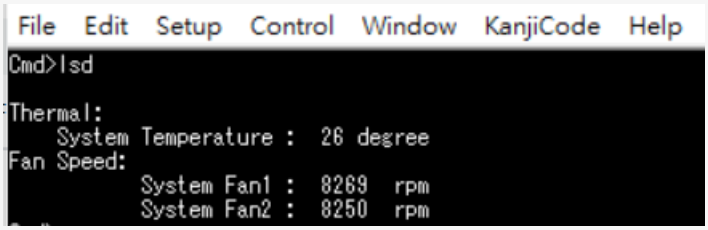
Usage: setmac <xx:xx:xx:xx:xx:xx>

```
File  Edit  Setup  Control  Window  Help

Cmd>setmac 38:26:2B:00:00:00

 MacAddress[0] 38

 MacAddress[1] 26

 MacAddress[2] 2B

 MacAddress[3]  0

 MacAddress[4]  0

 MacAddress[5]  0

 Set MAC - save configuration ok
Cmd>
```

lsd Command

Shows environmental information (etc. temperature, fan) in SAS4 JBOD.

Usage: lsd



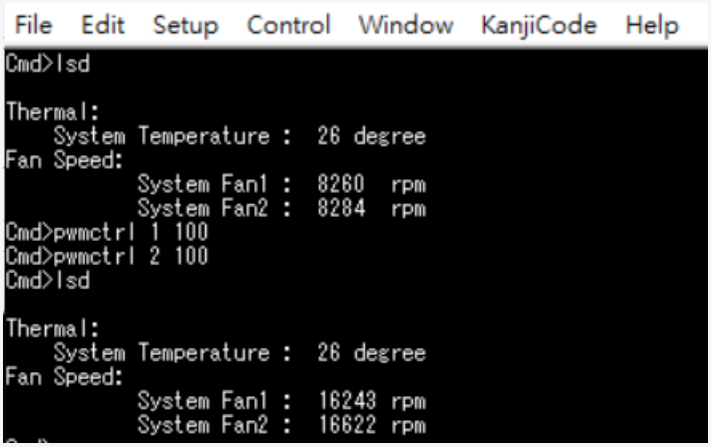
pwmctrl Command

Set the PWM duty for all FANs in SAS4 JBOD.

Usage: pwmctrl <fan_id(D)> <duty(D)|auto>

fan_id=1, System Fan1

fan_id=2, System Fan2



Caution: The 8Bays JBOD implemented smart fan control, it isn't suggested to set FAN PWM manual unless for stress testing purpose.

ssdpwr Command

Slot power status checking and ON/OFF control.

Usage: Usage: ssdpwr [<slot(D)> <on|off>]

```
File  Edit  Setup  Control  Window  Help

Cmd>ssdpwr
Backplane slot 01 power status turn off.
Backplane slot 02 power status turn off.
Backplane slot 03 power status turn off.
Backplane slot 04 power status turn off.
Backplane slot 05 power status turn off.
Backplane slot 06 power status turn off.
Backplane slot 07 power status turn off.
Backplane slot 08 power status turn on.
```

```
File  Edit  Setup  Control  Window  Help

Cmd>ssdpwr 8 off

Slot 08 turn off success.
Cmd>ssdpwr
Backplane slot 01 power status turn off.
Backplane slot 02 power status turn off.
Backplane slot 03 power status turn off.
Backplane slot 04 power status turn off.
Backplane slot 05 power status turn off.
Backplane slot 06 power status turn off.
Backplane slot 07 power status turn off.
Backplane slot 08 power status turn off.
```

The slot power will be turned off automatically, when drive is plugging out from slot.
The use case of power control command is when drive is plugging into slot.

---

showtype Command

Shows the Back plane board type in passive 8bays JBOD

Usage: showtype

```
File  Edit  Setup  Control  Window  KanjiCode  Help
Cmd>showtype

Backplane type: U3
```

Note: Passive 8bays JBOD only support in U3 back plane board

buz Command

The command is for controlling the buzzer on SAS4 JBOD.

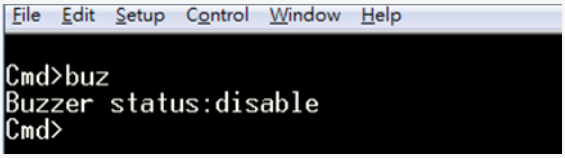
Usage: buz <on|off|en|dis>

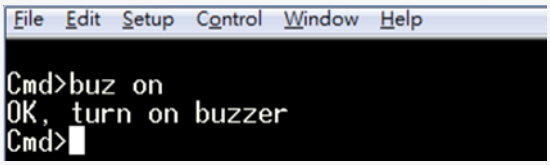
[en]: enable the buzzer function

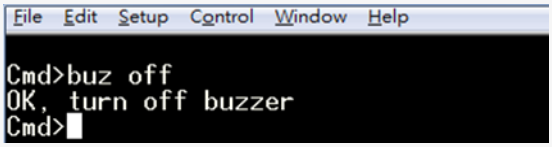
[dis]: disable the buzzer function

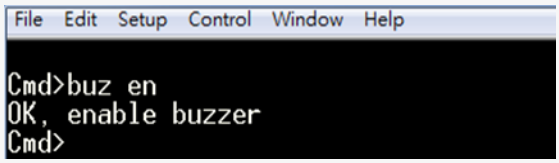
[on]: set buzzer to beep in one time

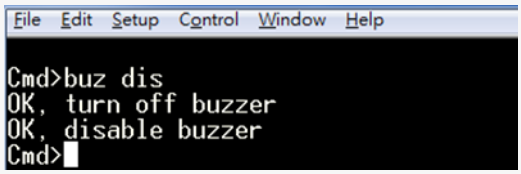
[off]: mute buzzer beeping







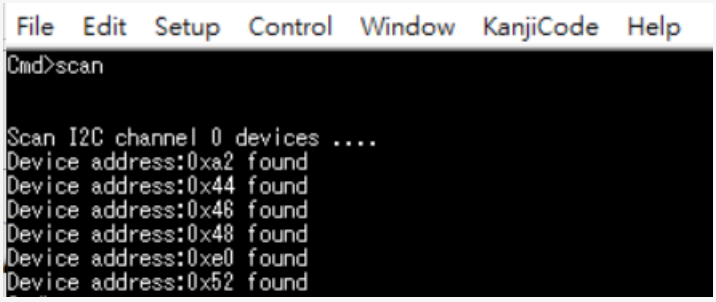




scan Command

Scan all of I2C devices in SAS4 JBOD.

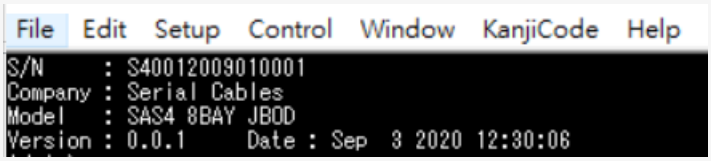
Usage: scan



ver Command

Show S/N, company and model names and the FW version for uP.

Usage: ver



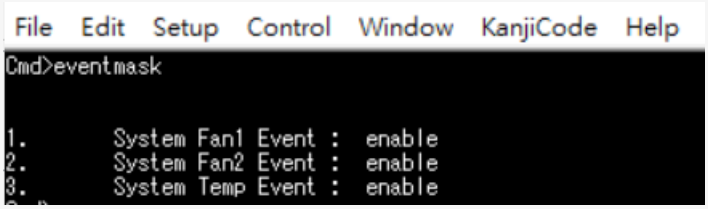
eventmask Command

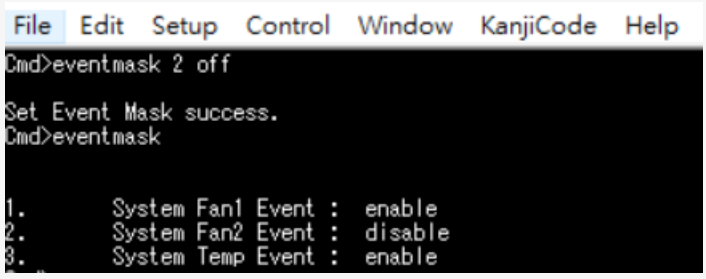
Use for following events mask

Usage: eventmask <event ID> <on|off>

Event ID from 1 to 3

1. System Fan Event
2. System Fan1 Event
3. System Fan2 Event





reset Command

uP FW reset

Usage: reset