**hasivo \_ 8port\_PSE Application description**

I2C address configuration (NC = 1； connected to 10K to GDN = 0)

|  |  |  |  |
| --- | --- | --- | --- |
| AD1 | AD2 | AD3 | I2C Address |
| 1 | 1 | 1 | 0X1A |
| 0 | 1 | 1 | 0X2A |
| 1 | 0 | 1 | X03A |
| 1 | 1 | 0 | 0X4A |
| 0 | 0 | 1 | 0X5A |
| 1 | 0 | 0 | 0X6A |
| 0 | 1 | 0 | 0X7A |
| 0 | 0 | 0 | 0X8A |

Address：0X1A（more is 0X2A…..0X6A）

（1PSE chip ports： 4）

Judge whether the PSE chip is online，

 Address：0X0C

If the readout result = 0x91, it indicates that the chip is online, otherwise it is offline

1：Port status

Address：0X01

 0X01=4F=0100 1111

The last 4 bits of the fixed value of the first 0100 correspond to

1-4 ports, 1 = on, 0 = off

 4F= 4 ports all on

2：Power supply voltage

 Address：0X02+0X03 The result has been converted to voltage in V

 0X02+0X03 (High and low order combination) /100

 0X02=14 0X03=52

 Voltage =1452=5202/100=52.02V

3：Port current：

 Corresponding port current address

Address:

1 Port=0X04+0X05 2 Port =0X06+0X07 3 Port =0X08+9 4 Port =0X0A+0X0B

The result has been converted to current in ma

0X054+0X05 (High and low order combination)

0X04=05 0X05=5A

Port 1 Current = 55A=1370mA

 2-4 The port operation method is the same

4：Port Class

Class=0-8 0-8 represents class level,

Address:

Port 1=0X0D Port 2=0X0E Port 3=0X0F Port 4=0X10

0X0D=5 Indicates that the class level of port 1 is 5

2-4 The port operation method is the same

5：Port Power

Address:

Port 1= 0X21+0X 22 Port 2=0X 23+0X 24 Port 3=0X 25+0X 26 Port 4=0X 27+0X 28

The result has been converted to power in W

0X21+0X22 (High and low order combination) /100

0X21=10 0X22=05

Port Power=1005=4101/100=41.01W

2-4 The port operation method is the same

6： Total real-time power consumption (sum of 4 ports)

0X1D 0X1E (High and low order combination) /100

The result has been converted to power in W

0X1D=10 0X1E=02

Total Power= 1002=4098/100=40.98W

7：Port Switch

 Write address: 0X14 , Control port on or off

 0X0F=48=0100 1000

The last 4 bits of the front 0100 fixed value correspond to 1-4 ports

1=on， 0=off

 48= 1 Port 1 is allowed to open and other ports are closed，

8：Port restart

 Write address: 0X1F ,control port automatically restarts once

0X10=48=0100 1000

The last 4 bits of the front 0100 fixed value correspond to 1-4 ports

1 = lifting 0 = maintaining the original state

 48 = port 1 is restarted once, and the status of ports 2-4 remains unchanged.

 Note that this is a set instruction. You only need to write 1 once, and the corresponding port will restart automatically. There is no need to write 0 again.

9：Port power protocol type setting

 Write address: 0X19 PSE protocol type setting of 4 Ports

0XE4=228=11 10 01 00

Convert to binary, and each two groups represent one port in the order of 1-2-3-4 00=BT; 01=HiPOE; 10=AT; 11=AF

 0XE4=228，

 Set port 1 as AF; Port 2 is at; Port 3 is hipoe; Port 4 is BT;

Note that this function requires PSE chip support!

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