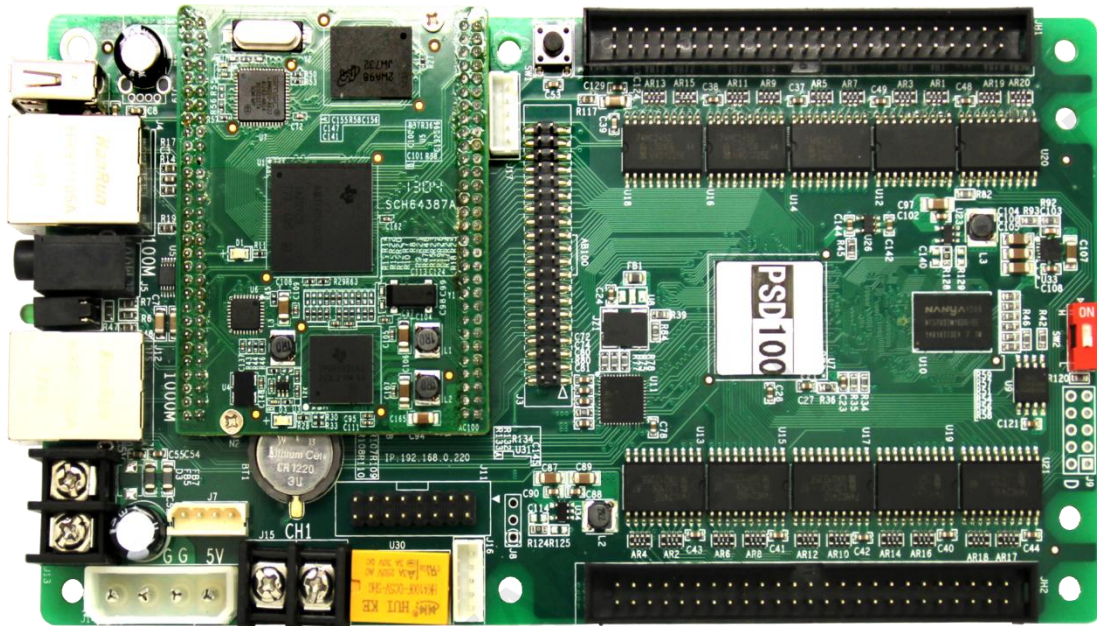


# PSD100 Specification

Ver 1.0 2013-10-16

## 1 Function



PSD100 is Nova Asynchronous Card, It has the following characteristics:

- ✧ Remote publish play-program;
- ✧ Remote Monitoring the current play information;
- ✧ Remote control power supply;
- ✧ Play as per time segment or according to date, week and time;
- ✧ Self-adapting window display;
- ✧ Multiple clients synchronous display;
- ✧ Support a variety of media formats, such as video, images, text, weather, clock, countdown, Word, Excel, Txt etc;
- ✧ Support emergency inser play,immediate notification;

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- ✧ Remote manage the playback log;
- ✧ U disc export and Insert-and-Play;
- ✧ Support remote upgrade of application software and hardware programs;
- ✧ Flexible loading capacity : 512x1024, 800x600, 1024x512, 1536x384, 2048x256 ;
- ✧ Full-scale chip support : TI, Toshiba, MBlock, Siti, Sumacro, Mingyang and other series of products. Support DMI3H, MBI5024/5036/5034, MBI5042/5041/5030, MBI5040, MBI5050, etc;
- ✧ Support full-color static to 32 scan, real pixel/virtual pixel;
- ✧ Field frequency as 60Hz;
- ✧ The gray level is settable, and support 16 bit 65536 level gray to the maximum;
- ✧ Refresh frequency : scanning screen can achieve 3840Hz and static screen can achieve 6000Hz;
- ✧ Support brightness correction and chromaticity correction;
- ✧ Support the open-short test of MBI5036, MBI5034, MBI5039, DM13H;
- ✧ Support all monitoring states of MON300 (monitoring working state, temperature, humidity, smoke, switching power supply voltage, fan speed and single lamp open short of each cabinet);
- ✧ On-board temperature and voltage test;
- ✧ Support (with the optical probe NS048C) automatic brightness adjustment ;
- ✧ Support secondary development ;
- ✧ Support multi-function card MFN300.

## 2 Electrical specifications

Working voltage: 4.5V ~ 5.5V;

Working current: 2 A maximum;

Working temperature: -20°C ~ 60°C;

Storage temperature: -40°C ~ 80°C.

## 3 Dimensions and positioning

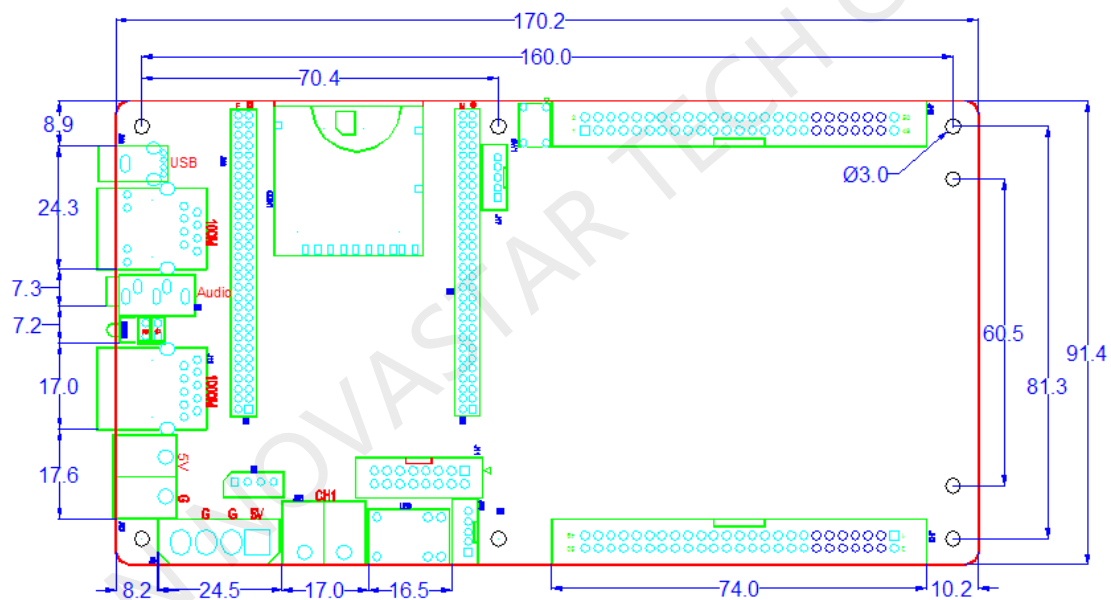


Fig. 1 PSD100 dimension diagram

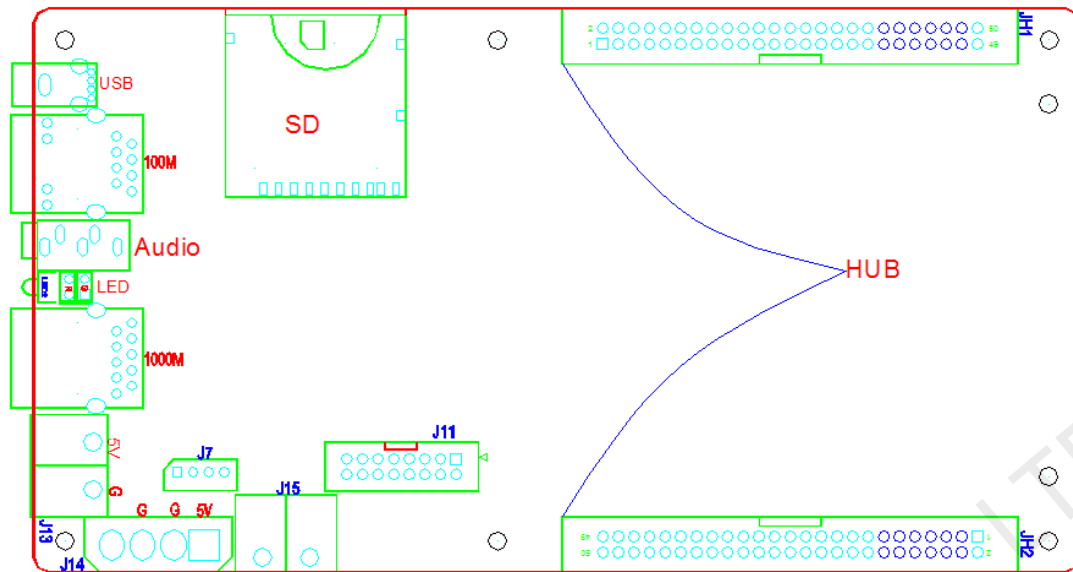


Fig. 2 PSD100 interface diagram

**【HUB】** : Connect to all kinds of LED display interface currently available in the market by 50 pin flat cable;

**【J7】** : Light sensor interface for LED display brightness adjustment according to environment;

**【J11】** : Monitor card interface for LED display temperature, humidity, smoke, fan, power supply and etc status monitoring;

**【USB】** : Connect to common USB disks available in the market;

**【SD card】** : Insert SD card;

**【Audio】** : Audio input interface;

**【100M】** : Megabyte Ethernet port , Connect to internet ;

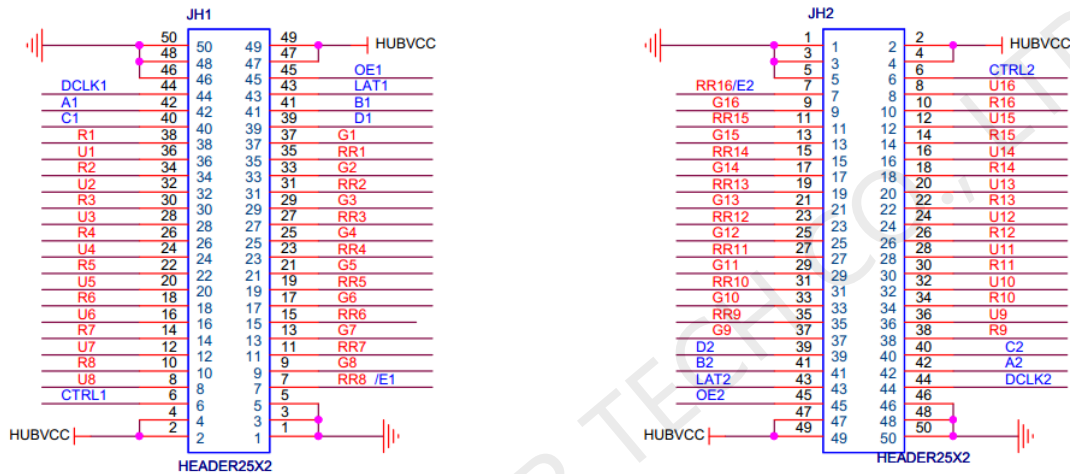
**【1000M】** : Gigabyte Ethernet port , Cascading to M3 receiving card (scan board) (MRV300/MRV320);

**【J13】** :2 Pin screw power socket;

**[J14]** : 4 pin Power socket;

## 4 Output interface definition

Support 16-group of RGBR 'parallel data, defined as follows:



Virtual R signal in the last data group of each 50pin hub is decoding signal E at 1/32 scan mode.

JP1	50P		
1	GND	VCC	2
3	GND	VCC	4
5	GND	CTRL	6
7	R8R/E	B8	8
9	G8	R8	10
11	R7R	B7	12
13	G7	R7	14
15	R6R	B6	16
17	G6	R6	18
19	R5R	B5	20
21	G5	R5	22
23	R4R	B4	24
25	G4	R4	26
27	R3R	B3	28

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29	G3	R3	30
31	R2R	B2	32
33	G2	R2	34
35	R1R	B1	36
37	G1	R1	38
39	D	C	40
41	B	A	42
43	LAT	CLK	44
45	OE	GND	46
47	VCC	GND	48
49	VCC	GND	50

**JP2 50P**

1	GND	VCC	2
3	GND	VCC	4
5	GND	CTRL	6
7	R8R/E	B8	8
9	G8	R8	10
11	R7R	B7	12
13	G7	R7	14
15	R6R	B6	16
17	G6	R6	18
19	R5R	B5	20
21	G5	R5	22
23	R4R	B4	24
25	G4	R4	26
27	R3R	B3	28
29	G3	R3	30
31	R2R	B2	32
33	G2	R2	34
35	R1R	B1	36
37	G1	R1	38
39	D	C	40
41	B	A	42
43	LAT	CLK	44
45	OE	GND	46
47	VCC	GND	48
49	VCC	GND	50