



Specification

Asynchronous Control Card PSD100-WiFi

Rev2.0.6 NS120100080

XI'AN NOVASTAR TECH CO.,LTD

Function

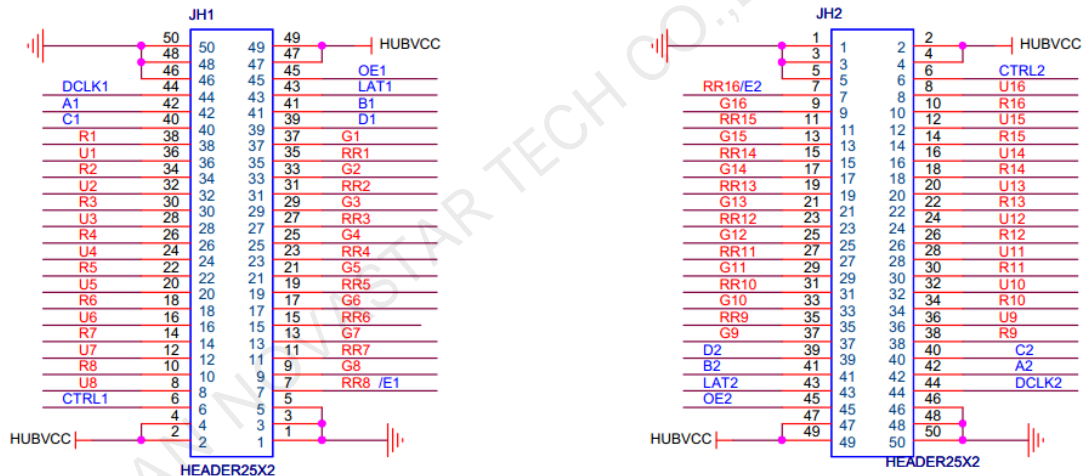
PSD100-WiFi is a Nova Asynchronous Control Card, It has the following characteristics:

- 1) Wireless communication with Wi-Fi module;
- 2) Support AP mode, Station mode and AP+Station Mode. Support 10 clients in AP Mode;
- 3) Remote publish play-program;
- 4) Remote Monitoring the current play information;
- 5) Remote control power supply;
- 6) Play as per time segment or according to date, week and time;
- 7) Self-adapting window display;
- 8) Multiple clients synchronous display;
- 9) Support a variety of media formats, such as video, images, text, weather, clock, countdown, Word, Excel, TXT, etc;
- 10) Support emergency insert play, immediate notification;
- 11) Remote manage the playback log;
- 12) U disk export and Insert-and-Play;
- 13) Support remote upgrade of application software and hardware programs;
- 14) Flexible loading capacity: 512x1024, 960x600, 800x700, 1024x576, 1520x384, 2048x256, 704x800, 1120x500, 904x640;
- 15) Full-scale chip support: can support a variety of chips;
- 16) Support full-color static to 32 scan, real pixel/virtual pixel;
- 17) Field frequency as 60Hz;
- 18) The gray level is settable, and support 16 bit 65536 level gray to the maximum;
- 19) Refresh frequency: scanning screen can achieve 3840Hz and static screen can achieve 6000Hz;
- 20) Support brightness correction and chromaticity correction;
- 21) Support the open-short test of MBI5036, MBI5034, MBI5039, DM13H;

- 22) 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);
- 23) On-board temperature and voltage test;
- 24) Support (with the optical probe NS048C) automatic brightness adjustment ;
- 25) Support secondary development ;
- 26) Support multi-function card MFN300.

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.

JH1				JH2			
1	GND	VCC	2	1	GND	VCC	2
3	GND	VCC	4	3	GND	VCC	4
5	GND	CTRL	6	5	GND	CTRL	6
7	R8R/E	B8	8	7	R8R/E	B8	8
9	G8	R8	10	9	G8	R8	10
11	R7R	B7	12	11	R7R	B7	12
13	G7	R7	14	13	G7	R7	14
15	R6R	B6	16	15	R6R	B6	16
17	G6	R6	18	17	G6	R6	18
19	R5R	B5	20	19	R5R	B5	20
21	G5	R5	22	21	G5	R5	22
23	R4R	B4	24	23	R4R	B4	24
25	G4	R4	26	25	G4	R4	26
27	R3R	B3	28	27	R3R	B3	28

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

Dimensions (Unit : mm)

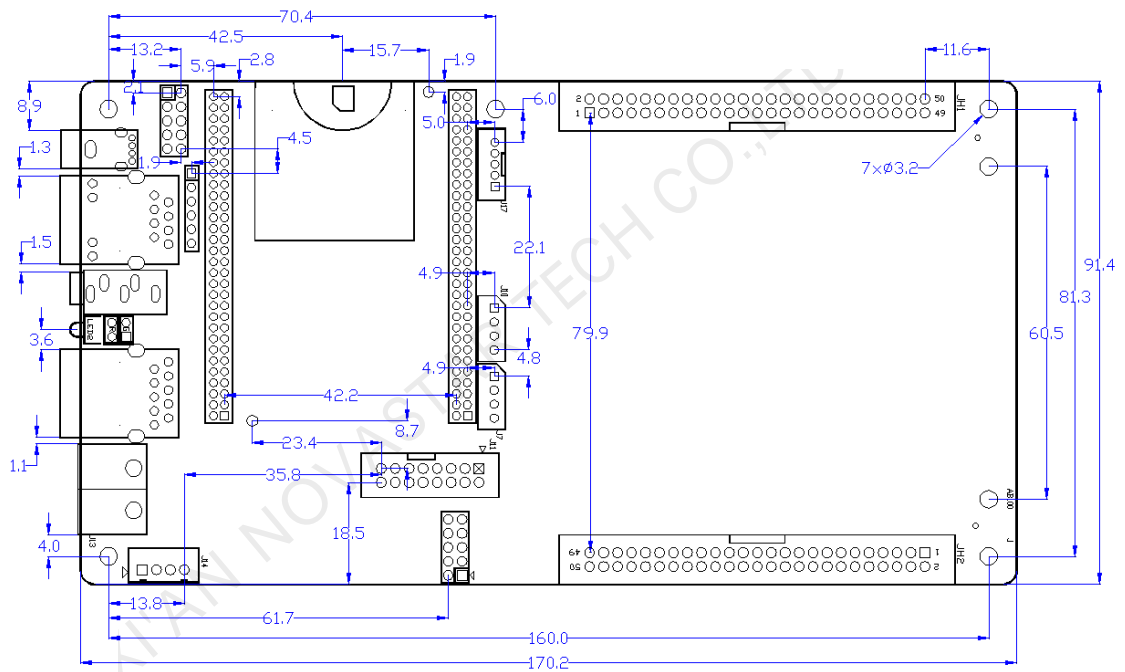


Figure 1Bottom board

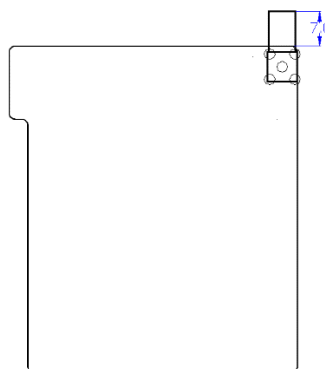
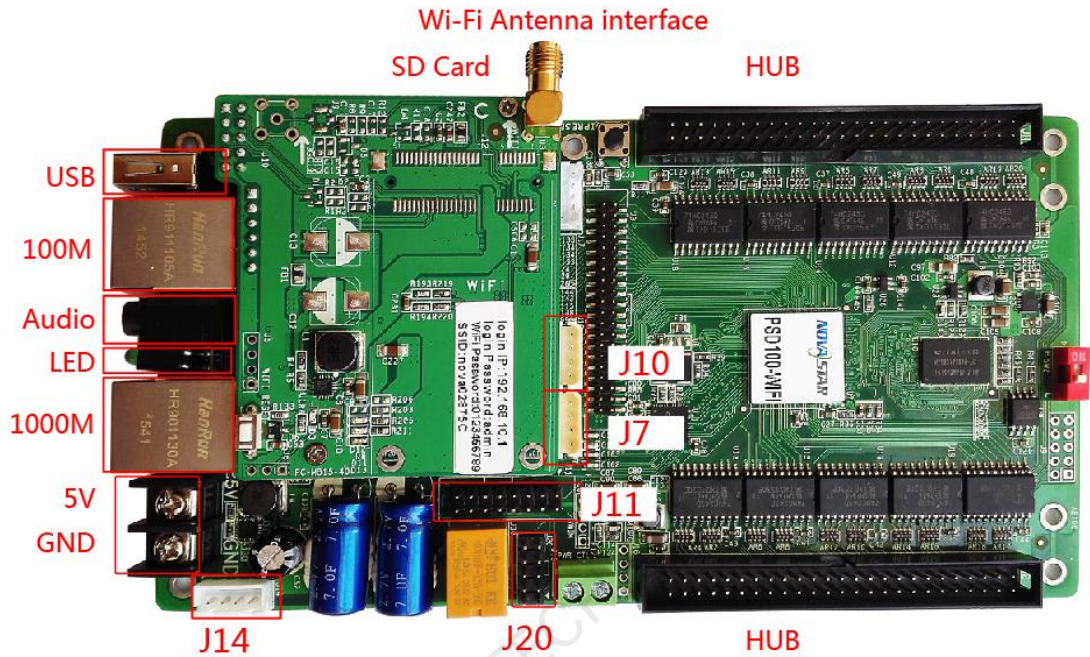


Figure 2Top board



Figure 3 Thickness

Interface introduction



【SDCard】 Insert SD card;

【Wi-Fi Antenna interface】 Insert Antenna;

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

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

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

【Audio】 Dual Channel Audio output interface;

【LED】 Working status indicator;

【1000M】 Cascading to M3 receiving card (scan board), recommend MRV300/MRV320;

【5V GND】 2 Pin screw power socket;

【J14】	4 pin Power socket;
【J20】	Serial port debug interface;
【J11】	Monitor card interface for LED display temperature, humidity, smoke, fan, power supply and etc status monitoring
【J7】	Temperature sensor or Light sensor interface for measuring the environment temperature or LED display brightness adjustment according to environment;
【J10】	Temperature sensor or Light sensor interface for measuring the environment temperature or LED display brightness adjustment according to environment.

Electrical specifications

Parameters of asynchronous card

Working voltage	4.5V ~ 5.5V
Working current	Rating value 2A, 3A maximum
Working temperature	-20°C ~ 60°C
Storage temperature	-40°C ~ 80°C

Parameters of wifi antenna

Frequency range	2400-2500MHz
Impedance	50Ω
V.S.W.R	2.0Max
Return loss	-10dB (Max)
Gain	3dBi
Radiation	Omni-directional

Radiating element	1/4 Wave Helical
Polarization	linear Vertical
Admitted power	1W
Connector	SMA non-standard connector (RP-SMA)
Operating temp	-40°C~+85°C
Storage temp	-40°C~+85°C

Note: So far, some products have been delivered according to the standard and the connector type is SMA standard(inner threads and pins).

Notes

J7 and J10 can connect to different type sensors at the same time but they can't connect to the same type sensors at the same time.

For example, J7 connects to temperature sensor and J10 connects to optical probe. Or, J7 connects to optical probe and J10 connects to temperature sensor. But J7 and J10 can't connect to optical probe at the same time.