SPECIFICATION FOR APPROVAL

PRODUCT : CCFL BACKLIGHT INVERTER

CUSTOMER :

CUSTOMER P/N. :

SAQ P/N. : SQB-405 VER.NO.:1.1

SAMPLES :

DATE :

APPROVED BY	NOTE
CUSTOMER SIGNATURE (S)	

ISSUED BY_____ CHECKED BY _____ APPROVED BY _____

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1. GENERAL DESCRIPTION

This DC-AC Inverter was developed for 4CCFL lamps of LCD back lighting system.

2. FEATURES

High performance low consumption special operating temperature
Open lamp protection
Lamp Current Balance Control
Wide Dimming Range

3. APPLICATION

The DC to AC back-light inverter is special designed on any type LCD display in implement (i.e. LCD monitor, etc…)

4. SUITABLE LOAD

4 Lamps TFT LCD Module: BOE HT190WG1-101

5. ABSOLUIE MAXIMUM RATING LF ENVIRONMENT

Temperature operating : 0^0C -- 50^0C
Temperature storage :-20^0C -- 60^0C
Humidity operating :10% -- 80RH
Humidity storage :10% -- 80RH

6. INPUT ELECTRICAL CHARACTERISTICS

No.	PARAMETER	Symbol	MIN	TYPE	MAX	Unit
1	INPUT VOLTAGE	Vin	10.8	12	13.2	V
2	INPUT CURRENT	Iin	----	1.90	2.40	A
3	INPUT POWER	Pin	----	23	----	W
4	BRIGHTNESS VOLTAGE	Vbri	5(MIN)	---	0(MAX)	V
5	CONTROL VOLTAGE	Enable Von=5V Disable Voff=0V				

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7. ADDITIONAL FEATURES

Input current overload protected (fuse protect).

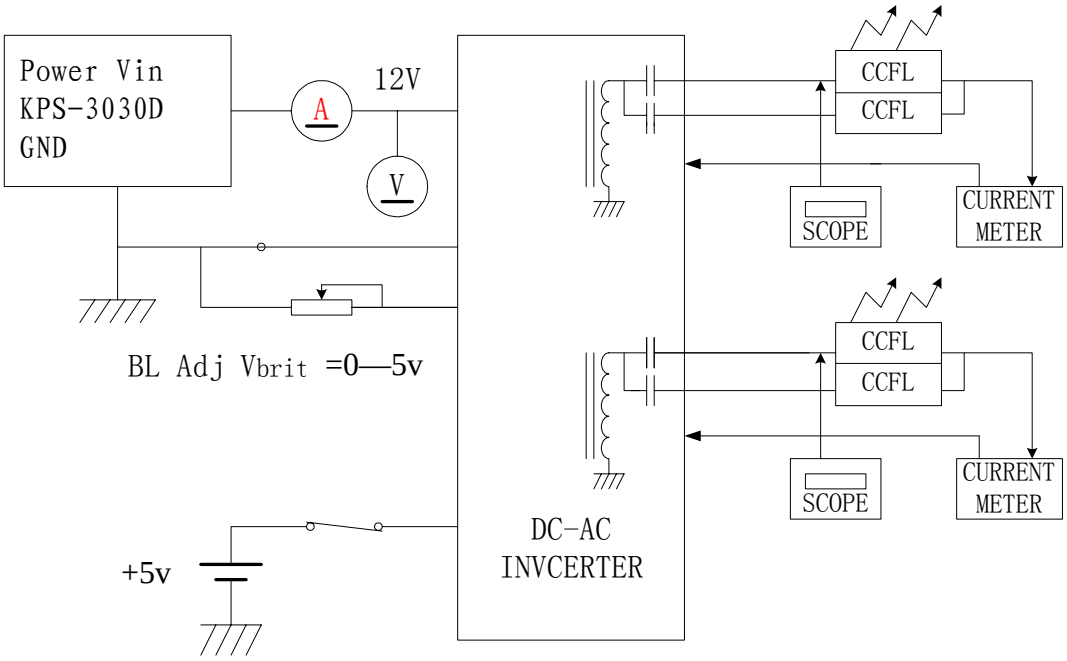
8. OUTPUT ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYPE	MAX	UNIT
CURRENT	Iout	Vin=12V Von=5V Vbrit=0V RL=80K×2	6.0	6.8	7.5	MA
CURRENT	Iout	Vin=12V Von=5V Vbrit=5V RL=80K×2	2.5	3.0	3.5	MA
VOLTAGE	Vout	Vin=12V Von=5V Vbrit=0V		740		Vrms
IGNITION VOLTAGE	Vig2	Vin=12V Von=5V Vbrit=0V 0℃	---	1800	---	Vrms
FREQUENCY	Fpwm	Vin=12V Von=5V Vbrit=0V	40	54	60	KHZ
Efficiency	η	Vin=12V Von=5V Vbrit=0V	---	90	---	%

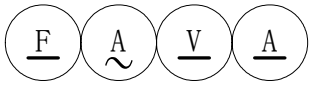
9. PIN ASSIGNMENTS

INPUT: JP1			
PIN	**SYMBOL**	**DESCRIPTION**	**VOLTAGE**
1.2	Vin	Supply voltage	10.8---13.2V
3	Von/off	Standby/operation	On=5V Off=0V
4	Vbrit	Dimming control	0V-5V(5V=MIN)
5.6	Gnd	Ground	
OUTPUT: JP2,JP3.			
PIN	**SYMBOL**	**DESCRIPTION**	**VOLTAGE**
1	H-V	High voltage	VOUT
2	L-V	Low voltage	Gnd

10. Test Circuit Diagram



测 试 仪 表
MEASUREMENT EQUIPMENT



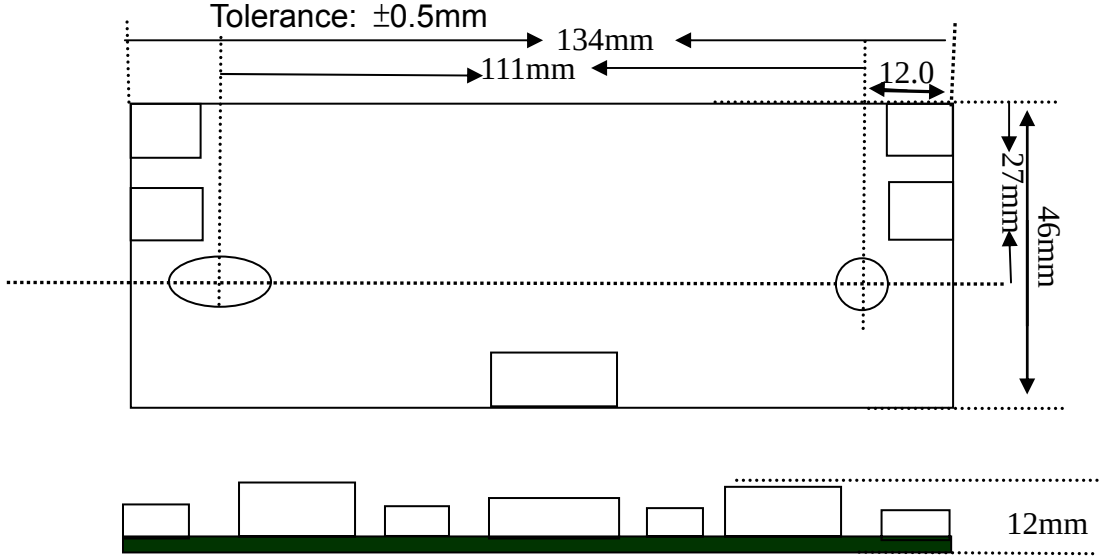
SCOPE TDS210 :TDS5040

CURRENT METER :FLUKE 45

11. MECHANICAL DRAWINGS

11.1 P.W.B. Unit : mm

Tolerance: ±0.5mm



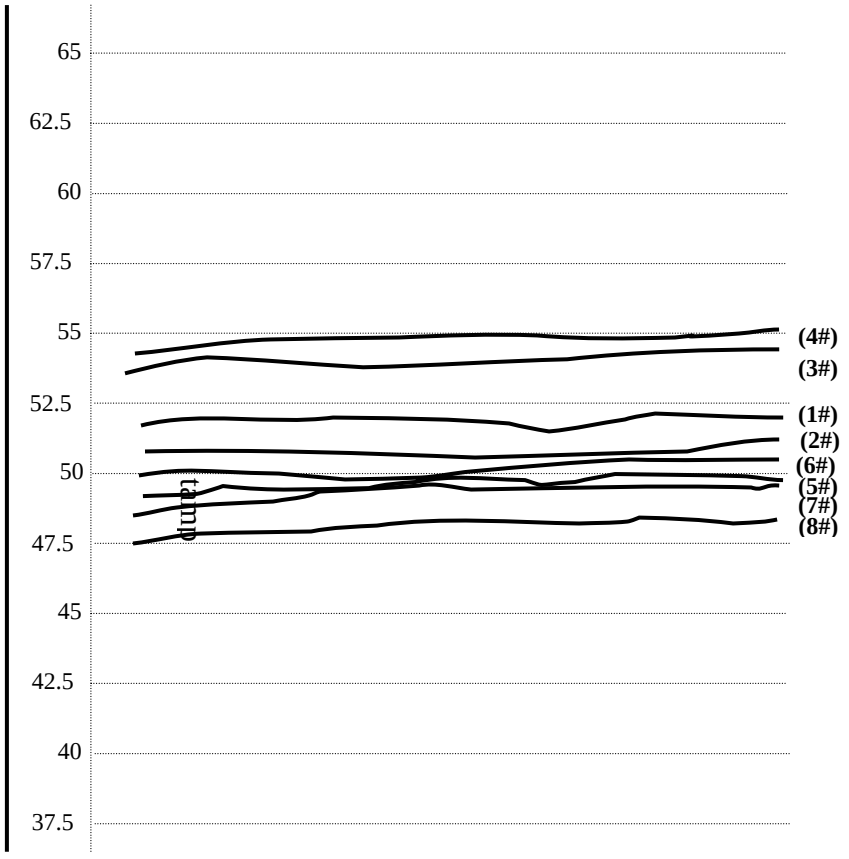
12. QUALITY ASSURANCE TEST

TEST RECORD FOR SAMPLES								
INVERTER TEST DATA		TEST INSTRUMENT	GPR-7550D / TDS3012B FLUKE45					
TYPE	SQB-405		TEST DATA					
TEST ITEM	TEST CONDITIONS	SURROUNDING TEMPERATURE	SAMPLE 1		SAMPLE 2			
			JP2	JP3	JP4	JP5		
INPUT CURRENT Iin (A)	Vin=12V ON/OFF=5V Vbrit=0V RL=80kΩ	0^0C	1.92					
		26^0C	1.93					
		50^0C	1.92					
OUTPUT VOLTAGE Vo(Vrms)	Vin=12V ON/OFF=5V Vbrit=0V RL=80kΩ	0^0C	723	721	722	724		
		26^0C	728	730	731	727		
		50^0C	731	733	738	734		
OUTPUT CURRENT Io(mA)	Vin=12V ON/OFF=5V Vbrit=0V RL=80kΩ	0^0C	6.60	6.59	6.63	6.61		
		26^0C	6.63	6.61	6.65	6.64		
		50^0C	6.71	6.69	6.67	6.68		
OUTPUT CURRENT Io(mA)	Vin=12V ON/OFF=5V Vbrit=5V RL=80kΩ	0^0C	3.10	3.08	3.09	3.21		
		26^0C	3.10	3.11	3.12	3.22		
		50^0C	3.12	3.13	3.15	3.24		
OUTPUT FREQUENCY fL(KHZ)	Vin=12V ON/OFF=5V Vbrit=0V RL=80kΩ	0^0C	53.7	53.7	53.7	53.7		
		26^0C	53.7	53.7	53.7	53.7		
		50^0C	53.7	53.7	53.7	53.7		

13. TEMPERATURE TEST REPORT（UNIT: ^{0}C）:

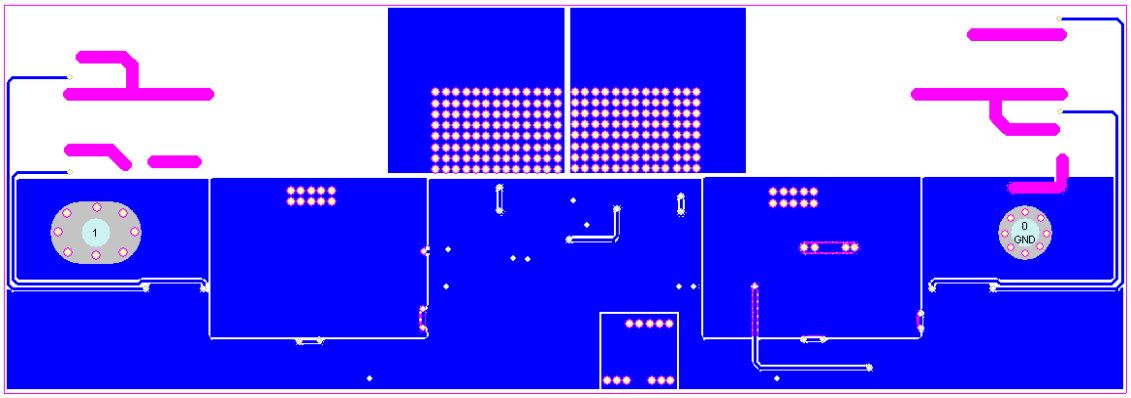
环境温度：27^{0}C

针号	1	2	3	4	5	6	7	8
被测点	T1	T2	U2	U3	Q2	Q3	Q6	Q7
温度	51.2	52.3	50.3	51.1	49.5	50.2	49.7	48.1
温升	24.2	25.3	23.3	24.1	22.5	23.2	22.7	21.1

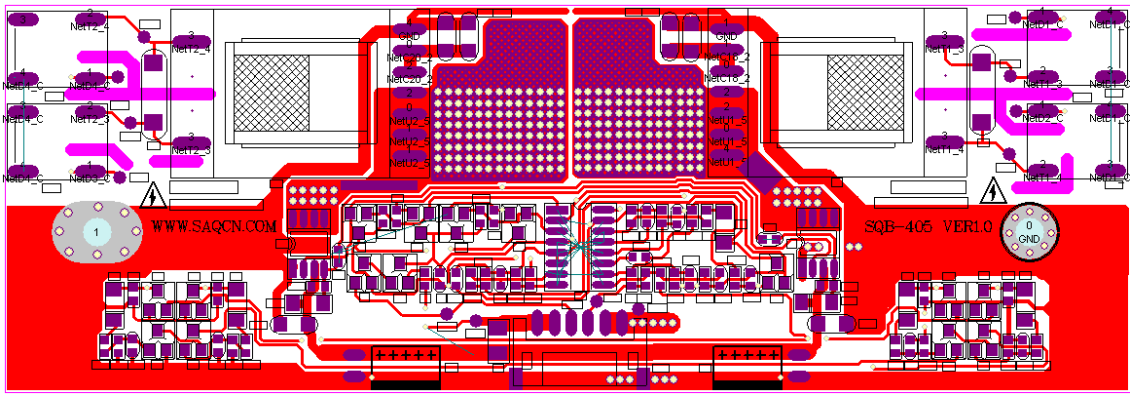


备注：温度测试用则温箱在最大亮度时进行，所列温度均为稳定值，测试仪器用 JK－2 多路温度测试仪。

14. PWB LAYOUT DIAGRAM



(BOTTON View)



(TOP View)