Salcomp

Travel Adaptor

APPROVAL SHEET

CUSTOMER	ASUS
CUSTOMER'S MODEL NO.	0A001-00380500
SUPPLIER'S MODEL NO.	S24A38ASA
Case Color	White
SPECIFICATION	5V/2.1A
	100-240V / 50-60Hz

CUSTOMER'S APPROVAL	

SUPPLIER	SALCOMP (SHENZHEN) CO LTD
Address	Salcomp Road Furong Industrial Area Xinqiao, Shajing, Baoan District 518125 Shenzhen China
Tel	+86-755- 2725-5111
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Salcomp

Approval Sheet Revision History

Rev. No.	Date	Name	Change
A01	2017/3/30	Rosildo Viana	1st Release
A02	2017/7/18	Rosildo Viana	Update Customer & Supper Model No.

Salcomp

Table of Content

ELECTRICAL SPECIFICATION
for
Jippo 2100_ US&CN&EU&UK&AUS&BR

Specification Number	2513EL		
Version	3.0		
Prepared By	Rupert Wang	Lab	17.07.2015
Checked By	Truman Wang	EE	20.07.2015
	Paul Liao	ME	20.07.2015
	Sophia Lin	SE	20.07.2015
Reviewed By	Patrick Wu	Lab	20.07.2015
Approved By	Terry Tuo	PM	20.07.2015

Customer	Platform
Customer's specification	
Customer's type	

Version history

Version	Date	Name	Remark
1.0	07.11.2014	Rupert Wang	Release
2.0	26.11.2014	Mecal Cheng	Add BR and AUS country version, updated 7.6.
3.0	17.07.2015	Hunter Hu	Updated clause 9.2.

Table of contents

1 Scope

This document contains specific information for approvals and detailed description of an electrical function and testing of the **Jippo 2100_US&CN&EU&UK&AUS&BR**. The requirements presented for the power supply unit in this document may be subject to revision based on future discussions between Salcomp and Customer.

2 Applicable documents

Name of standard	Description
IEC 60950-1: 2005+A1:2009+A2:2013	Information technology equipment-Safety Part 1:General requirements
EN 60950-1: 2006+A11:2009+A1:2010 +A12:2011+A2:2013	Information technology equipment-Safety Part 1:General requirements
UL60950-1 2nd edition	Information technology equipment-Safety Part 1:General requirements
CSA C22.2 No. 60950-1-07, 2nd Edition	Information technology equipment-Safety Part 1:General requirements
GB4943.1-2011	Information technology equipment-Safety Part 1:General requirements
2006 / 95 / EC 93 / 68 / EEC 2004/108/EC 2009/125/EC	Low Voltage Directive CE Marking Directive EMC Directive ERP Directive
EN 55022:2010, Class B (CISPR22)	Information technology equipment-Radio disturbance characteristics -Limits and methods of measurement(CISPR 22:2008,modified)
EN 55024:2010	Information technology equipment -Immunity Characteristics -Limits and methods of measurement(CISPR 24:2010)
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) —Part 3-2: Limits-Limits for harmonic current emissions(equipment input current≤16A per phase)
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) —Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connectionElectrostatic Discharge
IEC 61000-4-2:2009	Electromagnetic compatibility(EMC)- Part 4-2: Testing and measurement techniques- Electrostatic Discharge immunity test
IEC 61000-4-3:2006+A1:2008+A2:2010	Electromagnetic compatibility(EMC)- Part 4-3: Testing and measurement techniques-Radiated, radio-frequency, Electromagnetic Field Immunity test
IEC 61000-4-4:2012	Electromagnetic compatibility(EMC)- Part 4-4: Testing and measurement techniques- Electrical Fast Transient/ Burst immunity test
IEC 61000-4-5:2006	Electromagnetic compatibility(EMC)- Part 4-5: Testing and measurement techniques- Surge Immunity test

IEC 61000-4-6:2009	Electromagnetic compatibility(EMC)- Part 4-6: Testing and measurement techniques- Immunity to Conducted Disturbances, induced by redio-frequency fields
IEC 61000-4-11:2004	Electromagnetic compatibility(EMC)- Part 4-11: Testing and measurement techniques- Voltage dips, short interruptions and voltage variations immunity tests
FCC PART15 SUBPART B:2010	Federal Communications Commission part 15
ICES-003:2012	Interference-Causing Equipment Standard Digital Apparatus
DEPARTMENT OF ENERGY 10 CFR Parts 429, 430 and 431 [Docket No. EERE–2008–BT–STD–0005] RIN 1904–AB57	Energy Conservation Program: Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment
NRCan	Amendment 11 to the Energy Efficiency Regulations for External Power Supplies, published on October 12, 2011 in the Canada Gazette, Part II)
GB9254-2008	Information technology equipment-Radio disturbance characteristics Limits and methods of measurement
GB17625.1-2012	Electromagnetic compatibility—Limits-Limits for harmonic current emissions(equipment input current≤16A per phase)

3 Approvals

3.1 Certificate and Approvals

- CB, International Safety Certification
- EMC
- ERP
- CCC

4 Environmental conditions

4.1 Temperature ranges

Operating temperature range is -5°C ... +45°C for US/EU/UK/AUS/BR, where the power supply fulfils all specifications.
Operating temperature range is -10°C ... +40°C for CN, where the power supply fulfils all specifications.

Safety approval test temperature is 45℃

Storage temperature range is -40°C … +85°C, where the power supply shall not cause any danger for user when it is connected to mains system. Normal performance shall be fulfilled after 2 h recovery time at room temperature (without connection to mains).

4.2 Humidity

Relative humidity should be less than 95% non-condensing at full operating temperature range.

5 Charger operation

5.1 Charge operation

The charger is an AC/DC switch mode fly-back converter featuring constant voltage and variable current limit. Connection to terminal is made by an external cable. It exhibits fixed constant voltage limit characteristics. The electromagnetic emission level of the power supply is designed to be compatible with most information technology systems. It has one standard USB A-receptacle output.

5.2 Audible noise

Power supply should not make any audible noise measured from 25cm distance. Typical human ear (16Hz … 20000Hz) sensitivity value (30dBA) in different frequencies is used in case of noise detected.

6 Safety

6.1 General

The power supply is designed for indoor use to meet safety standards mentioned in Section 2 Applicable documents, protection against electrical shock class II installation category II and pollution degree 2.

6.2 Leakage current

Leakage current is measured according to IEC 60950 test procedure and tester. Maximum leakage current is 50μA.

6.3 Electric strength

The input to output isolation test voltage shall be 3 kVrms with frequency 50 Hz or 60 Hz, sinusoidal waveform. Test duration is 1 minute. The cut off current should be less than 5mA.

6.4 Insulation resistance

The insulation resistance between primary and secondary shall be more than 100MΩ at 500Vdc.

6.5 Over current protection

Over current protection is included into construction of the power supply. The maximum output current shall be less than 2.5A.

6.6 Over voltage protection

Over voltage protection is included into construction of the power supply. The maximum output voltage shall be less than 9V.

6.7 Short circuit protection

Short circuit protection is included into construction of the power supply. The power supply is designed to withstand continuous current of short circuit on output.

6.8 Temperature rise

Temperature rise of enclosure surface is 50 ℃ maximum at ambient temperature of +25 ℃. This specification is valid only in version that has enclosure.

6.9 Altitude requirement

The power supply fulfils altitude requirement of 5000 meter.

7 Electromagnetic compatibility

7.1 Conducted emission (Measured at the end of AWG#22 1.0m USB cable)

Powers supply's conducted emission to AC-line measured with resistive load in floating condition shall be 3dB below the limits of CISPR 22 and FCC 47 FCR part 15; Subpart B requirements. Test is performed to the level specified in CE requirements.

7.2 Radiated emission (Measured at the end of AWG#22 1.0m USB cable)

Power supply's radiated emission measured with resistive load in floating condition shall be 3dB below the limits of CISPR 22 and FCC 47 FCR part 15, Subpart B requirements. Test is performed to the level specified in CE requirements.

7.3 Electrostatic discharge

The power supply fulfils IEC 61000-4-2 with amendment 2 severity levels ±8kV contact and ±15kV air discharge requirements. Output is not allowed to be reset during ESD test.

7.4 Radio frequency electromagnetic field immunity

The power supply fulfils the immunity to radiated radio frequency requirements of IEC 61000-4-3, 10V/m.

7.5 Electromagnetic fast transient and burst

The power supply fulfils IEC 61000-4-4 electrical fast transient/burst ±1kV and 5ns /50ns requirements.

7.6 AC Surge immunity

The adaptor has to fulfils IEC 61000-4-5 surge immunity 1.2μs/50μs requirements for differential mode with 1kV (peak), for BR version is 2kv.

7.7 Immunity to conducted disturbances, induced by radio-frequency fields

The power supply fulfils IEC 61000-4-6 with 10Vrms requirements.

7.8 AC voltage dips, short interruptions and voltage variations

The power supply fulfils IEC 61000-4-11 voltage dips, short interruptions and voltage variations immunity requirements.

7.9 Common mode noise immunity

Charger has to fulfill EN/IEC 62684 standard interoperability requirements for common external power supplies used with data enabled mobile telephones.

Requirement	Test reference	Acceptance criteria
EPS switching frequency component	EN/IEC 62684 Clause 6	pulse longer than 250nS 2Vpp CMN limit test with LISN

8 Input requirements

8.1 Input voltage

Operating input voltage range is 90…264 Vac.

Outside operating ranges are 0-90Vac and 264-280Vac. Operating in above mentioned ranges does not fulfil all the specifications but does not cause permanent failures in unit.

8.2 Input frequency

Operating input frequency range is 47 - 63Hz.

8.3 Inrush current

Maximum inrush current is less than 50A within 10ms at nominal 230Vac line voltage. The power supply withstands 10000 mains connection at crest line voltage.

8.4 Standby power consumption

Maximum standby power consumption is 50mW in room temperature at rated input voltages of 115Vac/230Vac.

9 Output requirements

9.1 Output voltage and current (Measured at the end of AWG#22 1.0m USB cable)

Test Conditions: At an ambient temperature of 25 ℃, the load on the power supply accessory's output must be increased in step to produce the following output currents: 0, 250, 500, 700, 1000, 1500, and 2100mA.
Below table and figure represent specifications for output voltage and current.

Output	Min	Nom	Max
Voltage [V], (0A <Iout < 2.1A)	4.55	5.0	5.25
Current [A], (0V < Uout < 4.55V)	0	2.1	2.5

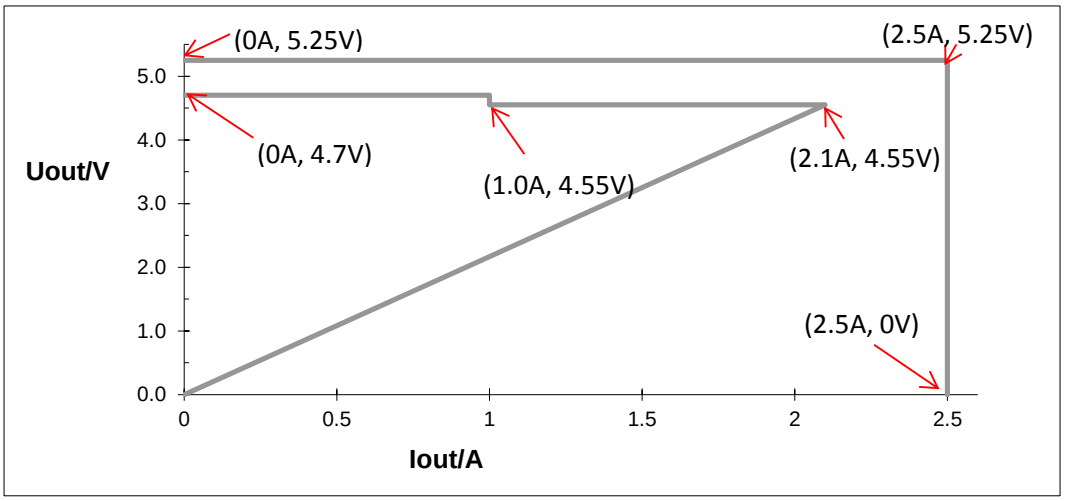


Figure1. Output Voltage/Current characteristics

9.2 Output voltage and current (Measured at the end of USB A Receptacle)

Test Conditions: At an ambient temperature of 25 ℃, the load on the power supply accessory's output must be increased in step to produce the following output currents: 0, 250, 500, 700, 1000, 1500, and 2100mA.
Below table and figure represent specifications for output voltage and current.

Output	Min	Nom	Max
Voltage [V], (0A <Iout < 2.1A)	4.75	5.00	5.25
Current [A], (0V < Uout < 4.75V)	0	2.1	2.5

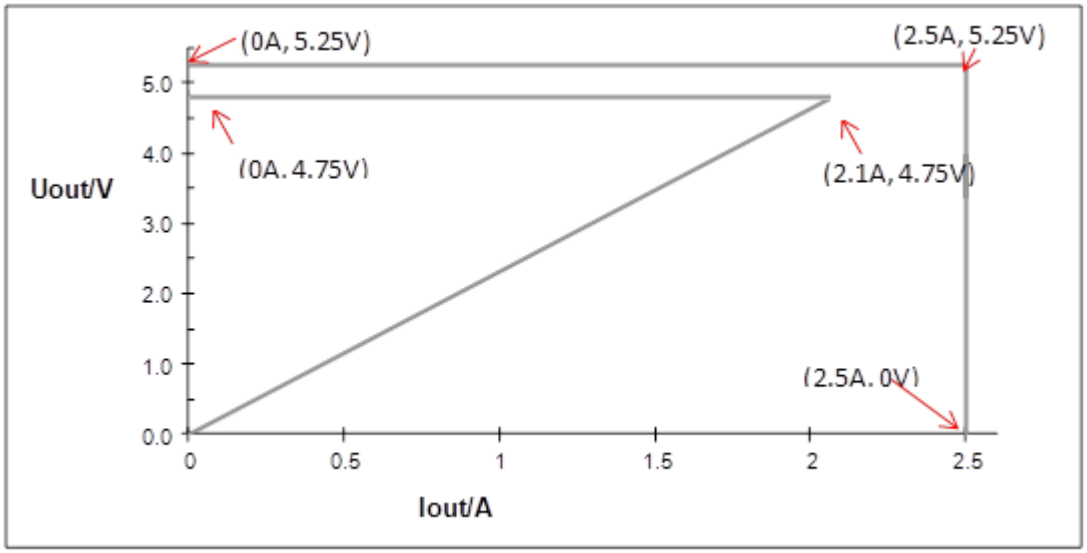


Figure2. Output Voltage/Current characteristics

9.3 Output ripple voltage (Measured at the end of AWG#22 1.0m USB cable)

The output ripple voltage is measured at 20MHz bandwidth with the ceramic 0.1uF capacitor connected in parallel to the output terminals at the input voltage of 90Vac/47Hz and 264Vac/63Hz with the current load 500mA, 1000mA, 1500mA, 2100mA and open load with DC electronic load. The maximum allowable output ripple voltage is 100mVp-p.

9.4 Efficiency

The average efficiency shall be meet CoC 5.0 Tier1/Tier2 and DoE 2016 requirement at the rated input voltage of 115Vac/230Vac under room temperature.
LN(5*2.1)*0.0755 + 0.586=76.35% (CoC5.0 Tier1 measured at the end of AWG#22 1.0m USB cable)
LN(5*2.1)*0.0834-0.0011*(5*2.1) + 0.609=79.36% (CoC5.0 Tier2 measured at the end of AWG#22 1.0m USB cable)
LN(5*2.1)*0.0834-0.0014*(5*2.1)+0.609=79.04% (DoE2016 measured at the end of AWG#22 1.0m USB cable)

The power supply nameplate output is 5V/2.1A.

9.5 Turn on delay time

The turn on delay time shall be less than **3** sec at the nominal input voltages.

9.6 Output under shoot

The output voltage shall not go below 4.1Vdc when output load changed from 0 to 500mA.

9.7 Overshoot at start up

The output overshoot voltage during start up at nominal input voltages without load shall be less than 6Vdc.

9.8 Reverse current

The reverse current is measured with an external DC power supply set to 4.75V connected to the output of the charger. The maximum reverse current shall be less than 5 mA.

9.9 Dynamic load response (Measured at the end of USB A Receptacle)

Dynamic load response shall be complied with USB Battery Charging Specification and Compliance Plan version 1.2. The maximum overshoot voltage shall be less than 6.0Vdc. The minimum undershoot voltage shall be greater than 4.1V. The mean output voltage shall be with 4.75Vac to 5.25Vac.

10 Reliability, expected lifetime

10.1 E-Cap lifetime

Operation lifetime of construction and components exceeds 10 years in normal operation conditions.

Normal operation conditions and use:
- Ambient temperature: +25 ℃
- Charging (specified nominal load): 2h / day
- Stand by: 22h / day

10.2 MTBF

The mean time between failures is estimated above 100K hours for the adapter operating continuously at nominal input voltage with full load under room ambient of 25 ℃ according to the reference standard of Telcordia SR332.

11 Testing

11.1 Electrical design verification testing

The power supply is verified according to this specification. The power supply passes all the tests that are subset of these requirements.

The design of the power supply has been approved by Salcomp prior to acceptance for production. This approval consists of examination and testing of the power supply in the area of operation, thermal and mechanical design.

11.2 Testing in production

Testing in production is performed to according Salcomp inter-company instruction.

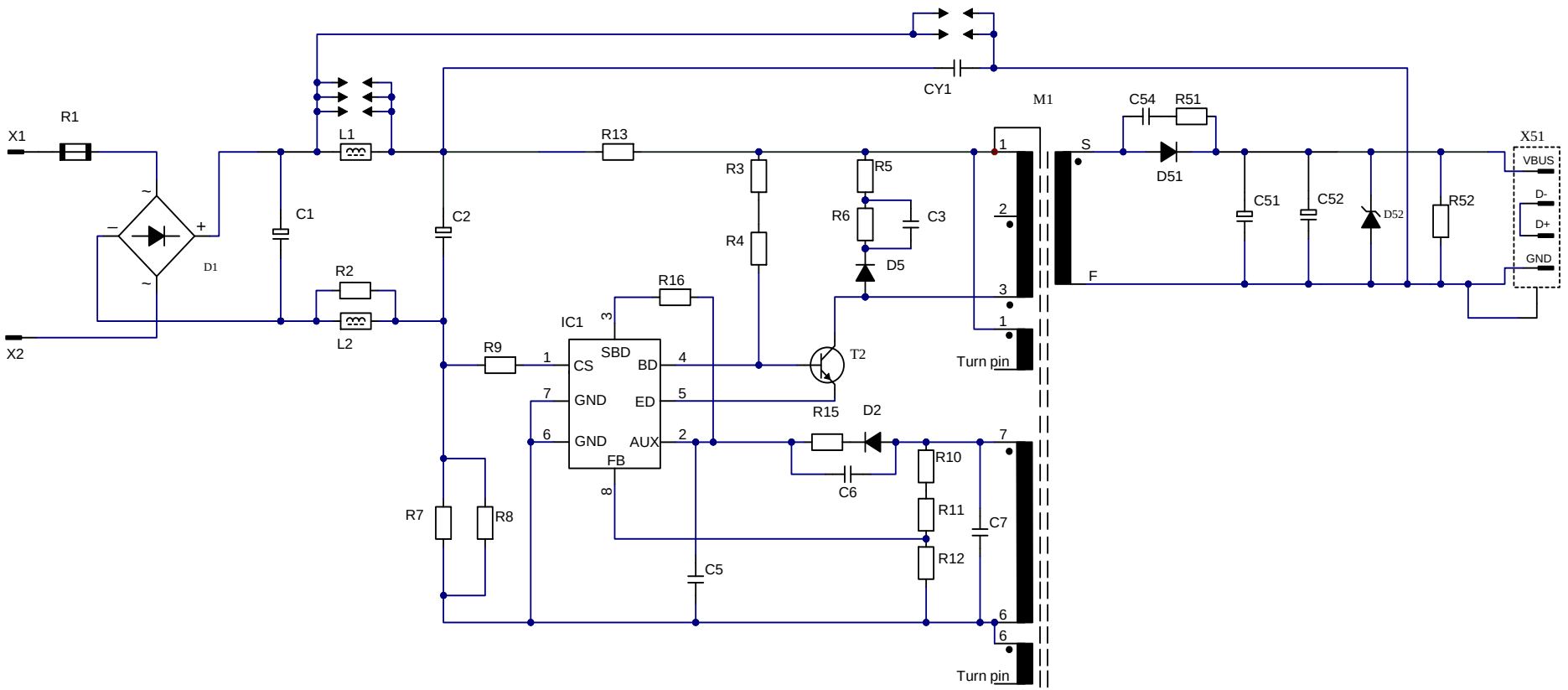
11.3 VPQCT, Volume Production Quality Control Test

Salcomp inter-company instruction defines a volume production quality control tests.

12 Technical Summary

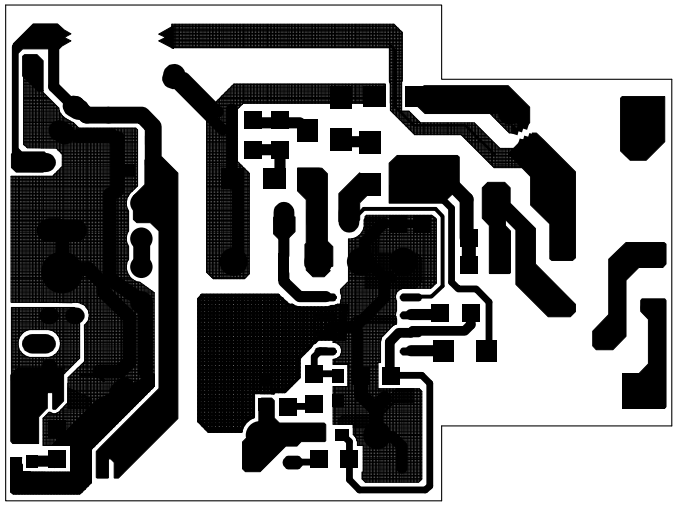
12.1 Technical parameters

Input parameter	**Type**	**Unit**	**Value**	
Input voltage	min	V	90	
	nom	V	100/240	
	max	V	264	
Input frequency	min	Hz	47	
	nom	Hz	50/60	
	max	Hz	63	
Standby power	max	mW	50	
Inrush current	max	A	50	
Inrush current time	max	ms	10	
Leakage current	max	uA	50	
Output parameter	**Type**	**Unit**	**Value**	
Output current	min…max	A	2.1….2.5	
Output voltage	min…max	V	4.55…5.25	With USB cable
			4.75....5.25	Without USB cable
Ripple voltage	max	mVp-p	100	0.1uF ceramic



CONFIDENTIAL

Salcomp	Salcomp Oyj P.O.Box 95 24100 Salo Finland Salorankatu 10	Sheet 1			Des.: Apr 19.14 Truman
		Size: A4			Drawn: Apr 19.14 Anne
Title: Jippo 2100		Join: SB0359A 12421B			Approved: Nov 20.14 Leon
					Approved: Nov 20.14 Steel
C05657	0.22	Delete C53,Add D52,M1:V0.12->V1.0	Truman	Sam	Nov 18.14
	0.21	M1: V0.11->V0.12; R11: 240R->1K1;R12: 3K6->2K7	Truman	Sam	Sep 9.14
	0.2	R11:390R->240R; C5:1u->2u2; C52:560u->470u Add R13; Remove C4; M1 V0.1->V0.11	Truman	Sam	Jul 21.14
Modif.no	HW	Explanation	Des	Check	Date
File: TE40836C.SchDoc					Code: S24AXX
					Drw.no: TE40836C



Material must fulfill III–INS–Q00003 salcomp Hazardous substances management standard latest version

Salcomp

Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
Furong Industrial Area, Xingiao
Shajing, Baoan District
SHenzhen 518125 CHINA

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

Product:	Jippo 2100
Title:	Bottom Layer
Material	CEM_1 1.0+/–0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

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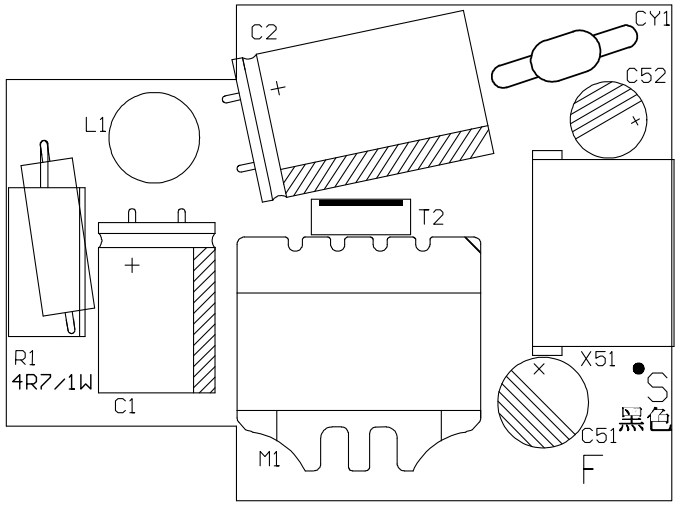

1 > The components R1/C1/L1/C2/CY1 lead length less than 1.5mm
2 > The components C51/C52/M1/T2 lead length less than 2.5mm

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Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
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Shajing, Baoan District
SHenzhen 518125 CHINA

Product:	Jippo 2100
Title:	Top overlay
Material	CEM_1 1.0+/-0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

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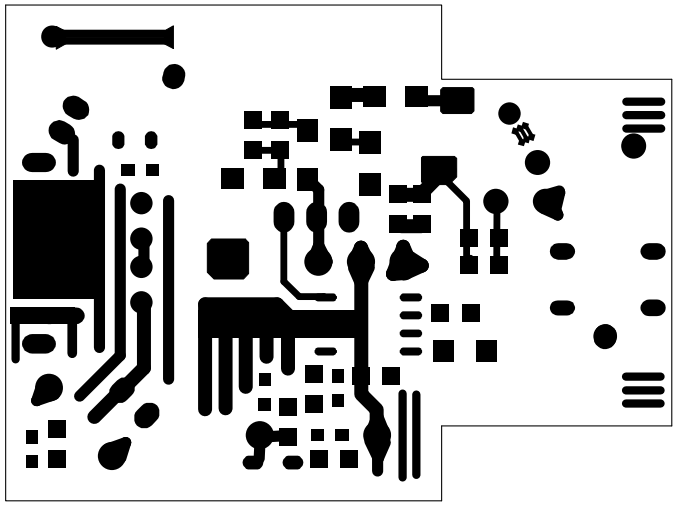

Material must fulfill III–INS–Q00003 salcomp Hazardous substances management standard latest version

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Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
Furong Industrial Area, Xingiao
Shajing, Baoan District
SHenzhen 518125 CHINA

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

Product:	Jippo 2100
Title:	Bottom solder mask
Material	CEM_1 1.0+/–0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

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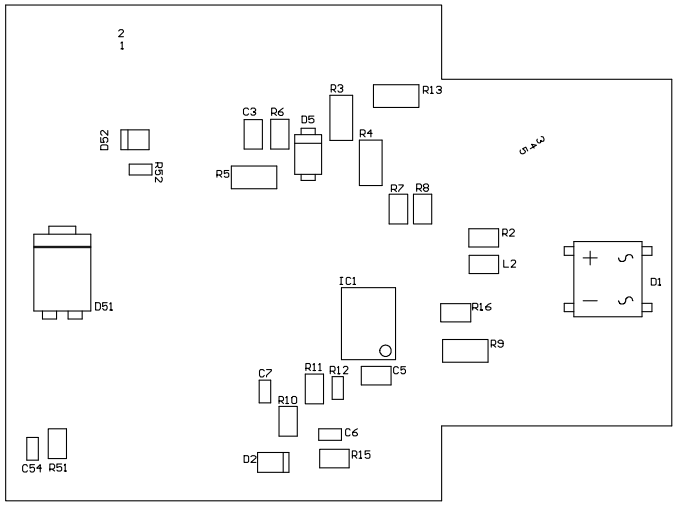

Material must fulfill III–INS–Q00003 salcomp Hazardous substances management standard latest version

Salcomp

Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
Furong Industrial Area, Xingiao
Shajing, Baoan District
SHenzhen 518125 CHINA

Product:	Jippo 2100
Title:	Bottom overlay
Material	CEM_1 1.0+/–0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

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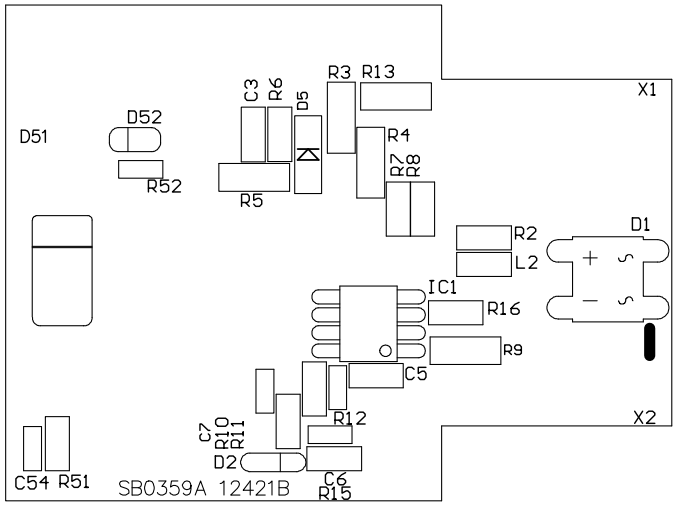

Note: The silkscreen on the pad or Bare Cu must be removed

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Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
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Shajing, Baoan District
SHenzhen 518125 CHINA

Product:	Jippo 2100
Title:	Bottom overlay 2
Material	CEM_1 1.0+/-0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

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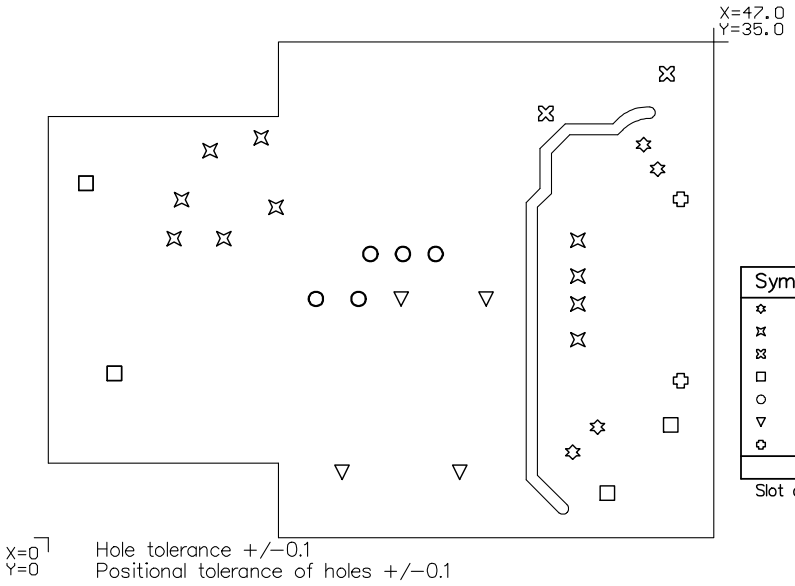

Symbol	Hit Count	Finished Hole Size	Physical Length	Rout Path Length	Plated	Hole Type
✡	4	0.7mm (27.559mil)			NPTH	Round
✡	10	0.8mm (31.496mil)			NPTH	Round
✡	2	0.85mm (33.465mil)			NPTH	Round
□	6	0.9mm (35.433mil)			NPTH	Round
○	5	1mm (39.37mil)			NPTH	Round
▽	4	1.1mm (43.307mil)			NPTH	Round
✡	2	0.6mm (23.622mil)	1.6mm (62.992mil)	1mm (39.37mil)	NPTH	Slot
	33 Total					

Slot definitions : Rout Path Length = Calculated from tool start centre position to tool end centre position.
Physical Length = Rout Path Length + Tool Size = Slot length as defined in the PCB layout

More PCB information refers to its GWI 2-9A3.1 PWB Specification Form

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Salcomp (Shenzhen) Co.,Ltd.
Salcomp Road
Furong Industrial Area, Xingiao
Shajing, Baoan District
SHenzhen 518125 CHINA

Product:	Jippo 2100
Title:	Drill drawing
Material	CEM_1 1.0+/−0.1 Cu 1x35u OSP
	Laminate type: CCP518(rFR)

Ver.	Modif.no	Explanation	ME Des.	EL Des.	Check	Date
B	C05657	Delete C53,Add D52,Add OTP package for R1	Robin	Truman	Sam	Nov 18.14
A		Modify layout	Robin	Truman	Sam	Jul 08.14
		Original	Robin	Truman	Sam	May 20.14

Des.:	Apr 26.14 Truman
Drawn:	Apr 26.14 Anne
Approved:	Nov 20.14 Leon
Approved:	Nov 20.14 Steel
Code:	SB0359A
Drw.no:	12421B

File: SB0359A 12421B.PcbDoc

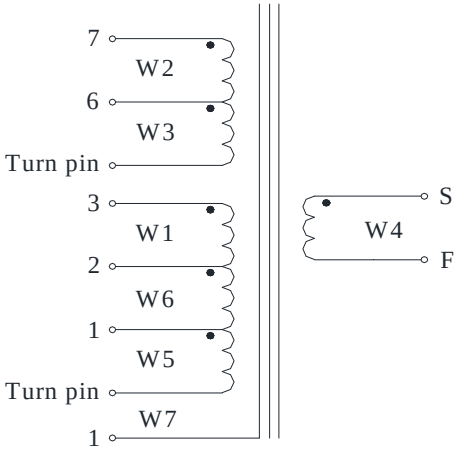
TRANSFORMER SPECIFICATION
for
FM6108

Drawing No.	TR100117B		
Transformer Version:	1.0		
Made by:	Mercy Yang	(Magnetics Engineer)	05-02-2015
Safety (Optional):	Sophia Lin	(Authority Approval Engineer)	06-02-2015
CE informed:	Sammy Wang	(Component Engineer)	06-02-2015
Checked by:	Truman Wang	(Electronics Engineer)	06-02-2015
Reviewed by:	Aman Liao	(Senior Magnetics Engineer)	06-02-2015
Approved by:	Leon Liu	(Senior Electronics Manager)	11-02-2015

Transformer Specification
(Released)
变压器规格

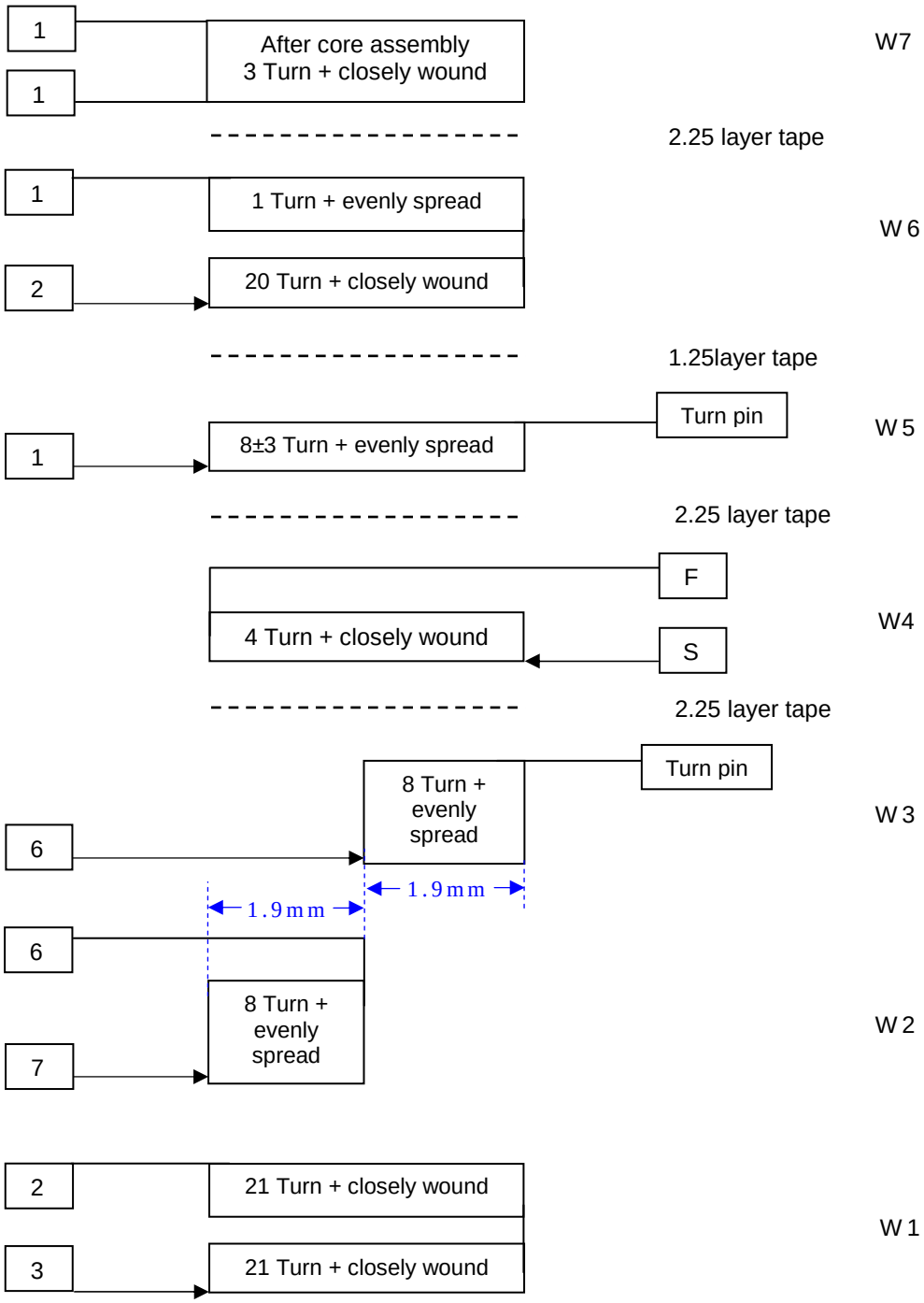
Transformer Code 变压器料号	FM6108	Output Voltage/Current 输出电压/电流	5V/2.1A

1. Circuit Schematic (接线线路图):



2. Winding Construction (绕线结构):

Winding Order 顺序	Start - Finish 开始 – 结束	Wire Size 线径	Turn 圈数	Wind Direction 绕线方向	Notes 说明
W1	3 - 2	Φ0.15	42	Right (向右)	
W2	7 - 6	Φ0.15	8	Right (向右)	
W3	6 - Turn pin	Φ0.15	8	Right (向右)	
2.25 layer of tape (thickness ~25μm), width=4mm (2.25 层绝缘胶带,宽 4mm)					
W4	S - F	TIW Φ0.65	4	Right (向右)	[1][2]
2.25 layer of tape (thickness ~25μm), width=4mm (2.25 层绝缘胶带,宽 4mm)					
W5	1 - Turn pin	Φ0.14	8±3	Right (向右)	
1.25 layer of tape (thickness ~25μm), width=4mm (1.25 层绝缘胶带,宽 4mm)					
W6	2 - 1	Φ0.14	21	Right (向右)	
2.25 layer of tape (thickness ~25μm), width=4mm (2.25 层绝缘胶带,宽 4mm)					
W7	1 - 1	Tinned wire Φ0.12~0.15	3	-	[3]



Notes:

[1] Put protection tape to prevent the primary & secondary wires touching each other before W4 wind. Refer to figure 1.

W4 绕线前贴一块保护胶带防止初级与次级的线相碰.如图 1 所示.

[2] W4 “S” wire start from the pin 7 side of bobbin top, wire length 27±1mm from the bobbin edge, include tinned 3±0.5mm & sleeved “L” type of black Teflon tube. The “F” wire leads out from the pin 6 side of bobbin bottom & fold to bobbin top outlet after W6 finished, wire length 27±1mm from the bobbin edge, include tinned 3±0.5mm & sleeved “L” type of white Teflon tube. The Teflon tube should be covered the whole free leads insulation length, the white Teflon tube need extending into the core & the black Teflon tube need extending to winding 3mm minimum. Refer to figure 2.

W4 “S”线自骨架 pin 7 侧顶部开始起绕,线长自骨架边缘量起 27±1mm,含沾锡 3±0.5mm,且穿“L”型黑色铁弗龙套管.“F”线自骨架 pin 6 侧底部引出,待 W6 绕完后折至骨架顶部出线,线长自骨架边缘量起 27±1mm,含沾锡 3±0.5mm,且穿“L”型白色铁弗龙套管.套管须穿满整条飞线(沾锡部份除外),白色套管须

伸入到磁芯里面,黑色套管须伸入线包 3mm 最小. 如图 2 所示.

[3] Wind 3Ts close around the product after core assembly.
组装磁芯后再围绕成品密绕 3 圈.

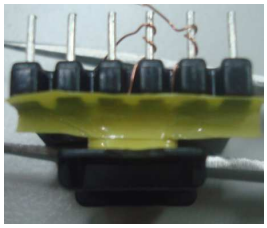


Fig. 1

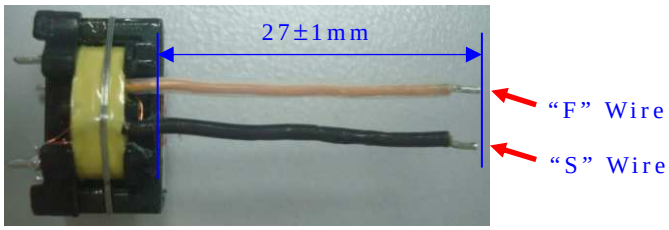
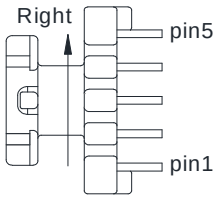


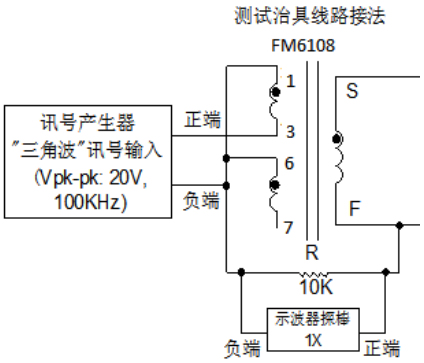
Fig. 2



<Side View>

3. Technical Parameter (技术参数):

Terminal 接线端		Inductance (L) 电感 Leakage inductance(LK) 漏电感 @100kHz/1.0Vrms	Contact resistance test 接触阻抗 @25°C	Q factor 品质因素 @100kHz/1.0Vrms
Start 开始	Finish 结束			
3	1	L: 0.95mH ± 10%	100kΩ max	
		LK: 45 µH max Pin S, F shorted.		
7	6	LK: 1.3 µH max Pin S, F shorted.		

Items (项目)	Specification (规格)	Remark (备注)
Balance voltage 平衡电压	-58mV ~ +36mV Need 100% fulfill spec	
Product pin pull force 成品 Pin 拉力	25 N min	
Reliability test 可靠性测试	Thermal shock: -40°C 2H--->+85°C 2H, transition less than 3minutes, 5 complete cycles	The transformer functional test shall be applied to EUT before and after 2 hours recovery time under room ambient temperature of 25°C after test.
	High temperature high humidity storage test: Temperature +50°C & humidity 90% ambient. Duration 48Hrs, power off.	
Environmental requirement 环境要求	Material must fulfill III-INS-Q00003 Salcomp Hazardous Substances Management Standard latest version	
Hi-pot test 耐电压测试	Primary to Secondary ……3.0kVac, 1min, 0.5mA (QA inspection) Primary to Secondary ……4.0kVac, 3s, 0.5mA (Mass production)	
	Pin 1 to Pin 6 ……0.6kVac, 3s, 0.5mA	

Drop test 跌落测试	Drop height is 1.8m on the concrete floor. Test result of 12, 24 & 36 drop to be included in report. PWB & housing code of test sample to be included in report.	

4. Assembly Notes (组装注意事项):

[1] Get the center leg of one core (≈ 0.2mm) to meet inductance requirement, put the gaped core on the bobbin top.
将其中一磁芯的中间脚磨掉约 0.2mm 的气隙,得到所需感量.组装时将磨有气隙的磁芯置于骨架顶部.

[2] Secure the 2 side legs with glue. After assembly core & ferrite grounding, wrap two layer of insulation tape around the cores.
磁芯两边柱结合面涂胶水固定.组装磁芯及缠绕地线后,沿磁芯包两圈胶带固定.

[3] The part must be varnished. Ensure varnish fill the gap between ferrite core & bobbin. Varnish time 20s, viscosity 21-25s. (@25°C, the viscosity measured with Zahn's cup type 2)
成品须含浸,使凡立水填满磁芯和骨架之间的空隙.含浸时间为 20s, 粘性 21~25s.

[4] The pin lengths are 2.8±0.3mm (measured from the bottom of the component). Cut pin 2 less than the stand of bobbin after solder.
脚长 2.8±0.3mm (从零件最低点量起). 焊锡后 Pin 2 剪至骨架凸点以内.

[5] Product length limit 16.5mm max, width limit 17.3mm max, height limit 11mm max. Lead wire twist on pins, pitch & label refer to figure 3.
成品长度 16.5mm 最大,宽度 17.3mm 最大,高度 11mm 最大.引脚缠 Pin 方式,脚位及印章如图 3 所示.

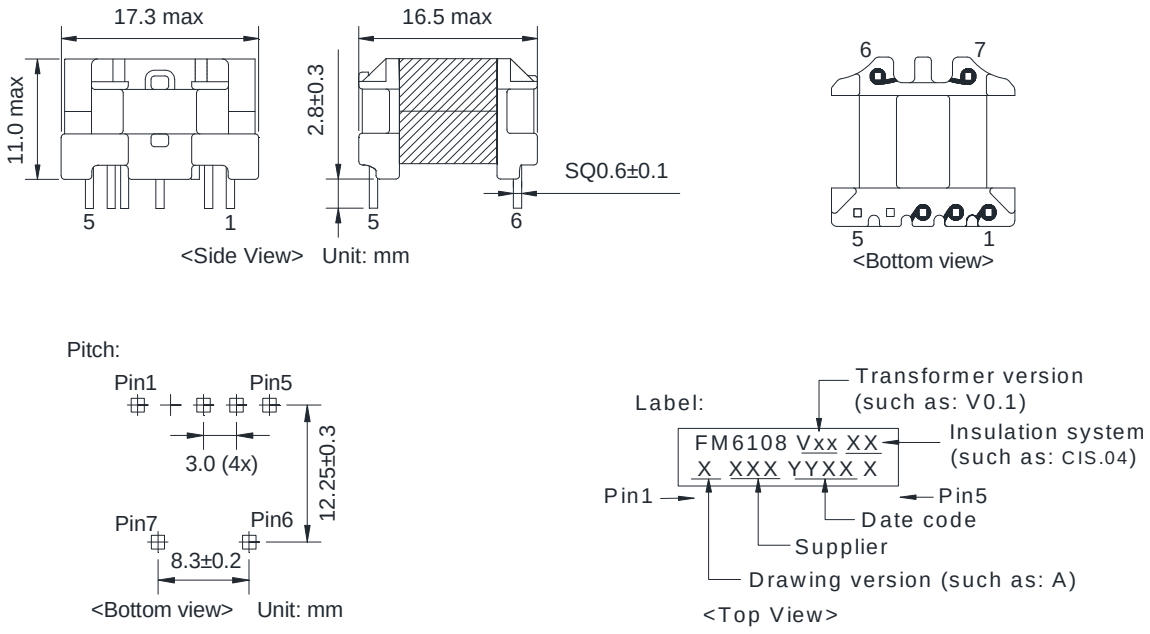


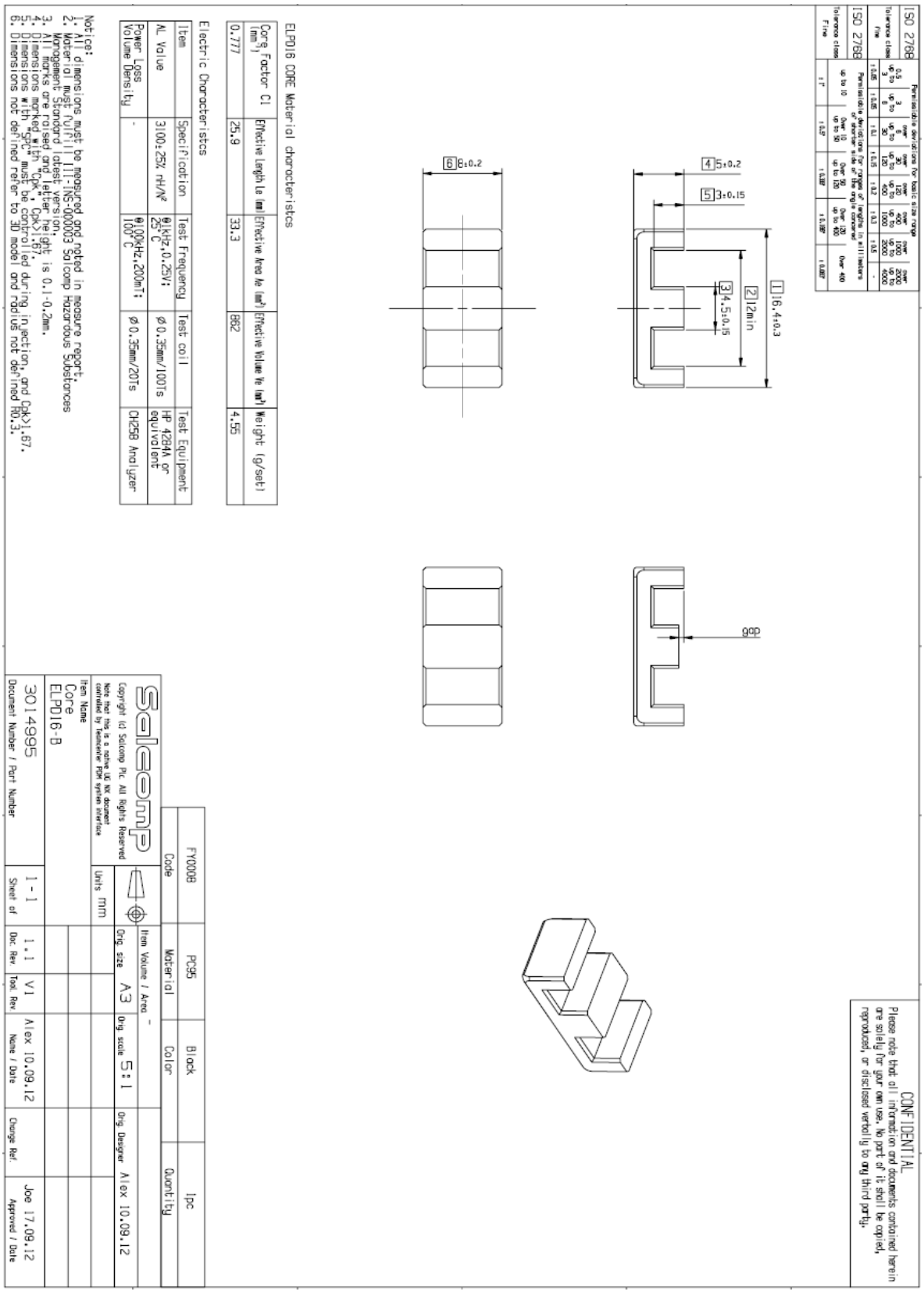
Fig. 3

5. Material List (材料清单):

(Material list based on salcomp AVL & must fulfill III-INS-Q00003 salcomp Hazardous substances management standard latest version, all raw material accord with supplier own Class B system)

Core 磁芯	ELPD16 PF-2T	Magway Co.
	ELPD16 NH9	LianFeng Co.
	ELPD16 JP95	JLW Co.
	ELPD16 P47	ACME Co. (India only)
	Code: FY0008	
Bobbin 骨架	Sumikon PM-9820 150°C	Sumitomo Bakelite Co. E41429
	ELPD16 5/2PIN VER Code: UA1240	Valpo Co. Feng Wu Co. Heng Xu Co. YLX Co. SXY Co. SL Co.
Copper Wire 铜线	Polyurethane Enameled Class F UEW-F 155°C IEC317-20 Grade2	Huizhou City DengGaoDa Electrotech Co. E253843 Siam Pacific Electric Wire & Cable Co. E142108 Hoi Luen Electrical MFR Co. E164409
	Polyurethane Enameled Class F P155 155°C IEC317-20 Grade2	Elektrisola (Malaysia) SDN BHD E143312 (India only)
Triple Insulation Wire 三层绝缘线	TEX-E	Furukawa Electric Co. E206440
	TIW-M	Cosmolink Co. E213764
	STW-B	Young Chang Silicone Co. E242198
Tinned Wire 镀锡线	Sn/Cu plating 0.12~0.15mm	Hoi Luen Electrical MFR Co.
Insulation Tape 绝缘胶带	CT-280 130°C PZ-280 130°C	Jingjiang YaHua Pressure Sensitive Glue Co. E165111
	#1388Y-1 130°C	3M Company E17385
Teflon tube 铁弗龙套管	Teflon Tube TFL 200°C	Great Holding Industrial Co. E156256
	Teflon Tube TFE-LW-150 200°C	Zeus Industrial Products INC E64007
	Teflon Tube CB-TT-L 200°C	ChangYuan Electronics Group Co. E180908
Glue 胶	EP3189	Jia Jia Chen Co.
	Eporite #2089	EPOLAB Co.
Varnish 凡立水	AC-43 180°C	John C. Dolph Co. E317427
	V1630FS 180°C	Elantas Electrical Insulation Elantas Pdg Inc E75225
Thinner 稀释剂	T200	John C. Dolph Co.
	T234	Elantas Beck Co.
Solder 锡	Sn99.3/Cu0.7	ALPHA Co.
	D9930C	YunXi Co.
Flux 助焊剂	#6229/#100 SM351F/SR64	ALPHA Co.
	GW680-1	Vital Co.
	36RMA	Orion metis Co. (India only)
Label Ink 印章油墨	INK Z-370/IC-270BK	Toyo Co.
	STG-3, White/Black	Shachihata Co.
	MPL(A)-5001	Da Feng Co.
	Printing(White ink)T18/1026 Thinner 35928,Hardener 37172	Ruco Co. (India only)

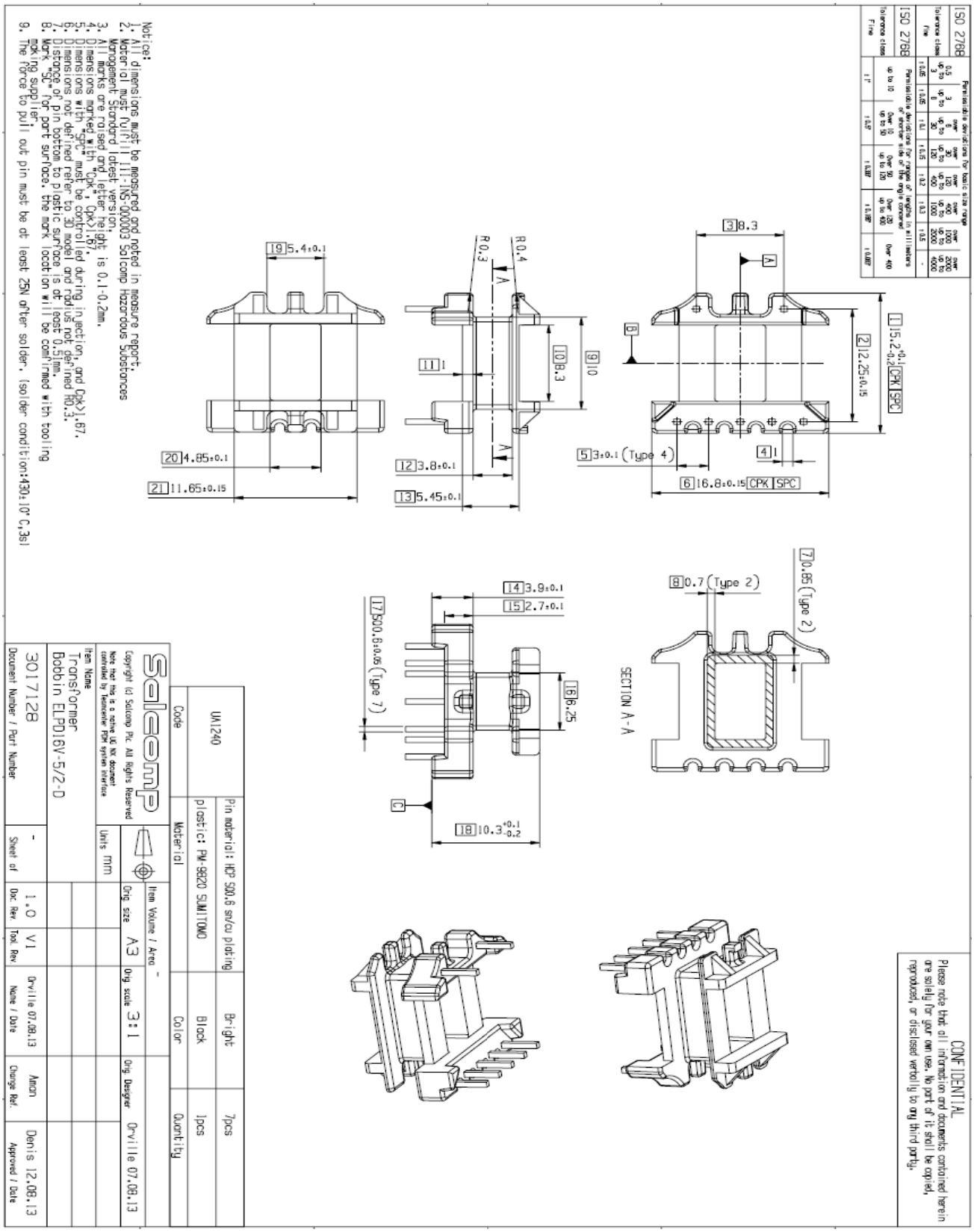
6. Core drawing:



Notes:

1. Test coil: using 63Ts/Φ0.15 as testing coil.
   Pin(1-3) Inductance = 0.95±10%mH @100kHz, 1.0Vrms.
2. The core of the actual gap size need comply with inductance.

7. Bobbin drawing:



8. Specification Change History (规格修订记录):

Drawing No. 图面编号	Transformer Version 变压器版本	Change Description 变更内容	Reviser 修订者	Date 日期
	0.1	Initial release.	Mercy Yang	22nd.May.2014
	0.11	1. Change W1: 4 - 7/41.5Ts → 3 - 2/42Ts. 2. Change W2 ←→ W3. 3. Change W2: 2 - 1 → 7 - 6. 4. Change W3: 1 - Turn pin → 6 - Trun pin. 5. Change W5: 5 - Turn pin → 1 - Trun pin. 6. Change W6: 7 - 5/21.5Ts → 2 - 1/21Ts. 7. Change W7: 5 - 5 → 1 - 1. 8. Add temporary EMC reading test. 9. Add cut pin 2.	Mercy Yang	26th.Jul.2014
	0.12	Change W2/W3 turns: 6Ts → 8Ts.	Mercy Yang	28th.Aug.2014
TR100117A	1.0	ECO No. C05657 1. Official release. 2. Cancel EMC reading test. 3. Add balance voltage test. 4. Change Lk(7-6): 1.0 µH max → 1.3 µH max (Pin S, F shorted).	Mercy Yang	17th.Nov.2014
TR100117B	1.0	ECO No. C05760 Change W5 turns: 8Ts → 8±3Ts.	Mercy Yang	5th.Feb.2014

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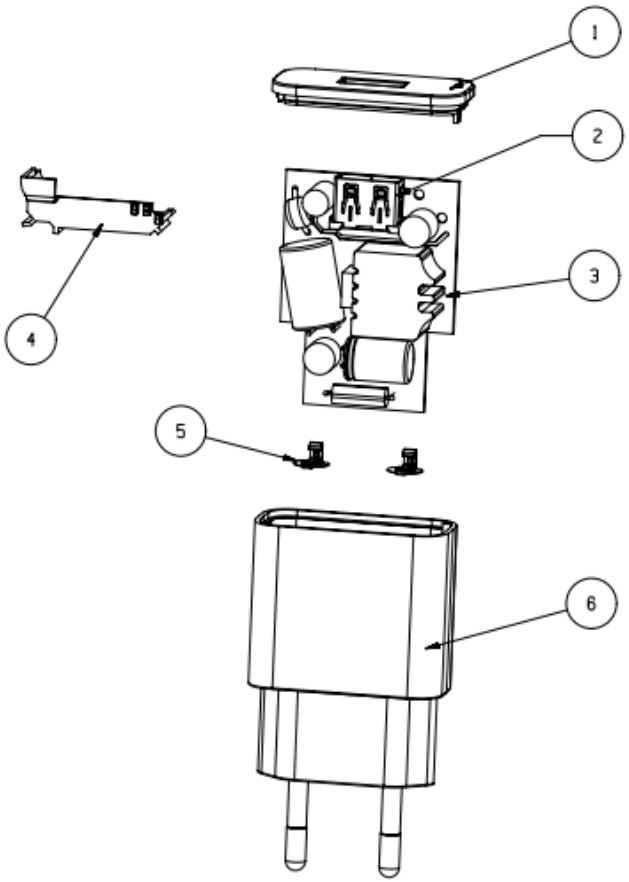
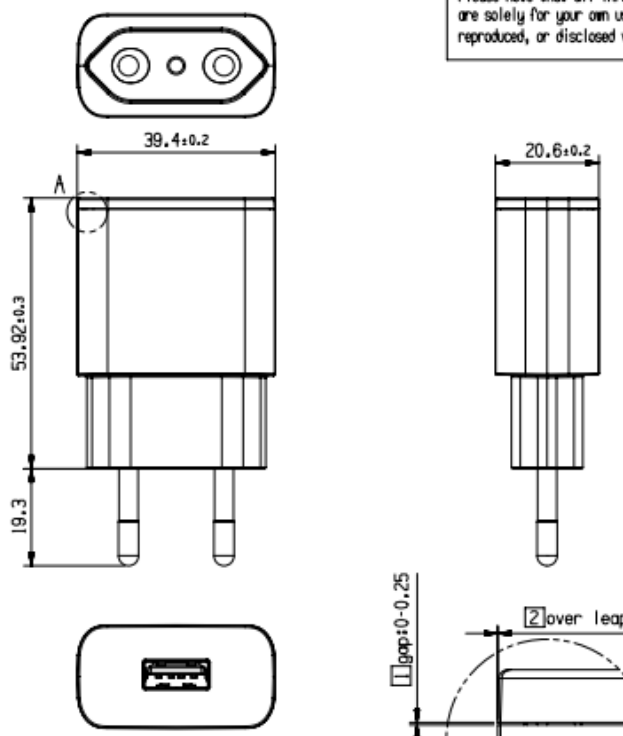
2. Mechanical Drawing

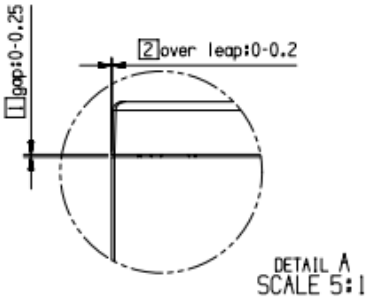
2.1 Outline Drawing

2.2 Label Drawing

2.3 Packing Drawing







For black version

Item No.	Part code	part name	DWG No.	Q'ty(PC)
1	UA1938(black)	A-cover	3013938	1
2	UG0078	USB connector	3009511	1
3	XXXX	PWBA	3018499	1
4	UA1847	PSIP	3018579	1
5	UC0835	Contact spring	3013919	2
6	UA1222(black)	B-cover	3016719	1
6	UA1222T(black)	B-cover	3016719	1

Assembly process:

1).PWBA build and Put PSIP into PWBA.
2).Riveting contact spring into B-cover;
3).Put PWB into B-cover, make sure PWB lay on the right place;
4).Assembly A-cover onto B-cover, and close A/B-cover by USW.

Technical requirement:

1. Visual inspection under standard condition
2. Dimensions No.□1,□2 are critical dimensions and must be guaranteed.
3. All dimensions must be measured and noted in measure report.

Salcomp

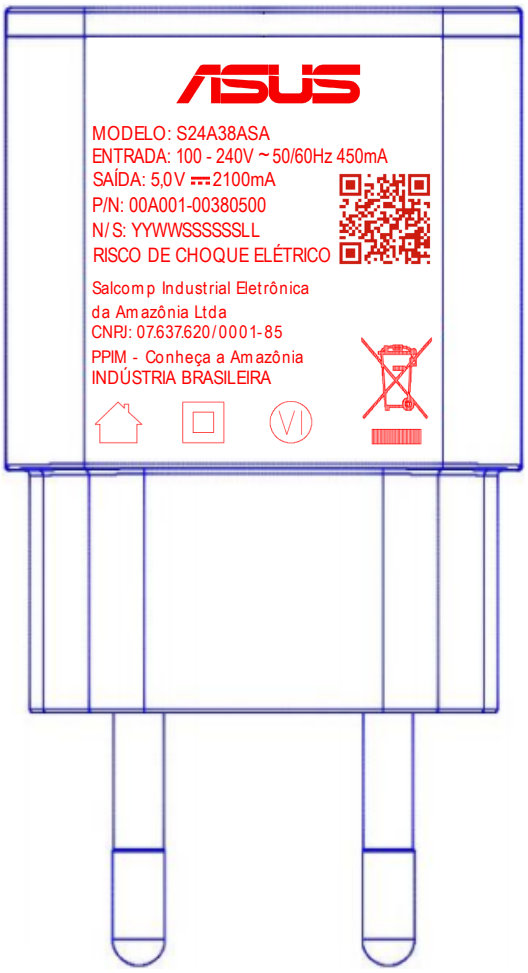
Units mm

Item Volume / Area -

Orig. size A3 | Orig. scale - 1:1 | Orig. Designer 05.03.15Paul

Item Name
Main assembly Jippo 2100 BR

Document Number / Part Number	Sheet of	Doc. Rev.	Tool. Rev.	Name / Date	Change Ref.	Approved / Date
3019913	- 1/1	1.0	V1	Paul 05.03.15		Dshi 06.03.15



Red colored are laser markings

Serial numbering: YYWWSSSSSSLL

(a) YY = stands for manufacturing Year (14 = 2014, 15 = 2015, 16 = 2016)

(b) WW = stands for manufacturing Week (Calendar week 01-53)

(c) P/N = Asus Part Number 0A001-00380500.

(d) S...S = stands for manufacutring Serial Number 6 digits.
(Starting from 0...01 every week)

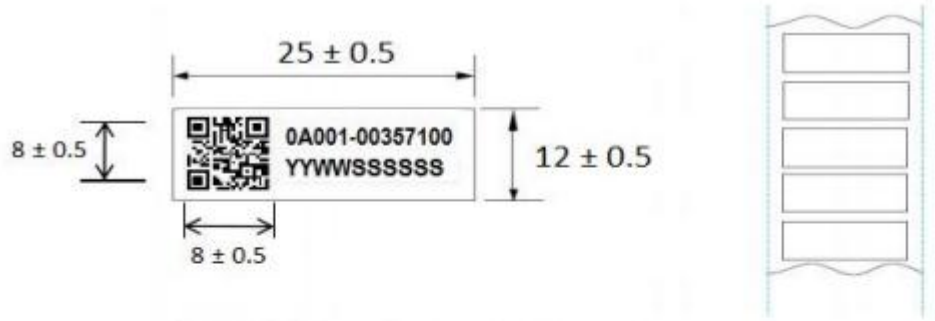
(e) LL = stands for manufacturing Line Numebr (2 digits)

Barcode information: Asus Part Number + Serial Numbering

(a) Barcode format: QR Code 21x21

(b) Barcode rule: 0A001-00380500 + YYWWSSSSSSLL

			Title Laser marked type label	SCALE 3:1	
			Salcomp Manaus, Brazil	Design Rosildo Viana	24.03.17
				Drawn Rosildo Viana	29.03.17
			File:	Check Ma Orchid	11.05.17
A	11.05.17	CO8970	Product:	Appd Cesar Bayona	11.05.17
Version	Date/Sign	Cr. No	0001_Jippo 2100_TM_S24A38ASA_BR		



Padrão QR Code 2D

1 - Tamanho 8 x 8mm

2 - Rastreabilidade formada por 10 dígitos

ASUS PN
(12 ~ 14 dígitos)

RASTREABILIDADE

Material
Frontal: Papel Couchê
Adesivo: JAC DFAM430
Protetor: Papel Glassine Branco

Obs.:
Utilizar fonte: Arial
Tamanho fonte: 6
Ribbon: 83 x 450
Utilizar impressora: Zebra

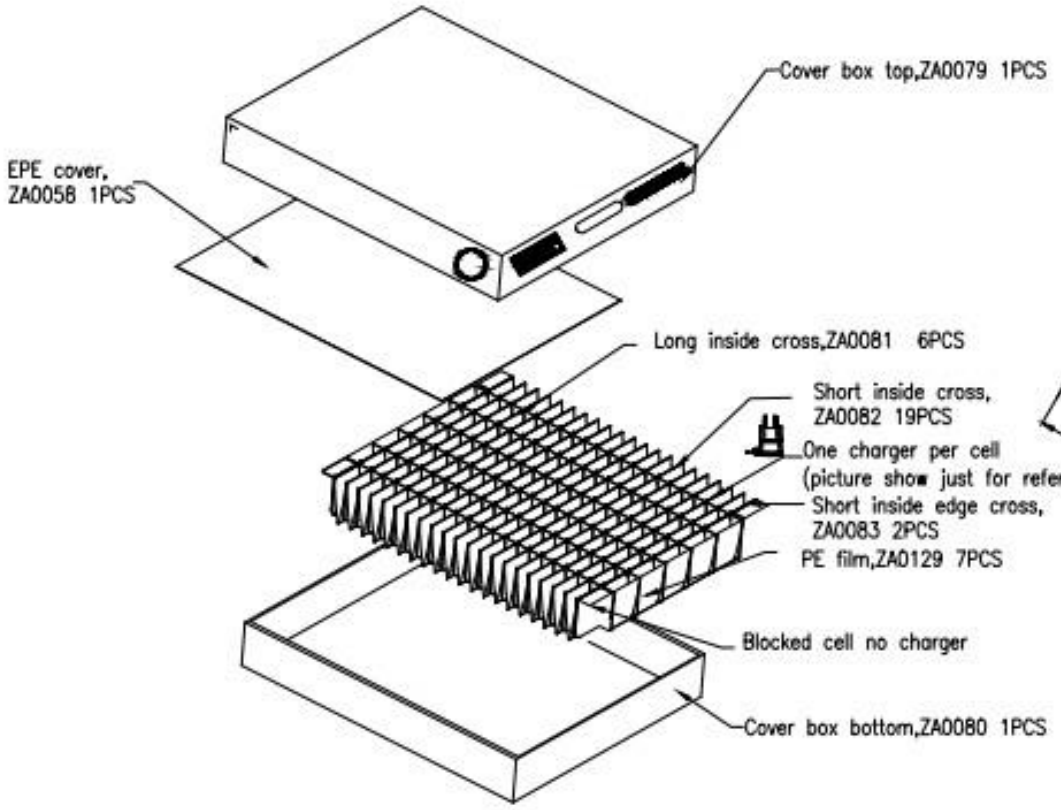
Serial numbering: YYWWSSSSSS

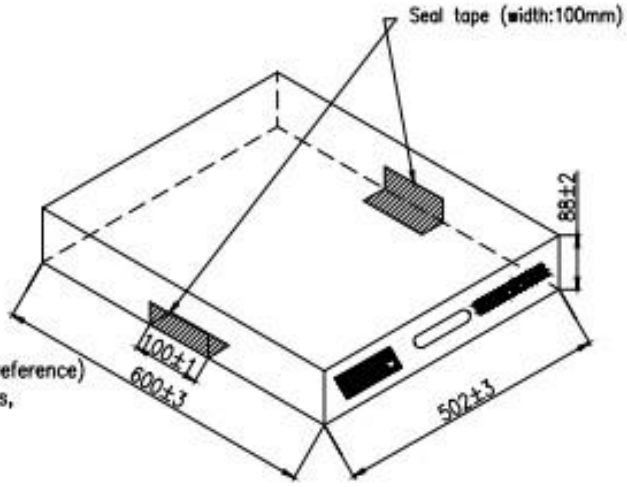
YY = stands for manufacturing Year (14 = 2014, 15 = 2015, 15 = 2016)

WW = stands for manufacturing Week (Calendar week 01-53)

S...S = stands for manufacutring Serial Number 6 digits.
(Starting from 0...01 every week)

ISO 2768								
Tolerance class medium	±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2



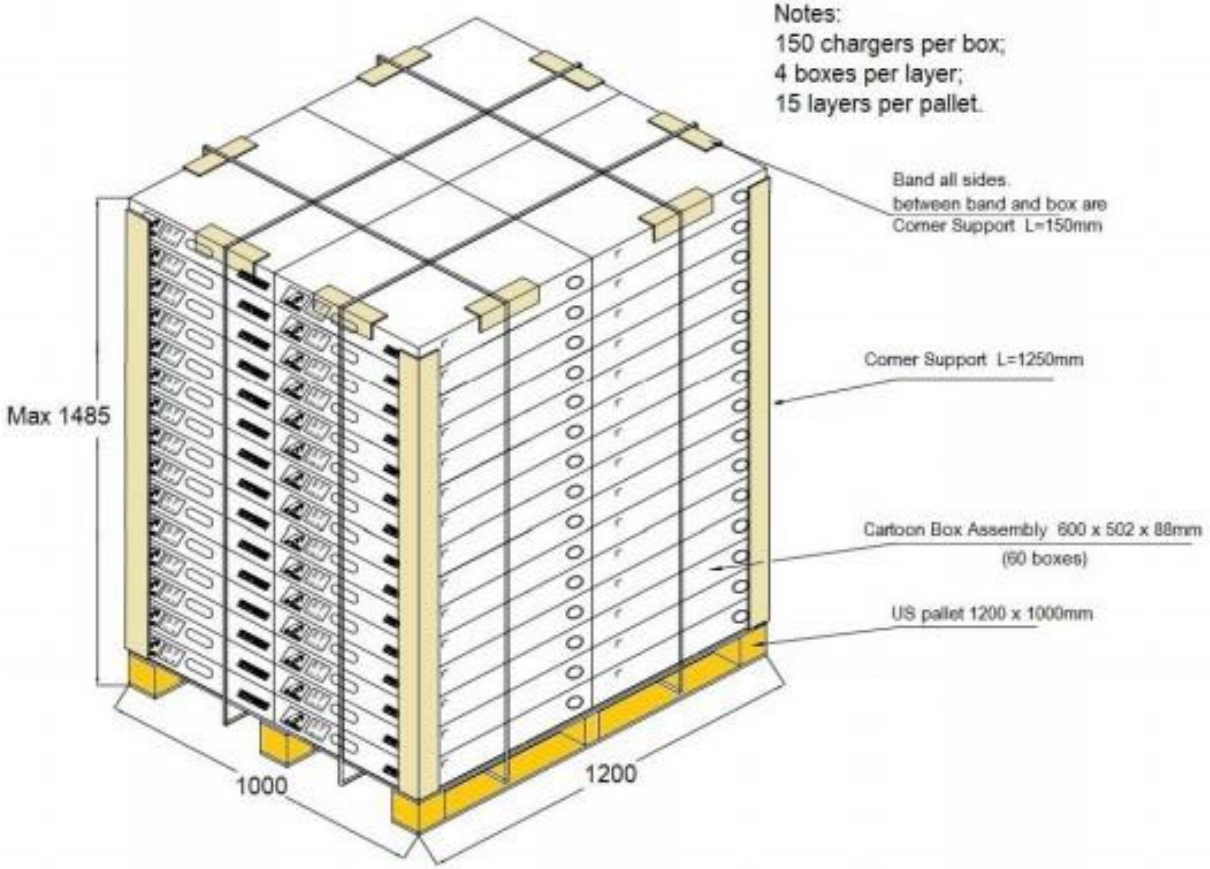


Notes:
1 charger per cell;
150 Cells per layer;
1 layer per box;
Total:150 chargers per box

Dec.	Rev.	Tool Rev.	Coordinates	Kind of reversal / Notice No.	Desig.	Check	Appd.	Date
5.0	V1			Add ULC 1A CI and ULC 700mA on C06868	Woods	Senly	Dahl	Nov-24-2015
4.0	V1			Change printing boxing on C03026	Bing	Senly	Dahl	Nov-13-2012
3.0	V1			Add SoM USB, Smart EU/BR/KR according to C02417	Eko	Hans	Dahl	Aug-26-2011
2.0	V1			Change mark from HF to BF according to CR C01436	Lee	Hans	Dahl	Dec-22-2009
1.0	V1			Original	Lee	Hans	Dahl	Oct-23-2009

Material: –	Treatment		Unit: mm
Color:–	Area		Draw. Lee Aug-12-2009
Salcomp CHINA	Volume		Desig.Lee Aug-12-2009
Copyright (c) Salcomp OY. All Rights Reserved	Orig Drawing Size A3	Scale: N A	Check. Hans Oct-23-2009
	Part of		Appd. Dahl Oct-23-2009
Product:SoM,SoM USB,Nano Universal, Smart Universal ,Genius,Thunder,Atlas BR/EU/CN/US,Palma BR/EU/CN/US,ULC700mA	ULC 1A CI	Model	Code:---
Title: Box assembly for CT packing			Drw. No. 3005449

Notes:
150 chargers per box;
4 boxes per layer;
15 layers per pallet.



1.0	V1		Original	Rosildo	Camurça	Bayona	Sep - 16 - 2016
Doc. Rev.	Tool Rev.	Coordinates	Kind of reversal / Notice No.	Design	Check	Appd.	Date

Material:	Treatment			Unit: mm
Color:	Area		Draw. Rosildo	Sep - 15 - 2016
Salcomp	Volume		Design. Rosildo	Sep - 15 - 2016
BRAZIL	Orig Drawing Size A3	Scale: NA	Check. Camurça	Sep - 16 - 2016
	Part of		Appd. Bayona	Sep - 16 - 2016
Product: Jippo 10W (Asus)		Model S11D3BASA	Code ----	
Title: Pallet Assembly for CT packing			Draw. No.	

Salcomp

3. BOM

Salcomp

Circuit Code	Salcomp Code	Part Description	Supplier	Q'ty	Unit
	UA1845	A Cover (White)	Takfat/Grandview Jiafuh/HongFuh Enzhan/YYX(RMB) Full Chance/XingZhong ChangYu/Juchang Ultratech/GreenTech Shing Tai/ SZD(RMB)	1	PCS
	UA1223	B Cover (White)	Takfat/Grandview Jiafuh/HongFuh Enzhan/YYX(RMB) Full Chance/XingZhong ChangYu/Juchang Ultratech/GreenTech Shing Tai/ SZD(RMB)	1	PCS
	UA1470	PSIP	Howweih/HowYu Ultratech/GreenTech Full Chance/XingZhong Jiafuh/HongFuh Takfat/Grandview Enzhan/YYX ShingTai/SZD	1	PCS
	UC0835	contact spring	How Yu FuanGee/Ledgan Spreadprofit B.R.D HaoFei	2	PCS
	ZA1174	Carton box	Protector MYS FAYIU	0.01	PPC
	ZA1175	Main divider	Protector MYS FAYIU	0.06	PPC
	ZA1176	Long inside cross	Protector MYS FAYIU	0.3	PPC
	ZA1177	Short inside cross	Protector MYS FAYIU	0.25	PPC
	ZZ1560	Protective film	Protector MYS FAYIU	1	PCS
	ZA0843	PE bag	MYS LianFeng	1	PCS
	ZZ1182	Carton Label	MYS Jiajia	0.01	PPC
R2	AC3400	CRES 0W125 1K F 0805	XmHOLDER(TA-I) FENGSHUO(FENGHUA) UNIOHM(TICROM) CLWELL(RALEC)	1	PC
R3, R4	AC8604	CRES 0W25 15M J 1206	FENGSHUO(FENGHUA) UNIOHM(TICROM) CLWELL(RALEC) XmHOLDER(TA-I)	2	PC
R5	AC8648	CRES 0W25 330R J 1206	XmHOLDER(TA-I) UNIOHM(TICROM) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R6	AC4408	CRES 0W125 470K J 0805	FENGSHUO(FENGHUA) UNIOHM(TICROM) XmHOLDER(TA-I) CLWELL(RALEC)	1	PC

Salcomp

Circuit Code	Salcomp Code	Part Description	Supplier	Q'ty	Unit
R7	AC3103	CRES 0W125 1R2 F 0805	XmHOLDER(TA-I) UNIOHM(TICROM) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R8	AC0300	CRES 0W125 R56 F 0805	UNIOHM(TICROM) XmHOLDER(TA-I) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R9	AC0188	CRES 0W25 300R 1206 1%	UNIOHM(TICROM) XmHOLDER(TA-I) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R10	AC3501	CRES 0W125 10K F 0805	UNIOHM(TICROM) FENGSHUO(FENGHUA) XmHOLDER(TA-I) CLWELL(RALEC)	1	PC
R11	AC3112	CRES 0W10 1k1 F 0805	FENGSHUO(FENGHUA) CLWELL(RALEC) UNIOHM(TICROM) XmHOLDER(TA-I)	1	PC
R12	AC1516	CRES 0W10 2K7 F 0603	XmHOLDER(TA-I) UNIOHM(TICROM) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R13	AC0244	CRES 0W25 0R J 1206	UNIOHM(TICROM) XmHOLDER(TA-I) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R15	AC3120	CRES 0W125 2R2 F 0805	UNIOHM(TICROM) XmHOLDER(TA-I) CLWELL(RALEC) FENGSHUO(FENGHUA)	1	PC
R16	AC4459	CRES 0W125 270R J 0805	FENGSHUO(FENGHUA) UNIOHM(TICROM) XmHOLDER(TA-I) CLWELL(RALEC)	1	PC
R51	AC3101	CRES 0W125 4R7 F 0805	XmHOLDER(TA-I) UNIOHM(TICROM) FENGSHUO(FENGHUA) CLWELL(RALEC)	1	PC
R52	AC1126	CRES 0W10 5K1 F 0603	CLWELL(RALEC) XmHOLDER(TA-I) UNIOHM(TICROM) FENGSHUO(FENGHUA)	1	PC
C3	CC0194	CCA 330P 20% 250V X7R 0805	Fruition(WALSIN) CLWELL(YAGEO) Fengshuo(Fenghua)	1	PC
C5	CC3302	CCA 0805 2u2 25V X7R +/-20%	CLWELL(YAGEO) Fruition(WALSIN) Fengshuo(Fenghua)	1	PC
C6	CC2000	CCA 330p 10% 50V X7R 0603	Fengshuo(Fenghua) CLWELL(YAGEO) Fruition(WALSIN)	1	PC
C7	CC0200N	CCA 220PF 10% 50V X7R 0603	CLWELL(YAGEO) Fruition(WALSIN) Fengshuo(Fenghua)	1	PC

Salcomp

Circuit Code	Salcomp Code	Part Description	Supplier	Q'ty	Unit
C54	CC2009	CCA 2N2 X7R 10% 50V 0603	Fruition(WALSIN) Fengshuo(Fenghua) CLWELL(YAGEO)	1	PC
D1	JF0144R	Bridge rectifiers 1000V 1.5A RFR	PINGWEI GALAXY	1	PC
D2	JF6002R	DIODE SWITCHING BAS216 SOD-323, rFR	LRC SUPER VICTORY PANJIT	1	PC
D5	JF0325R	Diode 1N4007 1000V 1A SOD-123 RFR	PINGWEI SUPER VICTORY LRC	1	PC
D51	JF0034R	SCHOTTKY DIODE LOW VF 10A 45V SMD RFR	PINGWEI GALAXY FSBR DIODES	1	PC
D52	JH0090R	Z-Diode 6.2V 2% 0.5W Micromelf RFR	SUPER VICTORY ZOWIE	1	PC
L2	FP0028	Ferrite Bead 0805 1k@30M 2.5K@65M 0.8R	XUSHENG(MICROGATE) Fengshuo(Fenghua) SUNLORD	1	PC
IC1	LM0380R	PWM IC C2174-B SOP-8 RFR	Camsemi	1	PC
PWB	SB0359A	CEM_1 1.0+/-0.1 Cu 1x35u OSP	Yuewah Jiahe Zhongluo	1	PC
R1	AJ0094	WW RES 1W 4R7 K 2KV 3.3*9.5Max Wire D 0.12mm	KAYOCOTA PAKHENG CHANGSHENG	1	PC
	QK1027	QK1027:Tube 5X11	HaiNa	1	PC
C1	CN0188P	ELCAP 6U8 400V 8X12.8Max 15%105C ESR<6R RC60mA	AISHI KSOHIN TEAPO CAPXON BERYL	1	PC
C2	CN0020	Ecap 15uF +/-20% 400V 10*16.7Max 2000Hou	CAPXON AISHI TEAPO BERYL	1	PC
C51	CN0147	OCAP 560UF6.3V 6.3x8 20%105C 5500MA0.01R	LELON TEAO ASIHI	1	PC
C52	CN0529	ocap 470U6.3V 5X11 Max 20% 105C	AISHI LELON TEAPO	1	PC
CY1	CE0220	Y1 CAP 100pF 250V P:9mm T:Max 3.5mm	ISND SHM	1	PC
T2	JM0009R	Transistor 850V/4A 13005C3D1 TO-251 RFR	JUNWELL SISEMI	1	PC
L1	FJ0082	CHOKE 330UH D6.5X6mm max, 130#,0.14mm	Deli Cenker changsheng	1	PC
M1	FM6108	Transformer ELPD16	BH Jano YF CT JY	1	PC
X51	UG0077	USB-A 2.0 white plastic insert	ShenMing Forman HowYu	1	PC
	XW0120	Silicone,White,soft,UL94 V0	Sunyes	0.8	ML

4. QC Flow chart

HI-INS-Q00630-01
Control Plan

Customer 客户	[illegible]	Date (REV.)	[illegible]	Date (ORIG.)	Date
Part Name 產品名	[illegible]	Process 制程	Final Assembly	Prepared by	[illegible]
Part Number 產品型号	[illegible]	Product Phase 产品阶段	Mass production verification	Approved by	[illegible]
Core Team 核心小组	[illegible]				

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COMPANY CONFIDENTIAL

Process # 制程号	Process name 制程名称	Document Reference 参考文件	Machine, Device, Jig, Tools For Mfg.	Characteristics 特性: Product 产品	Characteristics 特性: Process 制程	Special Char. 特殊特性	Methods 方法: Product/Process Specification/Tolerance	Evaluation/Measurement Technique	Sample 样本: Size	Sample 样本: Freq.	Control Methods 控制方法	Remarks	Target	Reaction Plan
	TLA (Goods Receiving)	[illegible]	NA	NA	Goods receiving		[illegible]	NA	1	[illegible]	[illegible]	[illegible]		Inform PMC
	IQC (Incoming Material Inspection)	[illegible]	[illegible]	NA	Incoming quality		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		Hold and issue SCAR
	FPL / Store	[illegible]	NA	NA	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
		[illegible]		NA	[illegible]		[illegible]	NA		[illegible]	NA			
[illegible]	Materials Pick up	[illegible]	NA	NA	[illegible]		[illegible]	NA		[illegible]	NA	[illegible]		
	PCB Loading	[illegible]	[illegible]	NA	[illegible]		[illegible]	[illegible]		-	NA	[illegible]		[illegible]
[illegible]	Glue printing	[illegible]	[illegible]	NA	[illegible]	NA	[illegible]	[illegible]		-	NA	[illegible]		[illegible]
				NA	[illegible]	NA	[illegible]	NA		[illegible]	NA	[illegible]		[illegible]
				NA	[illegible]	NA	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SMT & Reflow soldering & inspection	[illegible]	[illegible]	NA	[illegible]	NA	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
									[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
				NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
				NA	[illegible]	NA	[illegible]	NA		[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	Component preforming	[illegible]	[illegible]	NA	[illegible]	NA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
								[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	Manual assembly	[illegible]	NA	NA	[illegible]	NA	[illegible]	[illegible]		-	NA	[illegible]		[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
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					[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
			[illegible]		[illegible]		[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
			[illegible]		[illegible]		[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
					[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
								[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]			[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]			[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]			[illegible]		[illegible]	[illegible]			[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]			[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
			[illegible]	[illegible]			[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

4M	Product Store 产品储存	SOP-PW004 Handling, Storage, Packing and Delivery控制，存储，包装和交货 SOP-PW007 Product Identification and Traceability产品标识和追溯性			Store and traceability 储存与追溯		Refer the related documents. 参考相关文件。	NA		NA	SAP R3	PMC Warehouse 仓储员		No-inspection 免检出货
	TCR (Deliver to customer) 出货	SUNSLA00016 (Delivery Instruction 出货指导书)			Quantity 数量		According to quantity in SAP R3 system (Per Order)根据SAP R3系统数量 (单张订单)	NA		NA	SAP R3	PMC Warehouse 仓储员		Inform customer or call back 通知客户或召回

Remark: **备注**

1. If operators find some non-conforming products in line during self-inspection or testing process, they should report it to line leader, then to production supervisor immediately,and QA Engineer at the same time.
   如果作业员在自检或测试中发现不合格品，必须立即向生产拉长报告，拉长向生产主管报告,通知相关人员调试机器,并同时告知品管工程师。
2.Production/ QA foreman or Engineer /supervisor should analyze the reported no-conforming cause and make corrective/preventive action.
   生产组长/QA班长或工程师/主管应当分析不合格原因并告诉纠正和预防措施。
3. For metrical data collected for calculating Cpk, they should be collected by QA and sent to QA Secretary everyday. The secretary input data to computer, print the Cpk value and report them to QA engineer daily. If the CPK is below the target, the QA engineer should analyze,and issue the CAR if necessary.
   对那些用作CPK计算的测量数据，每天由QA检验员收集交到QA 办公室文员处。文员每天输入数据到电脑并打印CPK结果, 同时报告给QA 工程师。对于CPK低于目标值,品工程师分析原因,必要时发出CAR.
4. If some target defined in Control plan can not get, related PE engineer, production supervisor and QA Engineer（R&D engginner if necessary) must have a meeting to analyze and take some actions to improve and prevent recurrence.
   如果不达控制计划中的目标值未能达到，相关的生产工业工程工程师，生产主管和品管工程师（如有必要，开发工程师）必须开会分析不良原因并给出纠正和预防措施。
5. For IPQA inspection, the quality target is 0 failure. If IPQA detects non-conforming products in some period, the operators sh
   IPQA的巡检质量目标为零缺陷.如果IPQA在某段时间内发现不良品，生产员工需将从IPQA上次巡检到此段时间内的产品进行返工。
6. The last version for document please refer to document controlling list. The MPI No. and version of each proce
   最新文件版本见控制文件清单. 各工序 MPI编号及版本见MPI清单。

■ Critical processes
● Safety processes

Salcomp

5. Safety Certifications

Ref. Certif. No.

SG ITS-9247M1

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product Produit	Power supply unit (Travel Adapter)
Name and address of the applicant Nom et adresse du demandeur	Salcomp (Shenzhen) Co., Ltd. Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Name and address of the manufacturer Nom et adresse du fabricant	Salcomp (Shenzhen) Co., Ltd. Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Name and address of the factory Nom et adresse de l'usine Note: *When more than one factory, please report on page 2* Note: *Lorsque il y plus d'une usine, veuillez utiliser la 2ème page*	Salcomp (Shenzhen) Co., Ltd. Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA ☒ Additional Information on page 2
Ratings and principal characteristics Valeurs nominales et caractéristiques principales	Input: 100-240V~, 50-60Hz, 450mA, Class II Output: 5Vdc, 2100mA
Trademark (if any) Marque de fabrique (si elle existe)	-
Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur	-
Model / Type Ref. Ref. De type	S24AXY** (See page 2 for details)
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire,, peuvent être indiqués sur la 2ème page	This certificate replaces CB Certificate No. SG ITS-9247 dated 21 January 2015 due to add new plug types, update model series list, add one new India factory and add alternative plastic material of enclosure in critical component list.
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la	IEC 60950-1:2005 + A1:2009 + A2:2013 Group and national differences for CENELEC countries (EN 60950-1:2006 + A11:2009 + A1:2010 + A1:2010 + A12:2011 + A2:2013) and national differences of United States, Canada, Korea, Australia and New Zealand, China, Japan and Israel have been checked.
As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport d'essais numéro de référence qui constitue partie de ce Certificat	141222010SZN-001 Amendment 1

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Intertek Testing Services (Singapore) Pte Ltd
5, Pereira Road, #06-01
Asiawide Industrial Building
Singapore 368025

Date: 14 December 2016

Intertek

Signature:

Ong Keng Chuan

Name and address of the factory

1. Salcomp Industrial Eletrônica da Amazônia Ltda
   Avenida dos Oitis, 4.145, Distrito Industrial, 69075- 842 Manaus, Amazonas, Brazil

2. Salcomp Manufacturing India Pvt Ltd
   Nokia Telecom SEZ, SIPCOT Industrial Area Phase III, Sriperumbudur 602105, Chennai Bangalore National Highway, Tamilnadu, India

3. Salcomp Manufacturing India Private Limited
   D-221, Sector 63, Sector 63, Noida, Gautam Budh Nagar, Uttar Pradesh, India

Model / Type Ref.

S24AXY**
X stands for different enclosure color, X=0-9, ** stands for customer code, it can be blank or letter A-Z; Y stands for different plug, Y=0-6, 8-9, see the details as below:

Model number	Plug type
S24AX0**	EU
S24AX1**	UK
S24AX2**	US/CA
S24AX3**	AUS
S24AX4**	CN
S24AX5**	JP
S24AX6**	KR
S24A18**, S24A38**, S24A58**, S24A78**, S24A98**	BR
S24A08**, S24A28**, S24A48**, S24A68**, S24A88**	AR
S24AX9**	TW

Date: 14 December 2016

Signature:

Ong Keng Chuan

Test Report issued under the responsibility of:

TEST REPORT

IEC 60950-1
Information technology equipment – Safety – Part 1: General requirements

Report Number. ..... :	141222010SZN-001
Date of issue ..... :	Jan. 20, 2015; Amendment 1: Dec. 12, 2016
Total number of pages ..... :	197 pages
Applicant's name ..... :	Salcomp (Shenzhen) Co., Ltd.
Address ..... :	Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Test specification:	
Standard ..... :	IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
Test procedure ..... :	CB scheme
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60950_1F
Test Report Form(s) Originator .... :	SGS Fimko Ltd
Master TRF ..... :	Dated 2014-02

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.intertek.com

Test item description..... :	Power supply unit (Travel Adapter)
Trade Mark..... :	N/A
Manufacturer ..... :	Salcomp (Shenzhen) Co., Ltd. Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Model/Type reference..... :	S24AXY** (see page 9 for details)
Ratings..... :	Input: 100-240V ~, 50-60Hz, 450mA; Output: 5V ⎓, 2100mA. Class II apparatus.

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.intertek.com