

1.0 Reference and Address			
Report Number	230830027GZU-001	Original Issued: 1-Nov-2023	Revised: 6-May-2024
Standard(s)	Furniture Power Distribution Units [UL 962A:2023 Ed.6] Cord Reels and Multi-outlet Assemblies [CSA C22.2#308:2018 Ed.2]		
Entirely Replaces Report Number	180824101GZU-001		
Applicant	Dongguan Baiyou Electronic Co Ltd	Manufacturer 1	<b>Dongguan baiyou electronic co.,ltd</b>
Address	2 F A building wufeng industrial jintan road shijie town dongguan city guangdong 523295	Address	2 F A building wufeng industrial jintan road shijie town Dongguan city Guangdong 523295
Country	CHINA	Country	CHINA
Contact	Yang yongxin; Cherry chen	Contact	Yang yongxin; Cherry chen
Phone	86 13556785659; 86 18002616618	Phone	86 13556785659; 86 18002616618
FAX	NA	FAX	NA
Email	baiyouyyx@163.com dgbaiyou@163.com	Email	baiyouyyx@163.com dgbaiyou@163.com

<b>2.0 Product Description</b>	
Product	Furniture Power Distribution Units
Brand name	BAYU
Description	The products covered by this report are household furniture power distribution units for indoor used only. The product used for mounting above face onto a cabinet or similar furnitures.
Models	<p>BY213- followed by H, M, Q, N, L, C, J , S or I; followed by 01, 02, 03, 04 or 05; maybe followed by 1, 2 or 3; maybe followd by K;maybe followd by -C.</p> <p>BY213- followed by H, M, Q, N, L, C, J , S or I; followed by 01 or 02; maybe followed by 1, 2 or 3; maybe followd by -C; followd by -Y.</p> <p>BY213- followed by H, M, Q, N, L, C, J , S or I; followed by 01, 02, 03, 04 or 05; maybe followed by 1, 2 or 3; followd by K;maybe followd by -C; followd by -Y.</p>
Model Similarity	<p>All the model used the same material and had the same rating.                      For example, use BY213-XABC-C-Y to represent the model no.:                      X=H, M, Q, N, L, C ,J, S or I, indicates the differences series of product. Every series had the different facade shape.                      A=01, 02, 03, 04 or 05, indicates the numbers of socket outlets which have the different length.                      The socket outlets may be use with or without TR Receptacles.                      B= 1, 2, 3 or nil, indicates the USB port.nil represent without USB port. 1, 2, 3 indicate the different type of USB output port.                      C=K or nil, indicates with or without OCP. K represent with OCP. nil represent without OCP.                      (All models shown in Illustrations 2 to 10 of Sec 7.0)                      -C represent with type-C port.                      -Y represent with 5-15R Cord connector.</p>
Ratings	12A, 125V, 60Hz, 1500W MAX
Other Ratings	<p>USB port output: 5VDC Max. 2.1A (for models without type-C port) ;                      USB port + class 2 lead output: 5VDC Max. 2.1A(for models without type-C port);</p> <p>USB module A:USB -A: 5V/3A, 9V/2 A, 12V/1.5A, Type-C: 5V/3A, 9V/2.22 A, 12V/1.67A                      USB -A+ Type-C:5V/3.1A (for models with type-C port.);</p> <p>USB module B:USB -A1 or USB-A2: 5V/3A, 9V/2 A, 12V/1.5A, Type-C: 5V/3A, 9V/2.22 A, 12V/1.67A,USB -A1+ Type-C or USB -A2+ Type-C or USB -A1+ USB -A2 or USB -A1+ USB -A2+ Type-C:5V/3.1A (for models with type-C port.);</p> <p>USB module C:USBA Output: 5Vdc/3A, 9Vdc/2A, 12Vdc/1.5A, Type-C Output: 5Vdc/3A, 9Vdc/2A, 12Vdc/1.5A,Total: 20W Max(for models with type-C port.).</p>

**3.0 Product Photographs**

**Photo 1 -** Front view of model BY213-S043K.

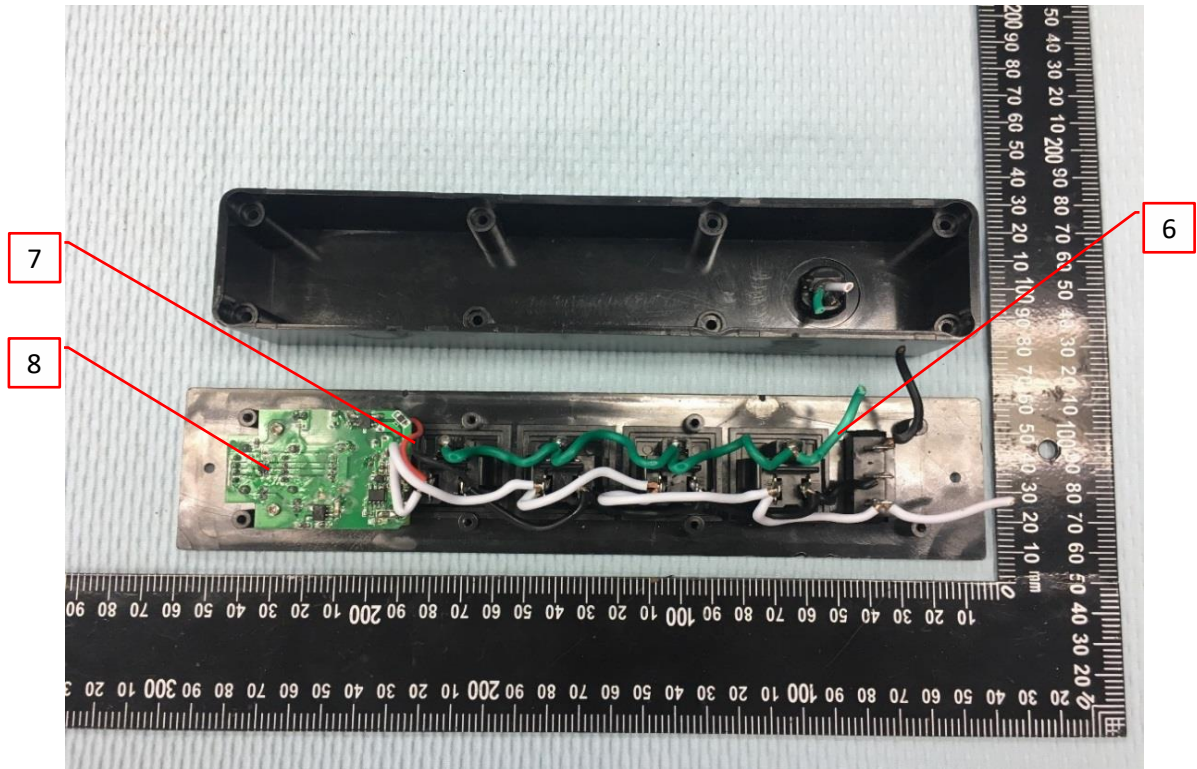


**Photo 2 -** Back view of model BY213-S043K.



**3.0 Product Photographs**

**Photo 3 - Internal view of model BY213-S043K.**



**Photo 4 - Front view of model BY213-L021**



**3.0 Product Photographs**

**Photo 5 -Back view of model BY213-L021**



**Photo 6 - Front view of model BY213-C021**



**3.0 Product Photographs**

**Photo 7 - Back view of model BY213-C031**



**Photo 8 - Front view of model BY213-M042K.**



### 3.0 Product Photographs

**Photo 9** - Back view of model BY213-M042K.



**Photo 10** - Front view of model BY213-H021



**3.0 Product Photographs**

**Photo 11 - Back view of model BY213-H021**



**Photo 12 - Front view of model BY213-I012**



**3.0 Product Photographs**

**Photo 13 - Front view of model BY213-I012(TR TYPE)**



**Photo 14 - Back view of model BY213-I012**



**3.0 Product Photographs**

**Photo 15 - Front view of Model BY213-N011**



**Photo 16 - Back view of Model BY213-N011**



**3.0 Product Photographs**

**Photo 17 - Front view of Model BY213-N011**



**Photo 18 - Back view of Model BY213-N011**



**3.0 Product Photographs**

**Photo 19 - Front view of Model BY213-J022**



**Photo 20 - Back view of Model BY213-J022**



**3.0 Product Photographs**

**Photo 21 -** Front view of Model BY213-H021



**Photo 22-** Back view of Model BY213-H021

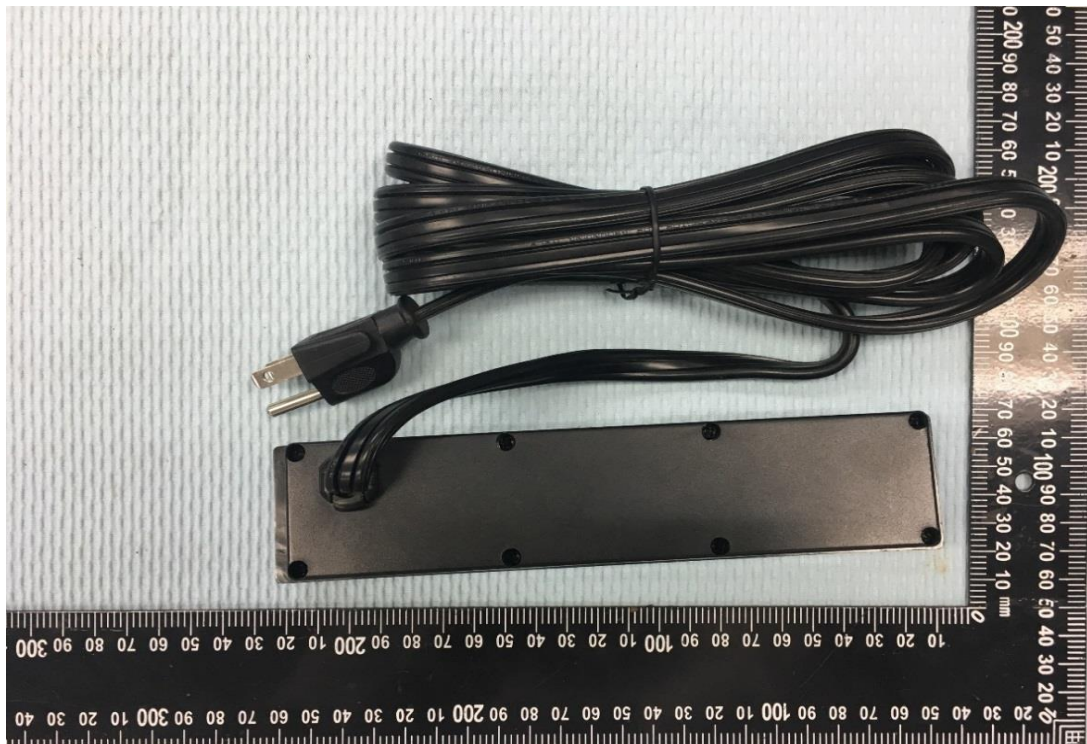


**3.0 Product Photographs**

**Photo 23-** Front view of Model BY213-Q041K



**Photo 24-** Back view of Model BY213-Q041K



**3.0 Product Photographs**

**Photo 25-** Front view of Model BY213-M032

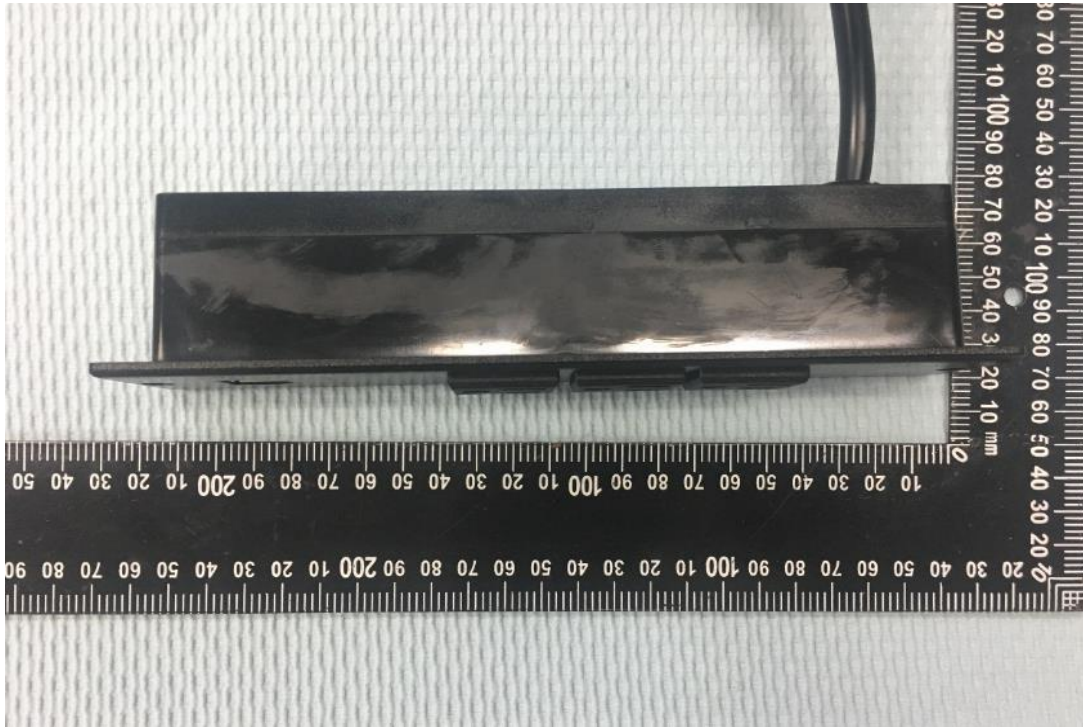


**Photo 26-** Back view of Model BY213-M032



**3.0 Product Photographs**

**Photo 27-** Side view of Model BY213-M032

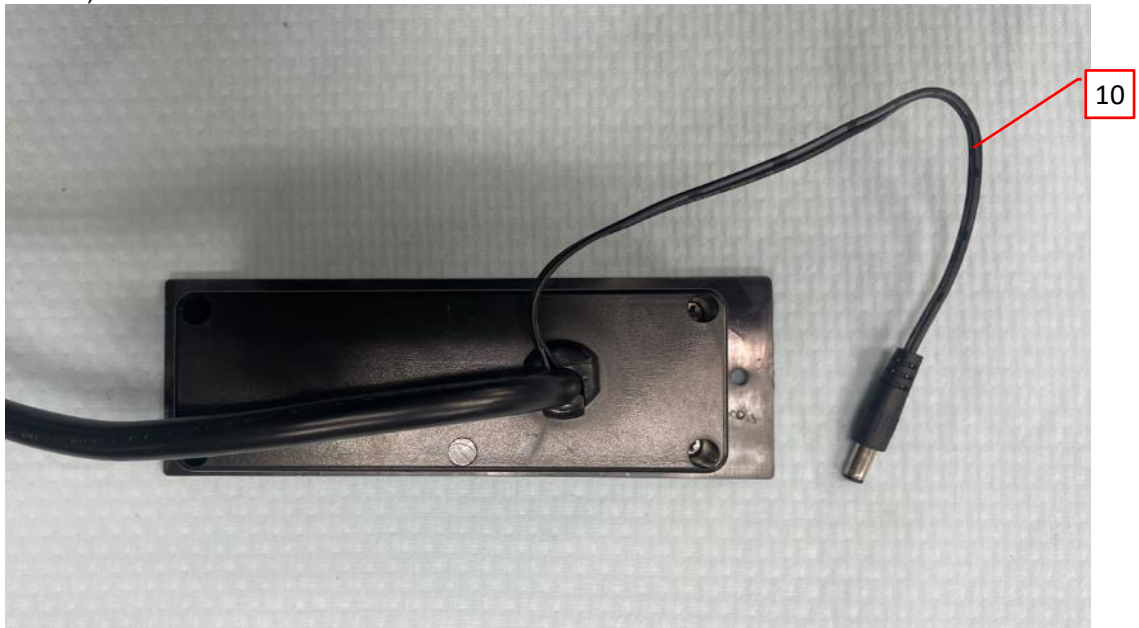


**Photo 28 -** Side view of Model BY213-M032

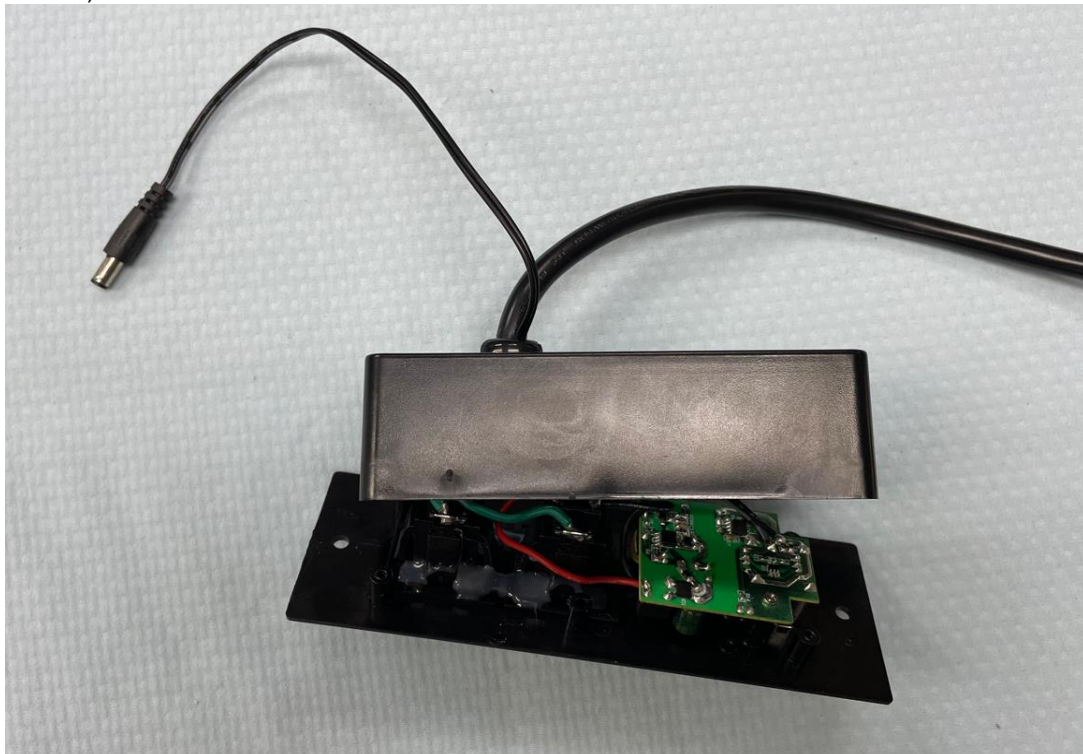


**3.0 Product Photographs**

**Photo 29** - Alternative view of model BY213-J022 with class 2 lead(also representative for other models which with USB module )



**Photo 30** - Alternative view of model BY213-J022 with class 2 lead(also representative for other models which with USB module )

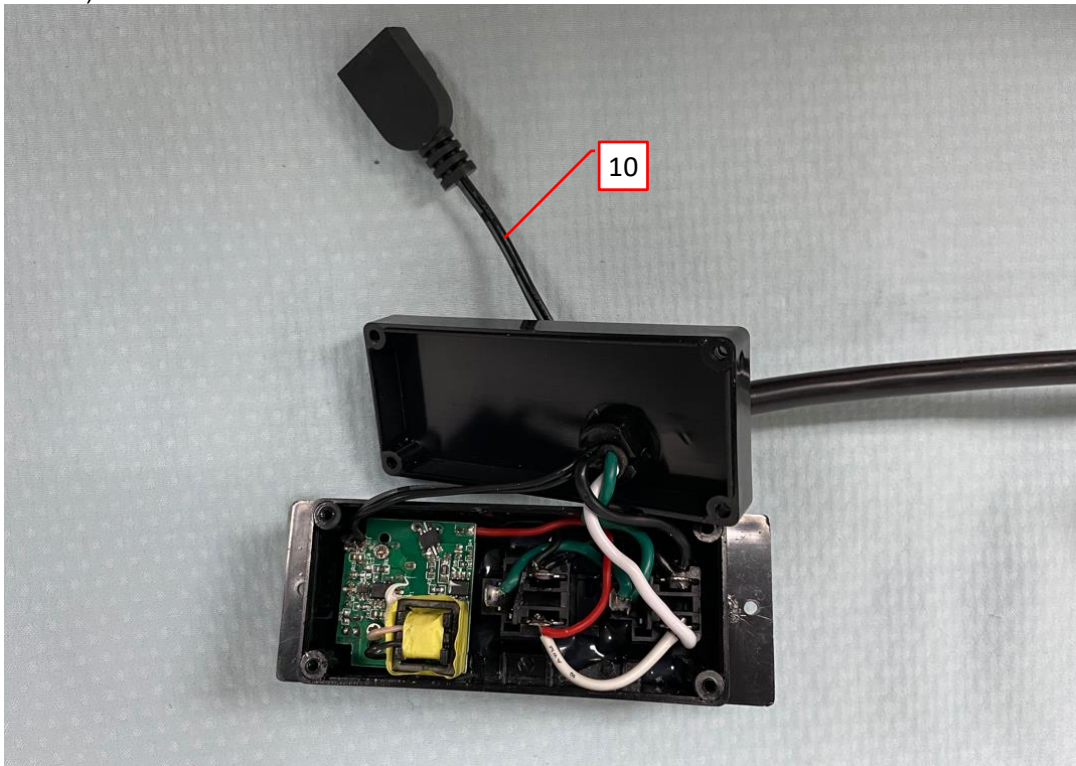


### 3.0 Product Photographs

**Photo 31** - Alternative view of model BY213-Q021 with class 2 lead (also representative for other models which with USB module )



**Photo 32** - Alternative view of model BY213-Q021 with class 2 lead (also representative for other models which with USB module )

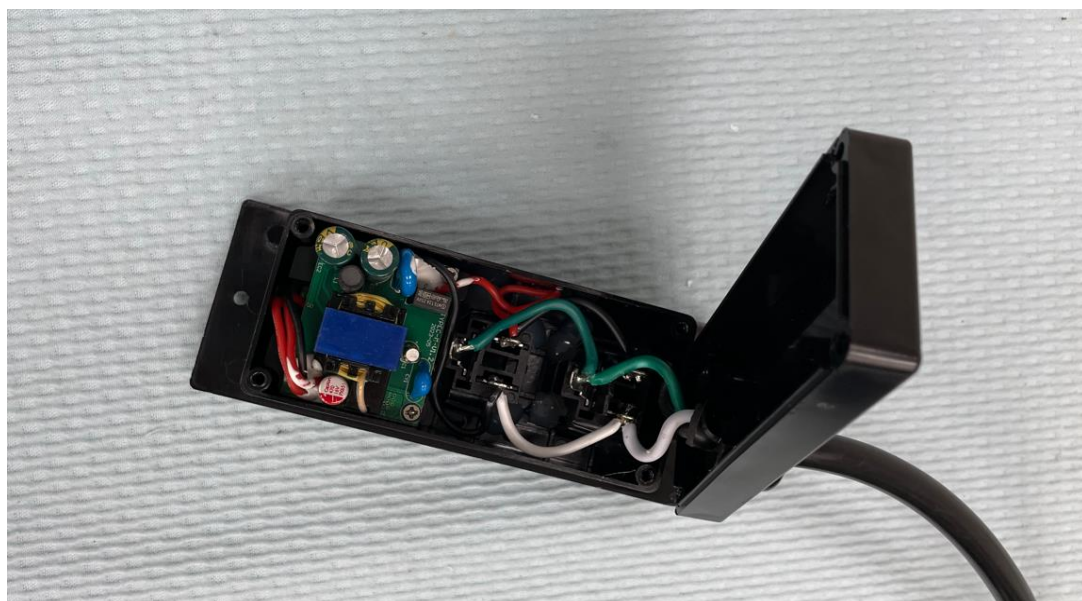


### 3.0 Product Photographs

**Photo 33** - Overall view of models with USB module A (representative)



**Photo 34** - Internal view of models with USB module A (representative)

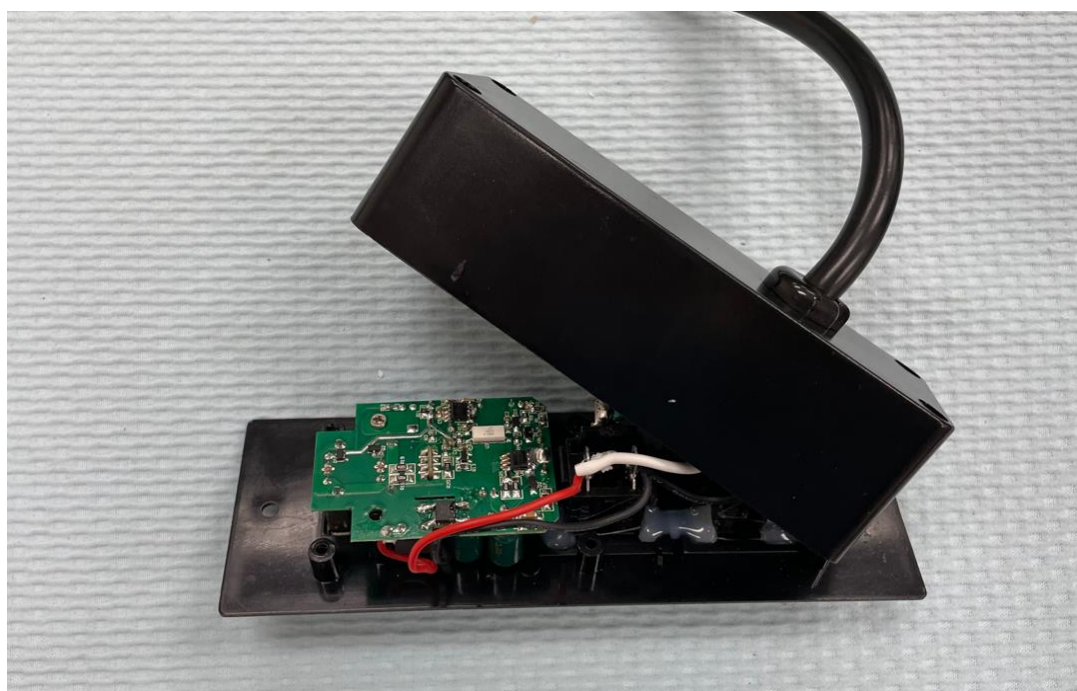


### 3.0 Product Photographs

**Photo 35** - Overall view of models with USB module B (representative)



**Photo 36** - Internal view of models with USB module B (representative)

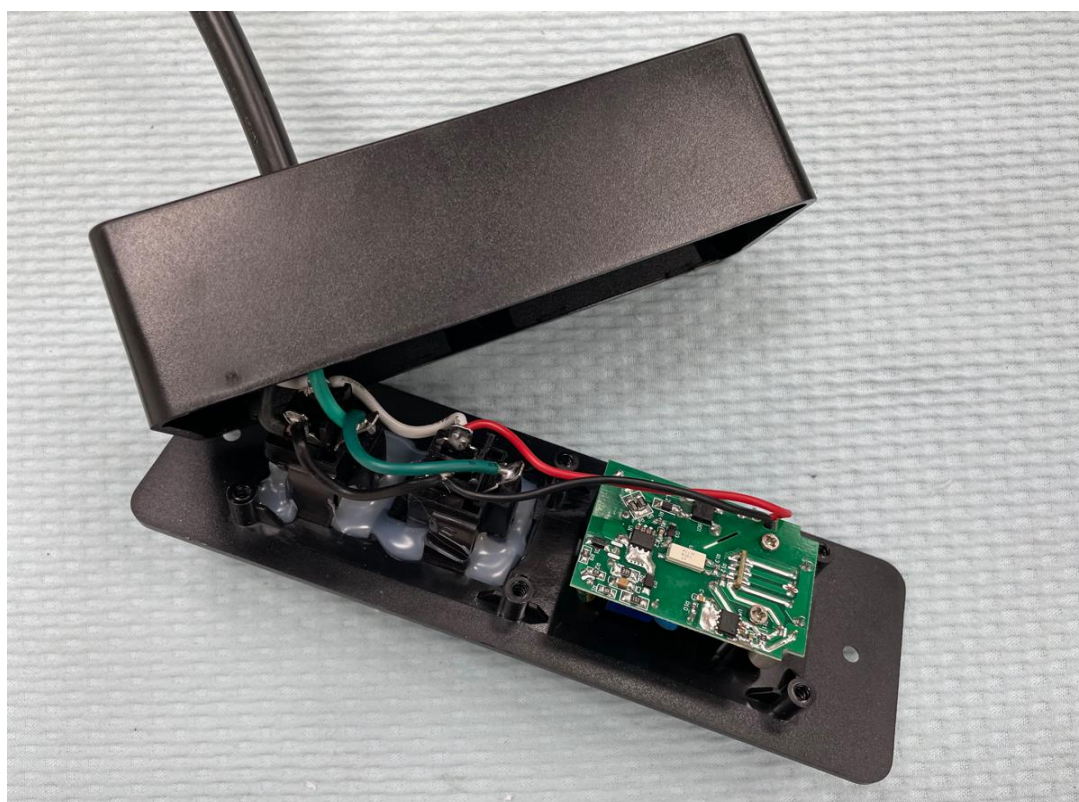


### 3.0 Product Photographs

**Photo 37** - Overall view of models with USB module C (representative)

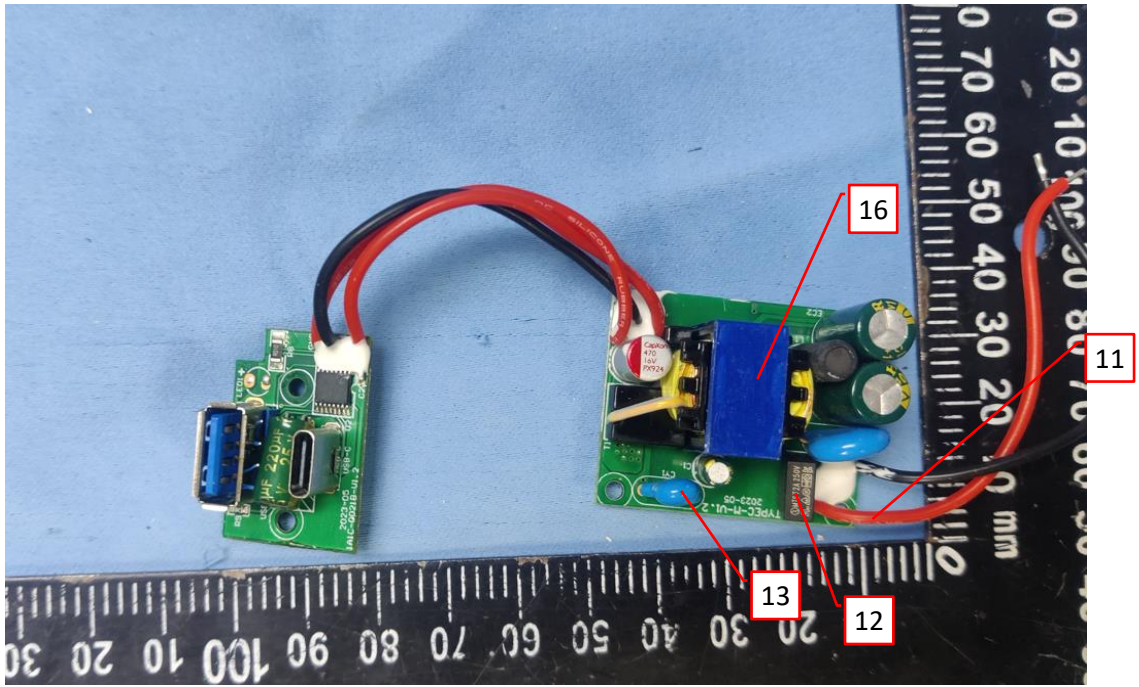


**Photo 38** - Internal view of models with USB module C (representative)

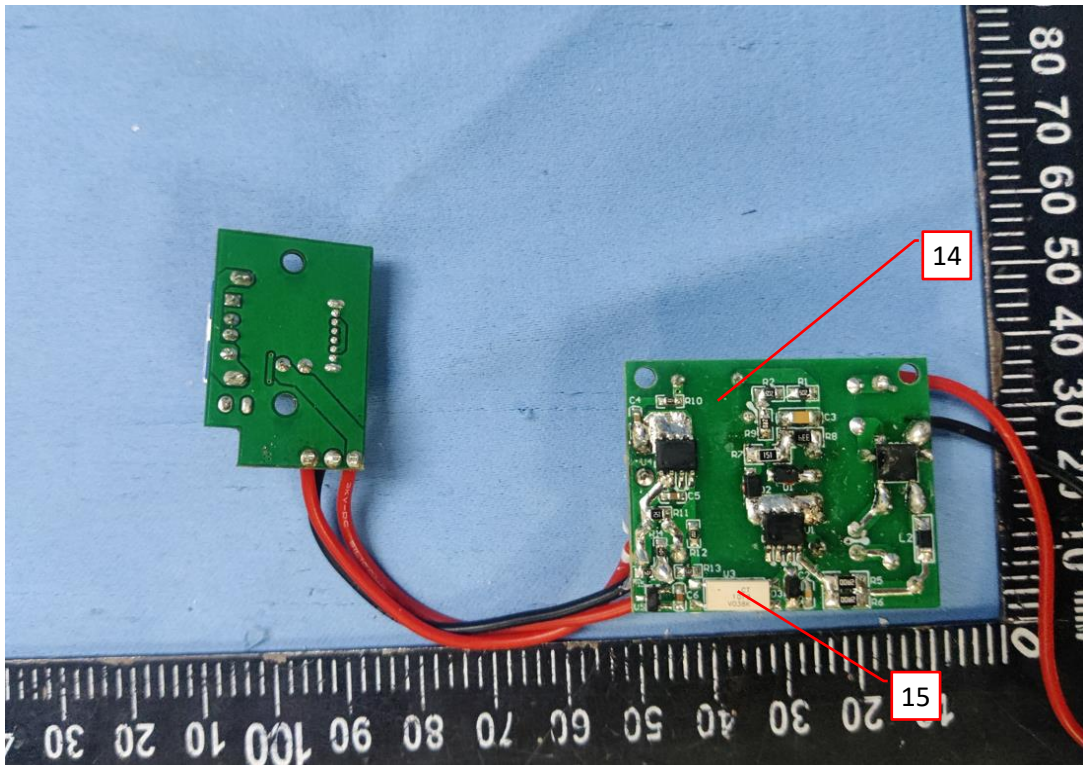


**3.0 Product Photographs**

**Photo 39 - USB module A**

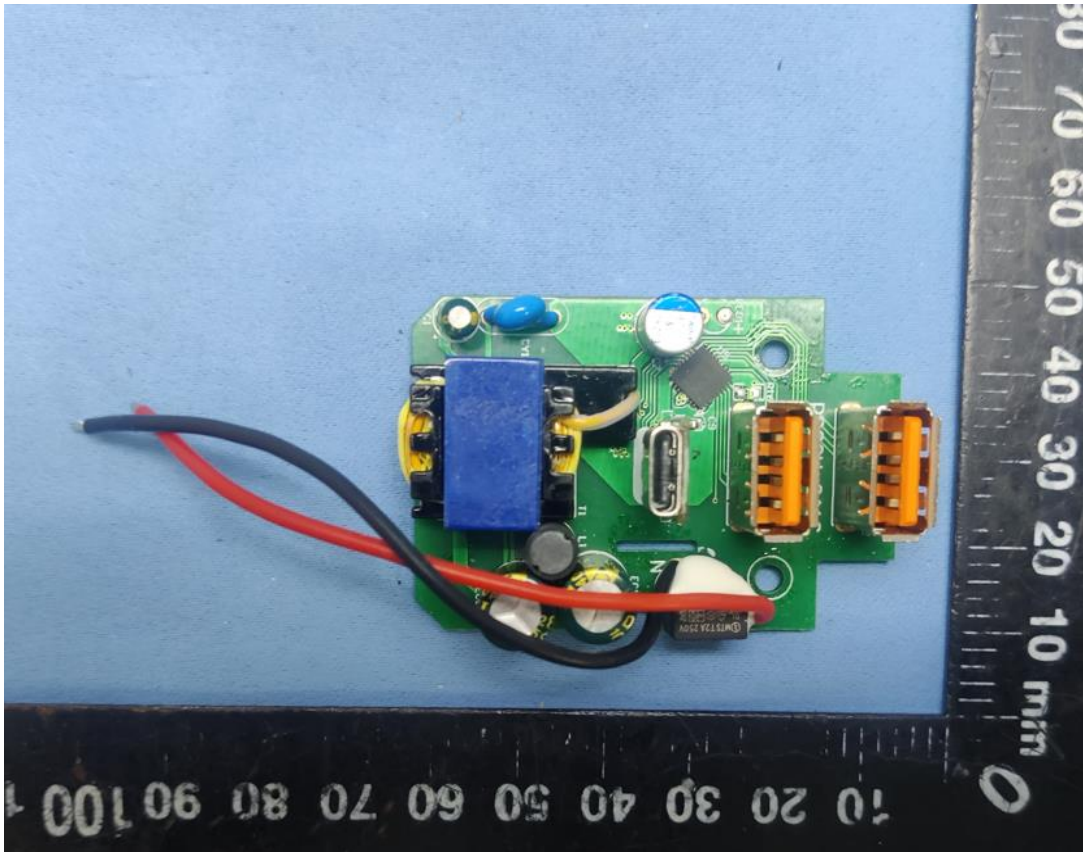


**Photo 40- USB module A**

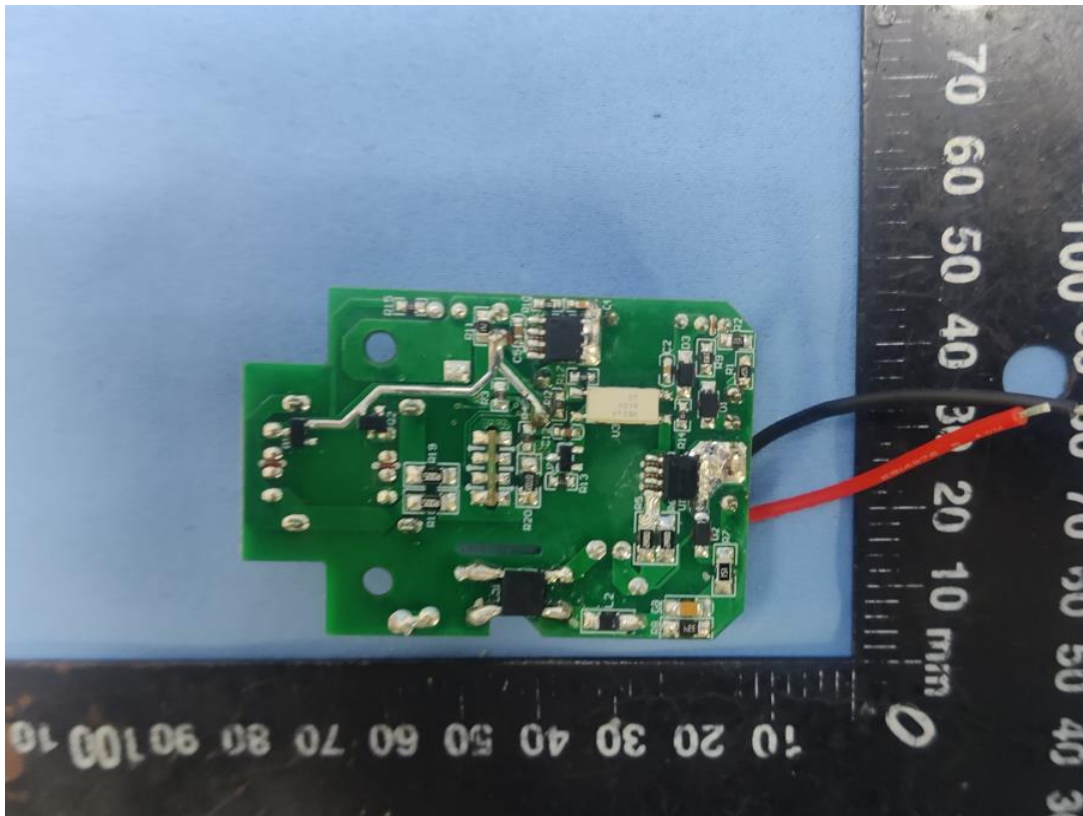


**3.0 Product Photographs**

**Photo 41-** USB module B

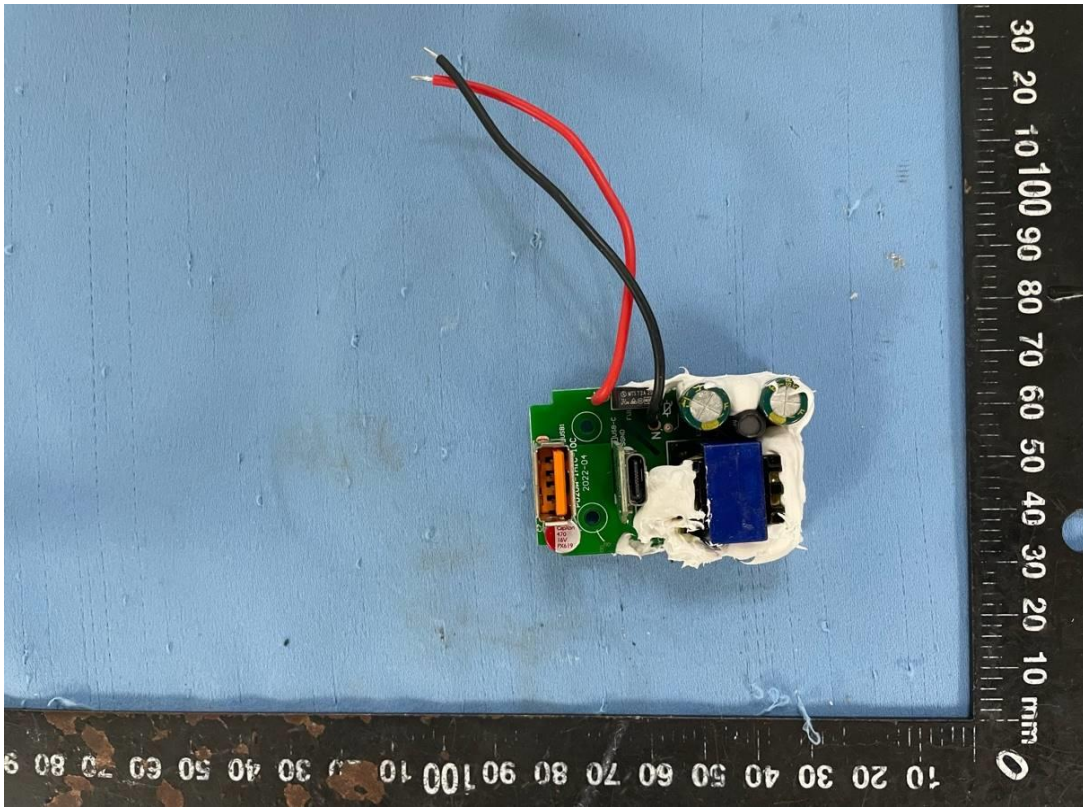


**Photo 42-** USB module B

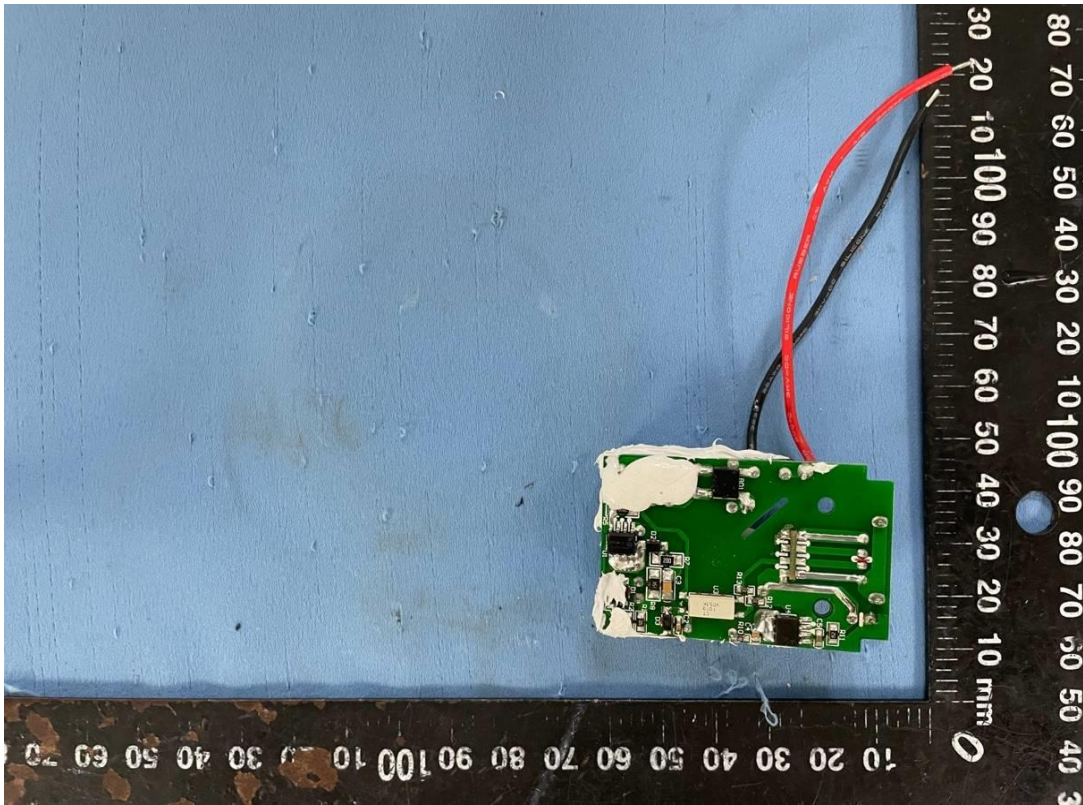


**3.0 Product Photographs**

**Photo 43-** USB module C

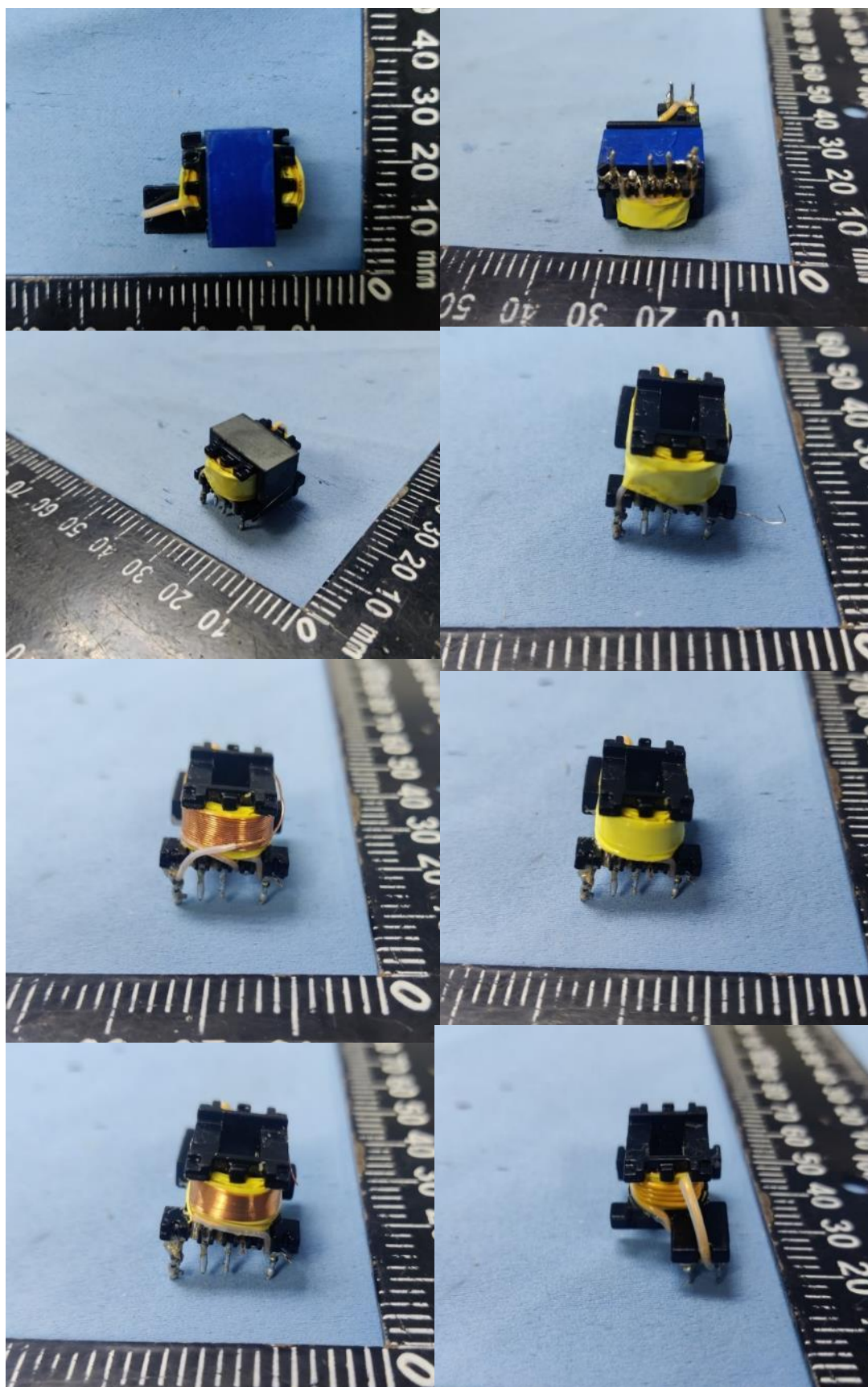


**Photo 44-** USB module C



**3.0 Product Photographs**

**Photo 45-** Transformer for USB module A,B and C

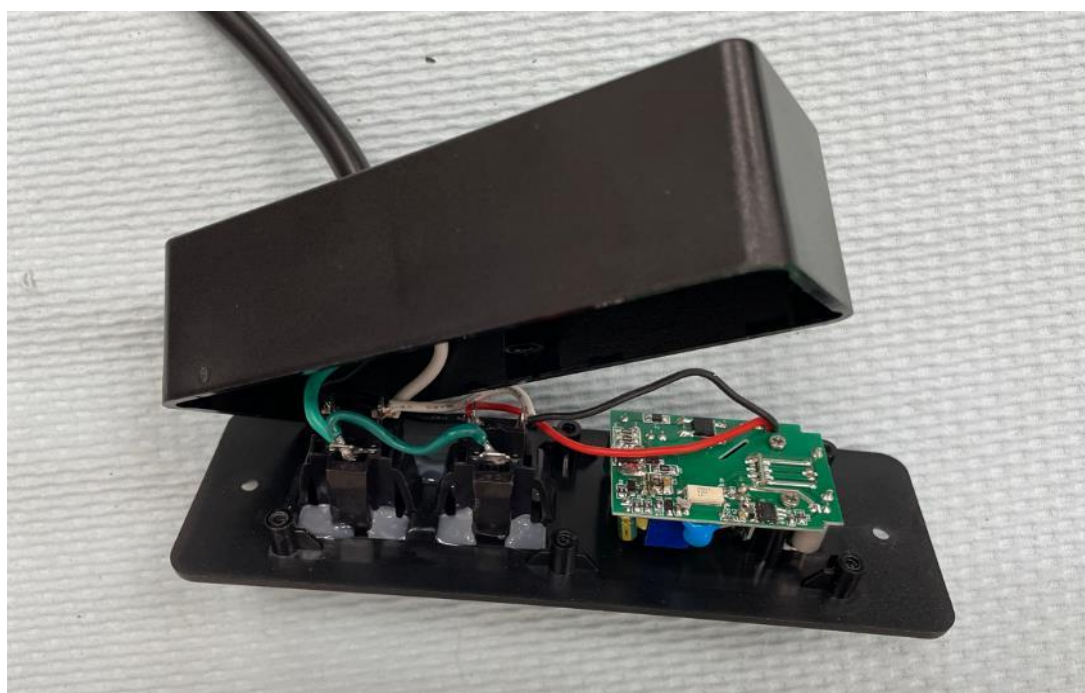


### 3.0 Product Photographs

**Photo 46** - Overall view of model BY213-L021-C



**Photo 47** - Internal view of model BY213-L021-C

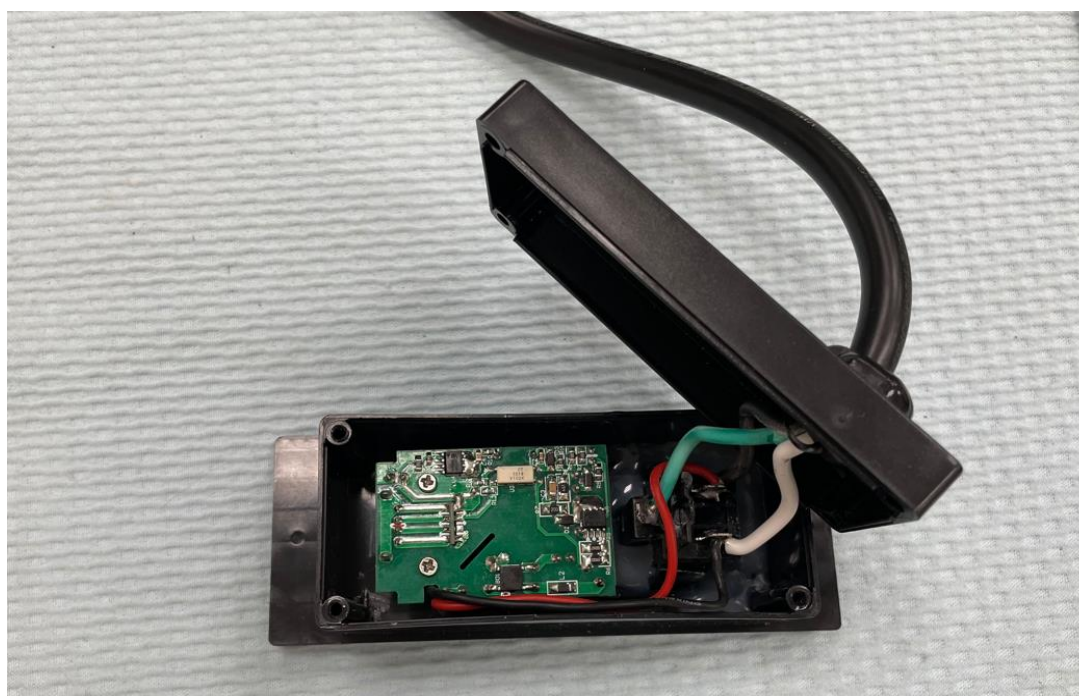


**3.0 Product Photographs**

**Photo 48** - Overall view of model BY213-I012-C



**Photo 49** - Internal view of model BY213-I012-C



### 3.0 Product Photographs

**Photo 50** - Overall view of model BY213-J022-C



**Photo 51** - Internal view of model BY213-J022-C



**3.0 Product Photographs**

**Photo 52 - Overall view of models with 5-15R Cord connector (representative)**

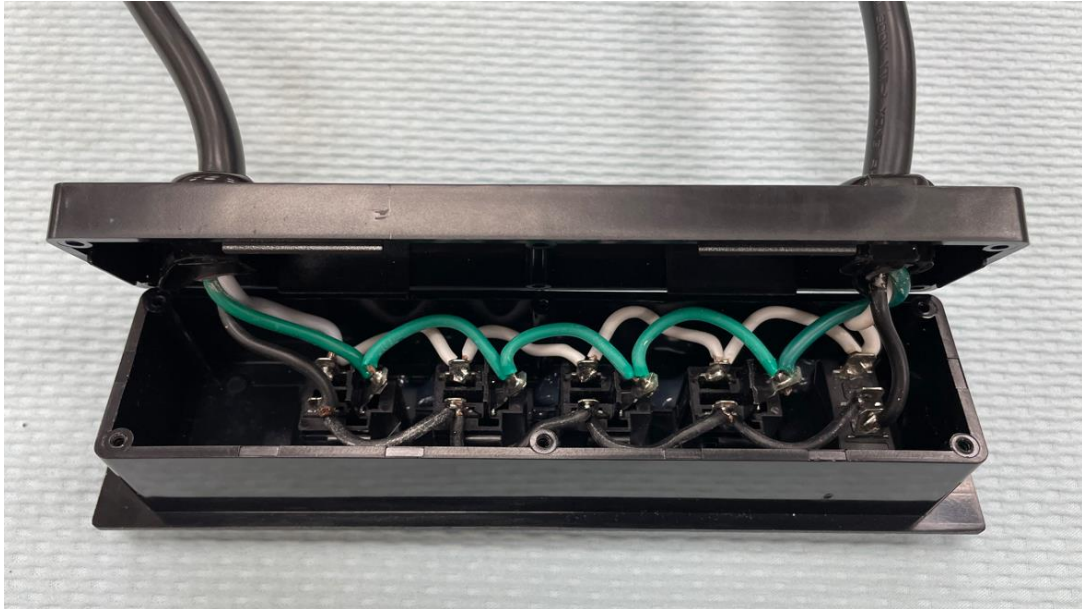


**Photo 53 - Overall view of models with 5-15R Cord connector (representative)**



### 3.0 Product Photographs

**Photo 54** - Internal view of models with 5-15R Cord connector (representative)



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	1	Power supply cord	Various	Various	Nondetachable power-supply cord, 5-15P Plug with SJT or SPT-3 16AWG/3 or 14AWG/3, finished length: 1.5ft~25ft (1.5ft~15ft for SPT-3).	cULus, cETLus
1	2	Enclosure	DOGNGGUAN LOYALER SCI&TECH CO LTD	PC 1100	Black, Min.Thickness 2.0 mm. Rated V-0, RTI 80°C.	cURus
1	3	Receptacle	SUN-LITE SOCKETS INDUSTRY INC	I-103A	5-15R, 15A 125V	cURus
			RONG EFNG INDUSTRIAL CO LTD	RF-6001	5-15R, 15A 125V	cURus
				RF-6002	5-15R, 13A 125V(for wire size 16 AWG)	cURus
			SHENZHEN B-STAR Technology CO LTD	BS-U15-XX	5-15R, 15A 125V	cURus
15	3a	TR receptacle	SHENZHEN B-STAR Technology CO LTD	BS-U15-XXB	5-15R, 15A 125V	cURus
1	4	Overcurrent protector	SUN-LITE SOCKETS INDUSTRY INC	BS-028-1	12A, 125V, OC Type, TC 2, OL 1, SC 1KA, U1, trip free, manual reset type.	cURus
			KUOYUH W L ENTERPRISE CO LTD	88 Series	12A, 125V, OC Type, TC 2, OL 1, SC 1KA, U1, trip free, manual reset type.	cURus
2	5	Insulating Bushings	HEAVY POWER CO LTD	7N-2	PA66, Fire rating: V-2, Dimension:21x19mm	UR
3	6	Internal wires	Various	AWM	16 AWG, 300V, 105°C. Connecting to contacts terminals by hooking and soldering.	cURus, cETLus recognized
3	7	USB input wire	Various	Various	Min.24 AWG, 300V, 105°C	cURus, cETLus recognized
3	8	USB Module	Dongguan baiyou electronic co., ltd	A021-2-USB	5VDC, 2.1A (for BY213-H, BY213-M series)	cETLus recognized
				Q021-2-USB	5VDC, 2.1A (for BY213-Q series)	
				Q021-1-USB	5VDC, 2.1A (for BY213-N series)	
				Q021-USB	5VDC, 2.1A (for BY213-L series)	
				C021-USB	5VDC, 2.1A (for BY213-C series)	
				S022-USB	5VDC, 2.1A (for BY213-J, BY213-I series)	
				S023-USB	5VDC, 2.1A (for BY213-S series)	
3	9	label(Not shown)	Various	Various	Comply with UL 969, -40~80°C, suitable for PC surface.	cURus
29, 32	10	Class 2 lead	Various	AWM	For models which with USB module,Maximum length of 10 feet (3.5 m), 24 AWG X 2C,VW-1,300 V	cURus, cETLus recognized

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
39	11	Internal wire	SHENZHEN DINGYU ELECTRICAL TECHNOLOGY CO LTD	3239	For USB module A,B and C, 20AWG, VW-1,Min.200°C, 300V	cURus
			Various	3239	For USB module A,B and C,20AWG, VW-1,Min.200°C, 300V	cURus, cETLus recognized
39	12	Fuse	DONGGUAN REOMAX ELECTRONICS TECHNOLOGY CO LTD	MTS	For USB module A,B and C,T2A, 250Vac	cURus
39	13	Y-Capacitors	JYA-NAY CO LTD	JN	For USB module A,B and C,Min 1000pF, AC 400V, Y1 type	cURus
40	14	PCB	Shenzhen Jia Li Chuang Technology Development Co Ltd	JLC-1	For USB module A,B and C,V-0, 130°C	cURus
			Various	Various	For USB module A,B and C,V-0, 130°C	cURus
40	15	Optocoupler	CT Microelectronics Far East Ltd	CT1019	For USB module A,B and C,Isolation 5000Vac. Min 120°C	UR
39	16	Transformer	DONGGUAN BAIYOU ELECTRONIC CO LTD	EE1710	For USB module A,B and C,Class B, Input:125V~, 50/60Hz 0.5A Output:5Vdc, 9Vdc, or 12Vdc	NR
39	16a	-Insulation System (Not shown)	TANGHE YAOHAO ELECTRONICS CO LTD	SBI4.2	For USB module A,B and C, Class 130°C (B) electrical insulation system	cURus
			JIA SHENG YUAN ELECTRONICS CO LTD	DASH 2 B-19	For USB module A,B and C, Class 130°C (B) electrical insulation system	cURus
52	17	Cord connector	Various	Various	5-15R with SJT 16AWG/3 or 14AWG/3,finished length: 6 ft Max.	cURus, cETLus recognized

NOTES:

- 1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- 2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.
- 3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

## **5.0 Critical Unlisted CEC Components**

No Unlisted CEC components are used in this report.

## 6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - In primary circuits, 1.6 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and 1.6 mm minimum between such current-carrying parts and dead-metal parts other than the enclosure. And 6.4 mm minimum spacing through air and minimum 12.7 mm over surface are maintained between live parts and a conductive enclosure.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. Accessibility of Live Parts - All uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord.
6. Polarized Connection - This product is provided with a polarized power supply connection. All single pole switches and fuses are connected only to the ungrounded supply circuit conductor.
7. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets.
8. Schematics - Refer to Sec. 7 Illustrations 11 to 17 for schematics requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked on a labeling system as described in item no. 9 of Section 4.0 or by a permanent method such as printing, painting, stamping or etching metal as follows:
  - a) Applicant's name/Brand name: According to Sec. 1.0, 2.0 and 9.0;
  - b) Model no.: According to Sec. 2.0 and 9.0;
  - c) Rating: According to Sec. 2.0;
  - d) Date code: The date or other dating period of manufacture not exceeding any three consecutive months.
10. Cautionary Markings - The following are required:

CAUTION: To Reduce the Risk of Electric Shock

  - Use only indoor in dry locations.
  - Suitable for Household (Residential) use only
11. Installation, Operating and Safety Instructions - NA
12. Logo Dependent Marking - The required marking is dependent on the specific ETL logo applied to the product as authorized by the Authorization to Mark. In addition to the required marking of item 10 above, all products bearing the cETLus or cETL logo must also be marked with:

ATTENTION: Pour réduire le risque de choc électrique

  - Utiliser uniquement à l'intérieur dans des endroits secs.
  - Approprié à l'usage domestique (résidentiel) seulement

**6.0 Critical Features**

13. Production Control - NA

14. Transformer - Supplier records must be provided that indicate the received shipment of transformers (section 4.0, item 16) was constructed as indicated in Illustration 17. These records must be available at the factory for inspection on every received shipment.

**7.0 Illustrations**

**Illustration 1** - Table of version differences per model number.

Section	Item	Specific Difference	Logo Restriction
4	1	AWG 14	none
4	1	AWG 16	ETLus only

**Illustration 2** - Model Similarity of BY213-H series

Series	model	Description
H series	BY213-H011	1 socket+1 USB
	BY213-H021	2 sockets+1 USB
	BY213-H031	3 sockets+1 USB
	BY213-H011K	1 socket+1 USB+ OCP
	BY213-H021K	2 sockets+1 USB+ OCP
	BY213-H031K	3 sockets+1 USB+ OCP
	BY213-H041K	4 sockets+1 USB+ OCP
	BY213-H02	2 sockets
	BY213-H03	3 sockets
	BY213-H01K	1 socket + OCP
	BY213-H02K	2 sockets + OCP
	BY213-H03K	3 sockets + OCP
	BY213-H04K	4 sockets + OCP
	BY213-H05K	5 sockets + OCP

**Illustration 3** - Model Similarity of BY213-M series

Series	model	Description
M series	BY213-M012	1 socket+1 USB
	BY213-M022	2 sockets+1 USB
	BY213-M032	3 sockets+1 USB
	BY213-M012K	1 socket+1 USB+ OCP
	BY213-M022K	2 sockets+1 USB+ OCP
	BY213-M032K	3 sockets+1 USB+ OCP
	BY213-M042K	4 sockets+1 USB+ OCP
	BY213-M02	2 sockets
	BY213-M03	3 sockets
	BY213-M01K	1 socket + OCP
	BY213-M02K	2 sockets + OCP
	BY213-M03K	3 sockets + OCP
	BY213-M04K	4 sockets + OCP
	BY213-M05K	5 sockets + OCP

**7.0 Illustrations**

**Illustration 4 - Model Similarity of BY213-Q series**

Series	model	Description
Q series	BY213-Q011	1 socket+1 USB
	BY213-Q021	2 sockets+1 USB
	BY213-Q031	3 sockets+1 USB
	BY213-Q011K	1 socket+1 USB+ OCP
	BY213-Q021K	2 sockets+1 USB+ OCP
	BY213-Q031K	3 sockets+1 USB+ OCP
	BY213-Q041K	4 sockets+1 USB+ OCP
	BY213-Q02	2 sockets
	BY213-Q03	3 sockets
	BY213-Q01K	1 socket + OCP
	BY213-Q02K	2 sockets + OCP
	BY213-Q03K	3 sockets + OCP
	BY213-Q04K	4 sockets + OCP
	BY213-Q05K	5 sockets + OCP

**Illustration 5 - Model Similarity of BY213-L series**

Series	model	Description
L series	BY213-L011	1 socket+1 USB
	BY213-L021	2 sockets+1 USB
	BY213-L031	3 sockets+1 USB
	BY213-L011K	1 socket+1 USB+ OCP
	BY213-L021K	2 sockets+1 USB+ OCP
	BY213-L031K	3 sockets+1 USB+ OCP
	BY213-L041K	4 sockets+1 USB+ OCP
	BY213-L02	2 sockets
	BY213-L03	3 sockets
	BY213-L01K	1 socket + OCP
	BY213-L02K	2 sockets + OCP
	BY213-L03K	3 sockets + OCP
	BY213-L04K	4 sockets + OCP
	BY213-L05K	5 sockets + OCP

**7.0 Illustrations**

**Illustration 6 - Model Similarity of BY213-C series**

Series	model	Description
C series	BY213-C011	1 socket+1 USB
	BY213-C021	2 sockets+1 USB
	BY213-C031	3 sockets+1 USB
	BY213-C011K	1 socket+1 USB+ OCP
	BY213-C021K	2 sockets+1 USB+ OCP
	BY213-C031K	3 sockets+1 USB+ OCP
	BY213-C041K	4 sockets+1 USB+ OCP
	BY213-C02	2 sockets
	BY213-C03	3 sockets
	BY213-C01K	1 socket + OCP
	BY213-C02K	2 sockets + OCP
	BY213-C03K	3 sockets + OCP
	BY213-C04K	4 sockets + OCP
	BY213-C05K	5 sockets + OCP

**Illustration 7 - Model Similarity of BY213-J series**

Series	model	Description
J series	BY213-J012	1 socket+1 USB
	BY213-J022	2 sockets+1 USB
	BY213-J032	3 sockets+1 USB
	BY213-J012K	1 socket+1 USB+ OCP
	BY213-J022K	2 sockets+1 USB+ OCP
	BY213-J032K	3 sockets+1 USB+ OCP
	BY213-J042K	4 sockets+1 USB+ OCP
	BY213-J02	2 sockets
	BY213-J03	3 sockets
	BY213-J01K	1 socket + OCP
	BY213-J02K	2 sockets + OCP
	BY213-J03K	3 sockets + OCP
	BY213-J04K	4 sockets + OCP
	BY213-J05K	5 sockets + OCP

**7.0 Illustrations**

**Illustration 8 - Model Similarity of BY213-I series**

Series	model	Description
I series	BY213-I012	1 socket+1 USB
	BY213-I022	2 sockets+1 USB
	BY213-I032	3 sockets+1 USB
	BY213-I012K	1 socket+1 USB+ OCP
	BY213-I022K	2 sockets+1 USB+ OCP
	BY213-I032K	3 sockets+1 USB+ OCP
	BY213-I042K	4 sockets+1 USB+ OCP
	BY213-I02	2 sockets
	BY213-I03	3 sockets
	BY213-I01K	1 socket + OCP
	BY213-I02K	2 sockets + OCP
	BY213-I03K	3 sockets + OCP
	BY213-I04K	4 sockets + OCP
	BY213-I05K	5 sockets + OCP

**Illustration 9 - Model Similarity of BY213-N series**

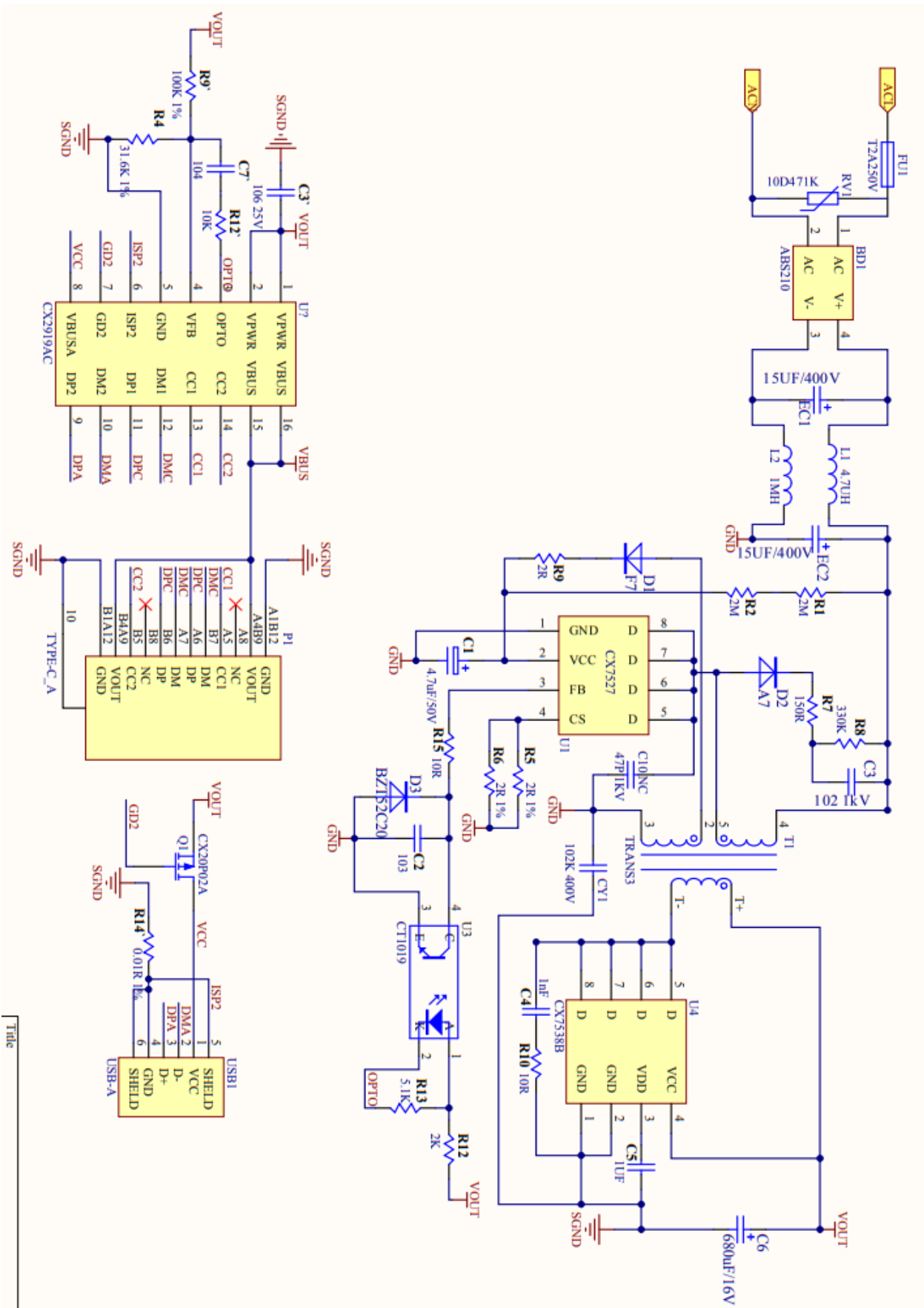
Series	model	Description
N series	BY213-N011	1 socket+1 USB
	BY213-N021	2 sockets+1 USB
	BY213-N031	3 sockets+1 USB
	BY213-N011K	1 socket+1 USB+ OCP
	BY213-N021K	2 sockets+1 USB+ OCP
	BY213-N031K	3 sockets+1 USB+ OCP
	BY213-N041K	4 sockets+1 USB+ OCP
	BY213-N02	2 sockets
	BY213-N03	3 sockets
	BY213-N01K	1 socket + OCP
	BY213-N02K	2 sockets + OCP
	BY213-N03K	3 sockets + OCP
	BY213-N04K	4 sockets + OCP
	BY213-N05K	5 sockets + OCP

**Illustration 10 - Model Similarity of BY213-S series**

Series	model	Description
S series	BY213-S013	1 socket+1 USB
	BY213-S023	2 sockets+1 USB
	BY213-S033	3 sockets+1 USB
	BY213-S013K	1 socket+1 USB+ OCP
	BY213-S023K	2 sockets+1 USB+ OCP
	BY213-S033K	3 sockets+1 USB+ OCP
	BY213-S043K	4 sockets+1 USB+ OCP
	BY213-S02	2 sockets
	BY213-S03	3 sockets
	BY213-S01K	1 socket + OCP
	BY213-S02K	2 sockets + OCP
	BY213-S03K	3 sockets + OCP
	BY213-S04K	4 sockets + OCP
	BY213-S05K	5 sockets + OCP

**7.0 Illustrations**

**Illustration 11 -Circuit Diagram of USB module A**

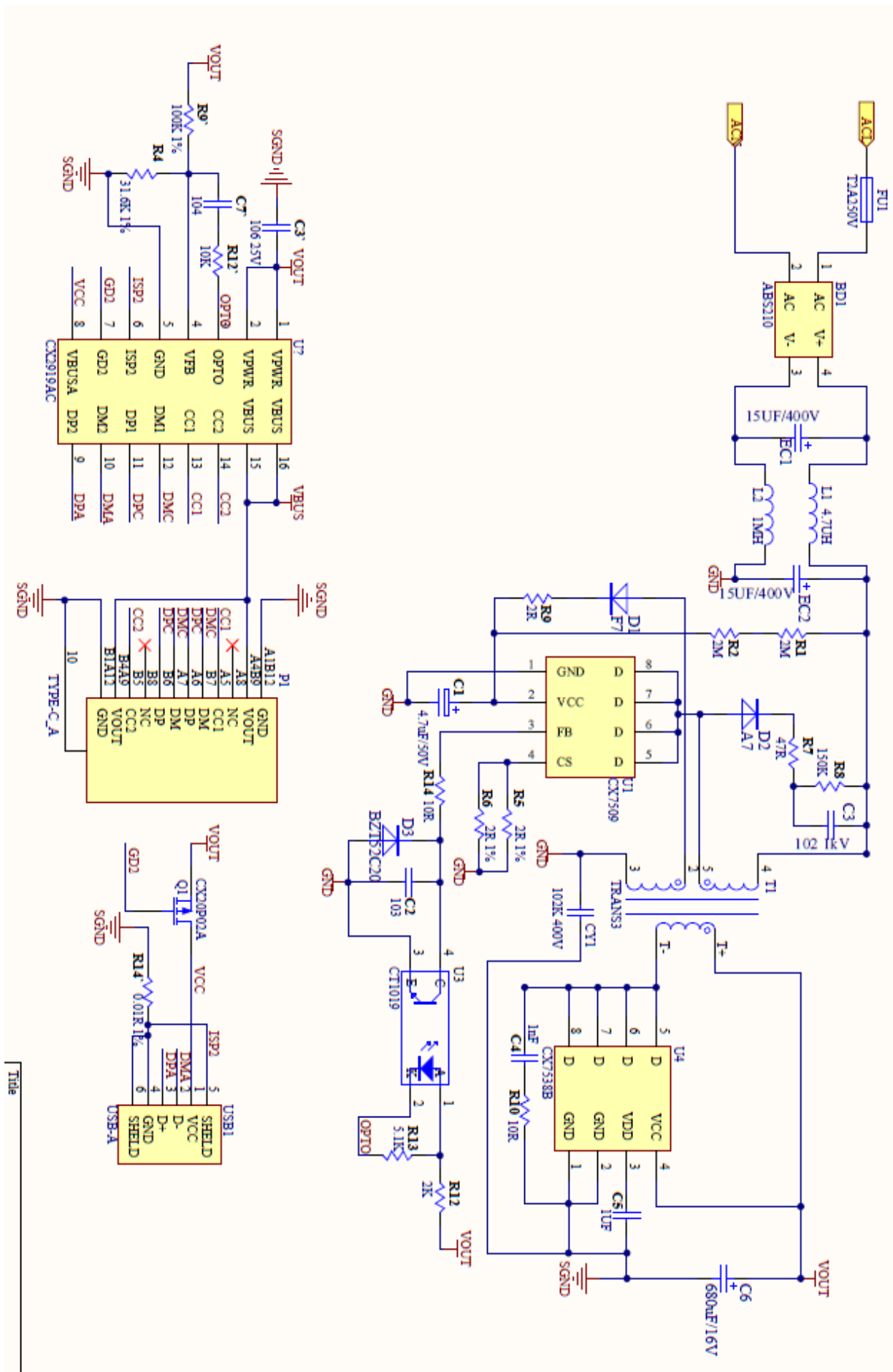


Title



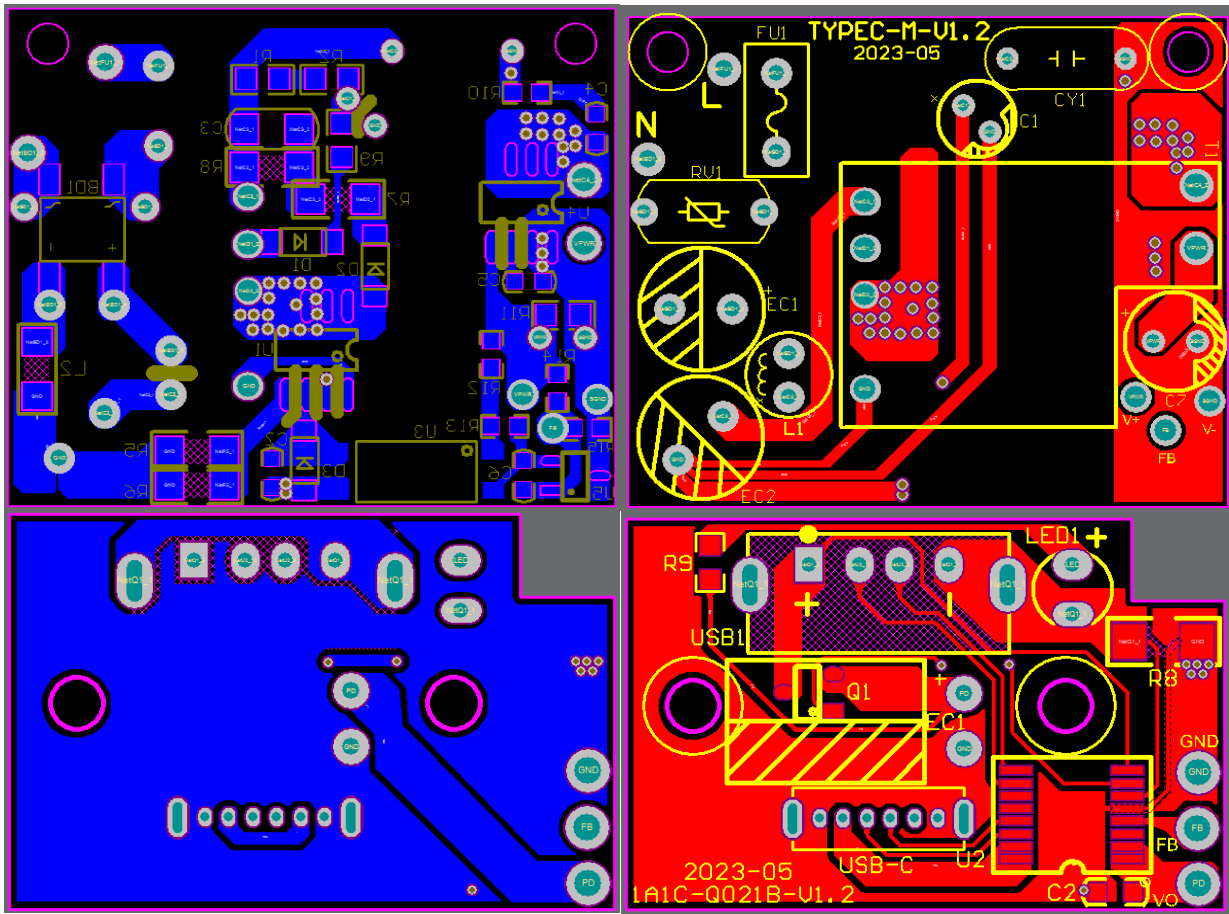
**7.0 Illustrations**

**Illustration 13 -Circuit Diagram of USB module C**

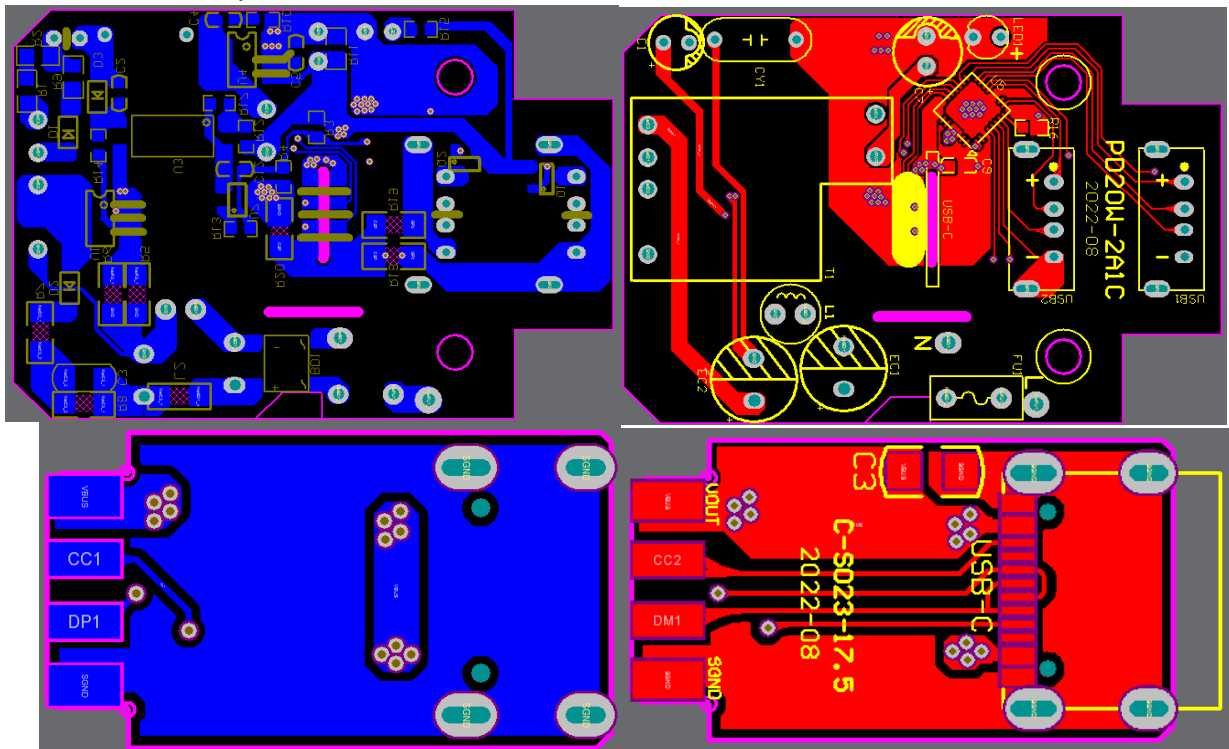


**7.0 Illustrations**

**Illustration 14 - PCB Layout of USB module A**

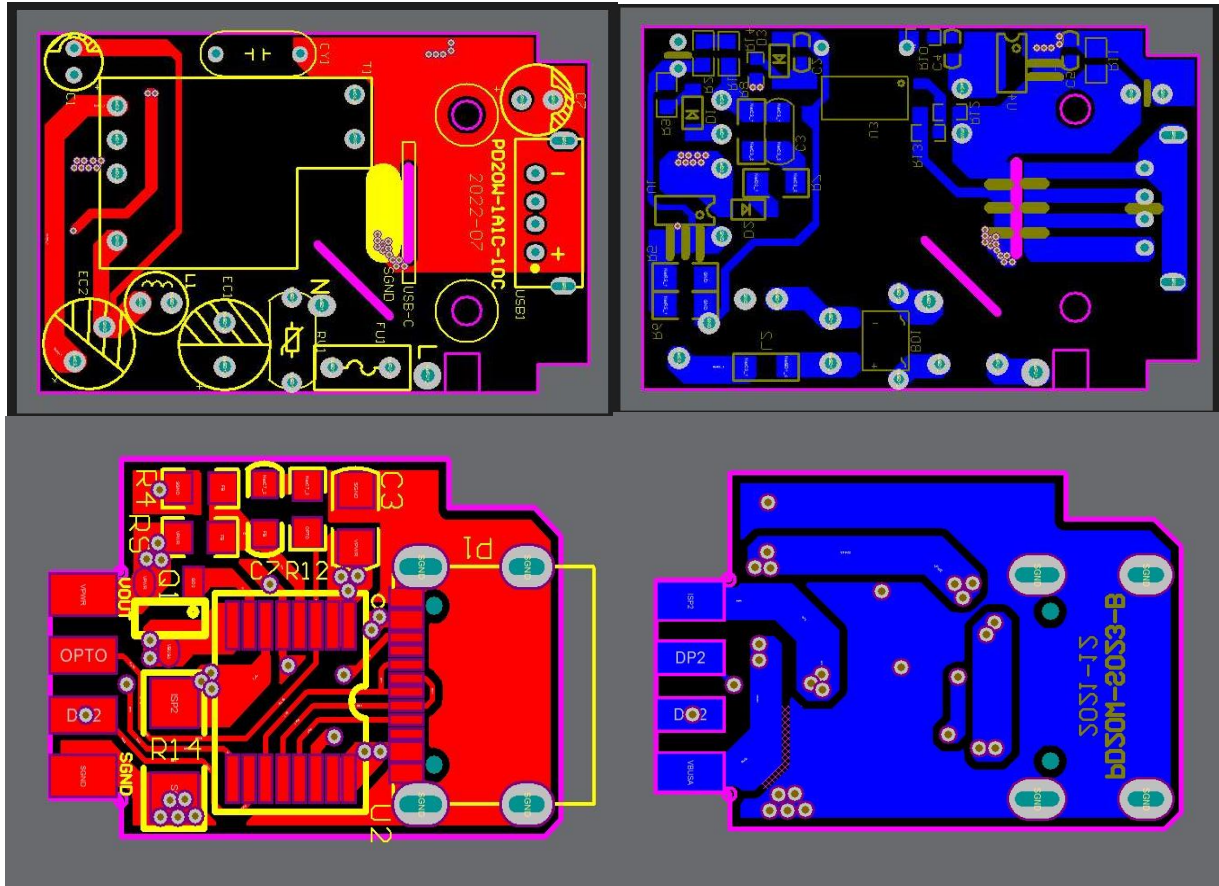


**Illustration 15 - PCB Layout of USB module B**



**7.0 Illustrations**

**Illustration 16 - PCB Layout of USB module C**



**7.0 Illustrations**

**Illustration 17 - Transformer specification**

一、外观尺寸:OUTLINE DIMENSION (单位UNIT:mm)

二、原理图:ELECTRICAL

三、绕线结构:WINDING CONSTRUCTION

NOTES:符合ROHS要求

1. 骨架为全脚，成品将PIN4脚剪掉2/3。
2. 绕N3绕组时，PIN6脚起线套管需延长至初级侧。
3. 磁芯用9.5mm胶带包3TS TAPE固定，PIN5脚引线接磁芯。
4. 成品须真空含浸处理。



四、绕线工艺:WINDING TECHNOLOGY

顺序	起始	起始套管	终止	终止套管	铜线规格	绕线圈数	胶带圈数	档墙胶带		绕线方式
								初级	次级	
N1	3		4		2UEW φ0.29*1P	41Ts	2Ts			密绕
N2	2		5		2UEW φ0.15*2P	14Ts	2Ts			密绕
N3	6	18L	7	18L	TIW-B φ0.75*1P	6Ts	2Ts			密绕
N4	5		NC		2UEW φ0.15*2P	15Ts	2Ts			散绕
N5	4		1		2UEW φ0.29*1P	19Ts	2Ts			密绕

备注:PIN脚朝机台右侧夹具顺时针绕线。

<b>8.0 Test Summary</b>			
Evaluation Period	18-Sep-2023 to 13-Oct-2023		Project No. 230830027GZU
Sample Rec. Date	18-Sep-2023	Condition Prototype	Sample ID. S230830027-001~012
Test Location	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room 101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
Due to previous testing performed under report 180824101GZU-001, the following tests were performed:			
Test Description	UL 962A:2018 Ed.5+R:29Mar2022 Clause	CSA C22.2#308:2018 Ed.2 Clause	UL 62368-1:2019 Ed.3+R:22Oct2021 & CSA C22.2#62368-1:2019 Ed.3+U1 Clause
Temperature Test	29	8.6	--
10 N steady force test	--	--	4.6.2
Classification of electrical energy sources	--	--	5.2
Temperature test for insulating materials and touch temperature	--	--	5.4.1.4, 9.3
Determination of working voltage test	--	--	5.4.1.8
Clearances and creepage distances measurement	--	--	5.4.2, 5.4.3
Minimum distance through insulation measurement	--	--	5.4.4.2
Antenna terminal insulation test	--	--	5.4.5
Humidity conditioning test	--	--	5.4.8
Electric strength test	--	--	5.4.9
Unearthed accessible parts touch current test	--	--	5.7.4
Electrical power sources (PS) measurements for classification	--	--	6.2.2
Determination of potential ignition sources (arcing PIS)	--	--	6.2.3.1
Determination of potential ignition sources (resistive PIS)	--	--	6.2.3.2
Input test	--	--	B.2.5
Operating temperature measurement	--	--	B.2.6
Simulated abnormal operating conditions test	--	--	B.3
Simulated single fault conditions test	--	--	B.4
Limited power source test	--	--	Q.1
Steady force test – 10 N	--	--	T.2
Component testing reviewer	--	--	Spark He

8.0 Test Summary			
Evaluation Period	8-Apr-2024 to 23-Apr-2024		Project No. 240407026GZU
Sample Rec. Date	8-Apr-2024	Condition Prototype	Sample ID. S240407026-001~009
Test Location	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room 101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following tests were performed:			
Test Description	UL 962A:2023 Ed.6 Clause	CSA C22.2#308:201 8 Ed.2 Clause	--
Strain Relief Test	36	8.29	--
Push Back Relief Test	37	--	--

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Ron Chen	Reviewed by:	Sunny Tang
Title:	Engineer	Title:	Reviewer
Signature:		Signature:	

**9.0 Correlation Page For Multiple Listings**

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	Dongguan Baiyou Electronic Co Ltd
Address	2 F A building wufeng industrial jintan road shijie town dongguan city guangdong 523295
Country	CHINA
Product	Furniture Power Distribution Units

MULTIPLE LISTEE 1	Atlantic Furniture INC
Address	5 Industrial Drive West, PO Box 287 South Deerfield MA 01373
Country	USA
Brand Name	AFI

ASSOCIATED MANUFACTURER	Dongguan baiyou electronic co.,ltd
Address	2 F A building wufeng industrial jintan road shijie town Dongguan city Guangdong 523295
Country	CHINA

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS
BY213-C022	BY213-L021

MULTIPLE LISTEE 2	Blue Shark Technology Co., Limited
Address	Room 502-506, No.33 Keyuan South road, Guancheng District, Dongguan, Guangdong, 523000
Country	China
Brand Name	Haylink/blueshark

ASSOCIATED MANUFACTURER	Dongguan baiyou electronic co.,ltd
Address	2 F A building wufeng industrial jintan road shijie town Dongguan city Guangdong 523295
Country	CHINA

MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS
BST213- followed by H, M, Q, N, L, C, J, S or I; followed by 01, 02, 03, 04 or 05; maybe followed by 1, 2 or 3; maybe followd by K;maybe followd by -C.	BY213- followed by H, M, Q, N, L, C, J, S or I; followed by 01, 02, 03, 04 or 05; maybe followed by 1, 2 or 3; maybe followd by K;maybe followd by -C.

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

## 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments

### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

**If all standards on the ATM have the same standard title**, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

**Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

### 10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

**The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.**

**Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.**

Managing CEC Location:

Intertek Testing Services Shenzhen Limited Guangzhou Branch

ETL Component Evaluation Center

Room 101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District

Guangzhou, Guangdong, China

Attn: Ms. Joey Kuang

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

## 11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

### Required Tests

Dielectric Voltage Withstand Test, Grounding Continuity Test

## 11.1 Dielectric Voltage Withstand Test

### Method

The test shall be conducted when the RPT is complete (fully assembled). It is not intended that the RPT be unwired, modified, or disassembled for the test.

The test equipment when adjusted for production-line testing, is to produce an output voltage that is not less than the factory test value specified, nor is the magnitude of the test voltage to be greater than 120 percent of the specified test potential when the tester is used in each of the following conditions:

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

a) When the test duration is 1 s, the output voltage is to be maintained within the specified range when:

- 1) Only a voltmeter having an input impedance of at least 2 M $\Omega$  and a specimen of the product being tested are connected to the output terminals and
- 2) A relatively high resistance is connected in parallel with the voltmeter and the product being tested, and the value of the resistance is gradually reduced to the point where an indication of unacceptable performance just occurs.

b) When the test duration is 1 min, the output voltage is to be maintained within the specified range (by manual or automatic means) throughout the 1-min duration of the test or until there is an indication of unacceptable performance.

The specified control of the applied voltage, manual or automatic, shall be maintained under conditions of varying line voltage. Higher test potentials are not prohibited from being used when the higher dielectric stress does not adversely affect the insulating systems of the product.

### Test Equipment

In addition to the characteristics indicated above, the test equipment is to have the following features and characteristics:

a) A means of indicating the test voltage that is being applied to the appliance under test. This is accomplished by sensing the voltage at the test leads or by an equivalent means.

b) An output voltage that has a sinusoidal waveform, a frequency that is within the range of 40 – 70 Hz, and a peak value of the waveform that is not to be less than 1.3 and not more than 1.5 times the root-mean-square value.

c) A means of effectively indicating unacceptable performance. The indication is to be:

- 1) Auditory, when it can be readily heard above the background noise level;
- 2) Visual, when it commands the attention of the operator; or
- 3) A device that automatically rejects an unacceptable product. When the indication of unacceptable performance is auditory or visual, the indication is to remain active and conspicuous until the test equipment is reset manually.

d) When the test equipment is adjusted to produce the test voltage, and a resistance of 120,000  $\Omega$  is connected across the output, the test equipment is to indicate an unacceptable performance within 0.5 s. A resistance of more than 120,000  $\Omega$  is not prohibited from being used to produce an indication of unacceptable performance when the manufacturer elects to use a tester having higher sensitivity.

Exception: The sensitivity of the test equipment – and a lower value of resistance – is not prohibited from being used when testing an appliance intended to be permanently wired.



There shall not be any transient voltage applied to the RPT under test that results in the instantaneous voltage applied to the RPT exceeding 120 percent of the peak value of the test voltage that the manufacturer elects to use for this test. This requirement applies for the entire duration of the test, including the time that the voltage is first applied to the RPT and the time that the voltage is removed from the RPT.

<b>Products Requiring Dielectric Voltage Withstand Test:</b>		
<b>Product</b>	<b>Test Voltage</b>	<b>Test Time</b>
All products covered by this Report.	1250V AC/ 1768V DC or 1500V AC/ 2121V DC	60 s  1 s
One sample from each shipment of Section 4.0 item 16 Between prim. and sec. output	4000Vpeak or 4000Vd.c.	1 s to 4 s
Between sec. and core	4000Vpeak or 4000Vd.c.	1 s to 4 s

**11.2 Grounding Continuity Test**

**Method**  
 Each RPT shall be tested, as a routine production-line test, to determine grounding continuity between the grounding pin or terminal of the attachment plug and the accessible, dead-metal parts of the RPT that become energized. The grounding contact of each receptacle, grounding pin of a supply-cord attachment plug, and other means for grounding on the load side are included in this test.  
 Compliance with above is determined by any appropriate device, such as an ohmmeter or a battery and buzzer combination, applied between the point of connection of the RPT grounding means and the metal parts in question.

**Products Requiring Grounding Continuity Test:**  
 All products covered by this Report.

<b>12.0 Revision Summary</b>				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
6-May-2024	Ron Chen/ 	1.0	-	Updated standard from "Furniture Power Distribution Units [UL 962A:2018 Ed.5+R:29Mar2022]"to "Furniture Power Distribution Units [UL 962A:2023 Ed.6]"
240407026GZU	Sunny Tang 	2.0	-	Added models BY213- followed by H, M, Q, N, L, C, J , S or I; followed by 01 or 02; maybe followed by 1, 2 or 3; maybe followd by -C; followd by -Y.
				BY213- followed by H, M, Q, N, L, C, J , S or I; followed by 01, 02, 03, 04 or 05; maybe followed by 1, 2 or 3; followd by K; maybe followd by -C; followd by -Y.
		3.0	52~54	Added Model Similarity:-Y represent with 5-15R Cord connector.
		4.0	17	Added component Cord connector.
		8.0	-	Added new test evaluation and re-signed.