



## Final Product Change Notification

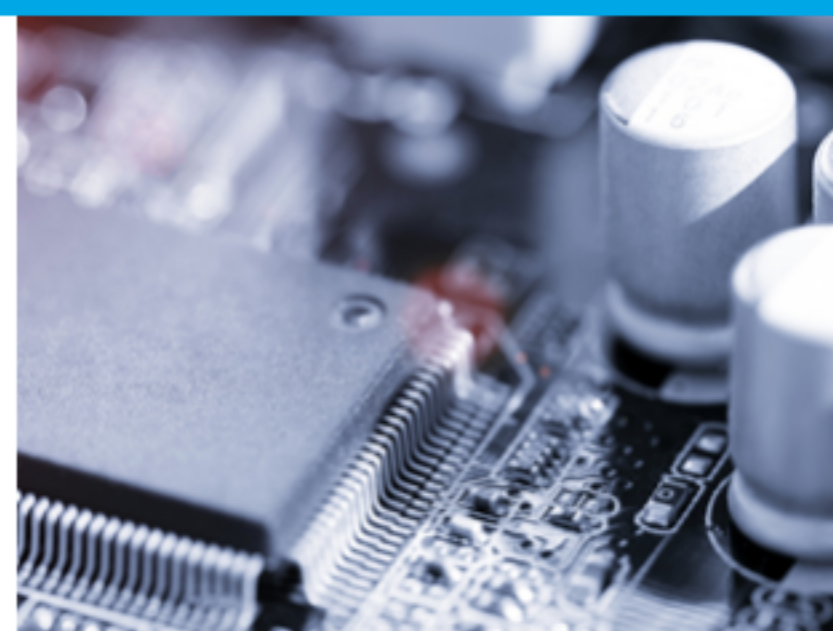
PCN number 2022110001

Issue Date:2022-11-01

Effective Date:2023-02-15

Dear *Customer*,

Here's your quality information concerning products our customers and partners purchased from WeEn.



### Management Summary

This notification is to release the second source of leadframe for package IITO220

#### Release the Second Source of Leadframe IITO220

### Information Notification

Release the second source of leadframe IITO220, the new supplier is Yongzhi. For the details, please refer to the report enclosed.

#### Why do we issue this Information Notification

The second source of leadframe IITO220 will help on eliminating the risk of material supply, and comply with business contingency management.

#### Identification of Affected Products

Both leadframe sources are qualified. The product identification is not changed.

### Impact

#### Data Sheet Revision

No change.

#### Disposition of Old Products

No affect.

#### Production

The planned first shipment is on 15.Feb.2023.

### Additional information

Affected products and sales history information: see attached file of Product List.

See attached file of Self-qualification Report.

### Remarks

Should you not be able to obtain these documents, please contact your WeEn sales representative or the e-mail address mentioned below under Contact and Support.

### Contact and Support

For all Quality Notification content inquiries, please contact your local WeEn Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly.

Name:Shawn Lin

Position:Quality Manager

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At WeEn Semiconductors we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards.

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This message has been automatically distributed. Please do not reply.

WeEn Semiconductors

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PCN: 2022110001

**Final Qualification Report:**  
*IITO220 Heat sink & Leadframe 2<sup>nd</sup> source  
Qualification*



**WeEn**  
WeEn Semiconductors

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# *Final Qualification Report*

*IITO220 Heat sink & Leadframe 2<sup>nd</sup> source Qualification*

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### 1. Introduction

The qualification is to qualify Heat sink & Leadframe 2nd source for supply chain security:

- IITO220 add 2nd source Heat sink & leadframe supplier-Yongzhi.

Remark: Yongzhi is a qualified leadframe supplier.

### 2. Affected Types

Please see detailed product list.

Package	SalesItem	Part Number
IITO220	9340 621 71127	BT138Y-600E
	9340 621 72127	BT138Y-800E
IITO220	9340 728 70127	BT151Y-650LTF
IITO220	9340 720 53127	BTA308Y-800C0T
IITO220	9340 613 16127	BTA312Y-600C
	9340 613 17127	BTA312Y-800C
IITO220	9340 696 28127	BTA330Y-800BT
IITO220	9340 696 27127	BTA330Y-800CT
IITO220	9340 661 54127	BTA410Y-600BT
	9340 661 59127	BTA410Y-800BT
IITO220	9340 661 57127	BTA410Y-600CT
	9340 661 61127	BTA410Y-800CT
IITO220	9340 661 58127	BTA410Y-600ET
	9340 661 62127	BTA410Y-800ET
IITO220	9340 613 12127	BTA412Y-600B
	9340 613 13127	BTA412Y-800B
IITO220	9340 613 15127	BTA412Y-600C
	9340 613 14127	BTA412Y-800C
IITO220	9340 708 69127	BTA412Y-600ET
	9340 708 71127	BTA412Y-800ET
IITO220	9340 661 89127	OT413
IITO220	9340 689 62127	OT415
IITO220	9340 613 21127	BTA416Y-600B
	9340 613 19127	BTA416Y-800B
IITO220	9340 613 22127	BTA416Y-600C
	9340 613 18127	BTA416Y-800C
IITO220	9340 670 81127	BTA420Y-800BT
IITO220	9340 670 78127	BTA420Y-800CT
IITO220	9340 673 73127	BTA425Y-800BT
IITO220	9340 673 74127	BTA425Y-800CT
IITO220	9340 728 68127	TYN16Y-600CTF
IITO220	9340 728 66127	TYN20Y-600TF
IITO220	9340 728 64127	TYN30Y-600TF

### 3. Purposed Material

BOM as the below. Keep same material chemical content.

**4. Technology, Platform or Material Used**

Material	Existing supplier	Second source
IITO220 Heat sink	C19210/Hualong	C19210/Yongzhi
IITO220 Leadframe	C19210/Hualong	C19210/Yongzhi

Remark: Raw material C19210 no change.

**5. Appearance Comparison**

Current heat sink



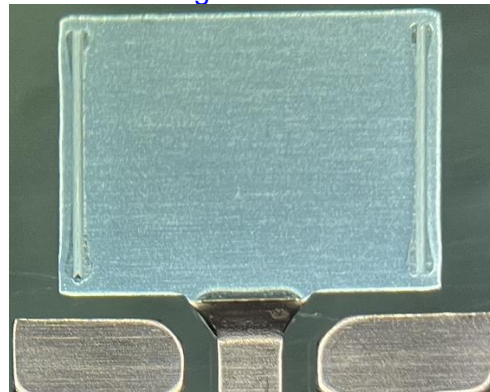
Yongzhi's heat sink



Current LF



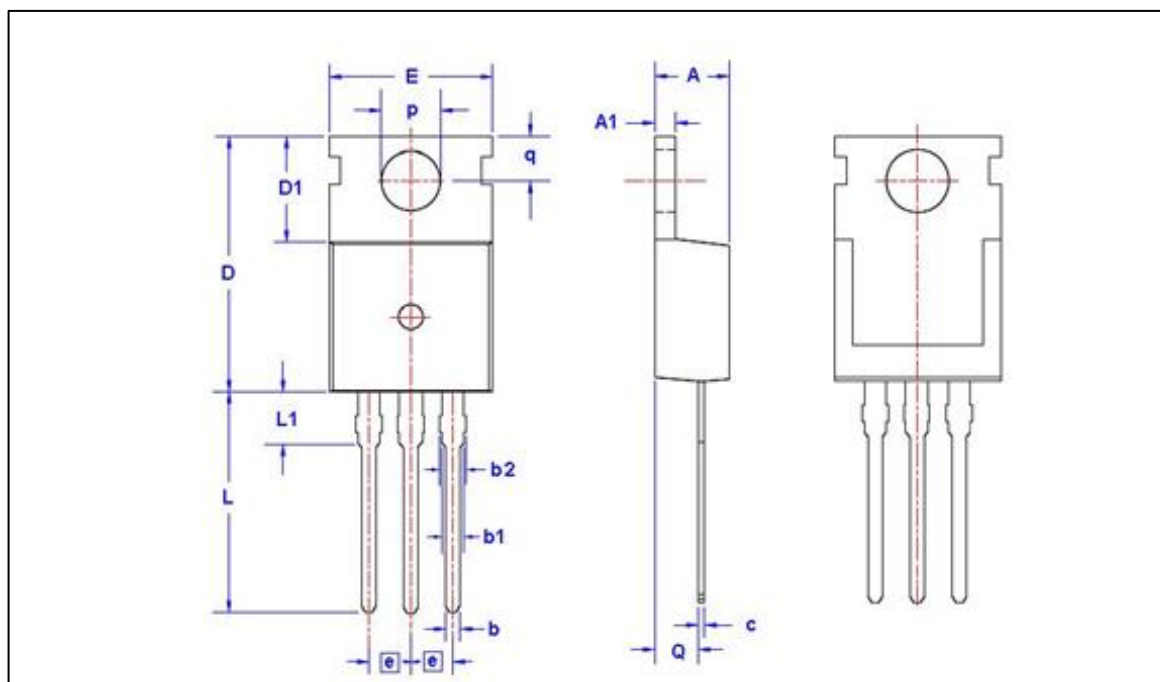
Yongzhi's LF



Remark: All same drawing dimensions design.

## 6. Package Structure


POD in datasheet no change.



Symb.	Spec.	Hualong Actual	Yongzhi Actual	Result
A	4.30-4.70	4.49	4.48	Pass
A1	1.25-1.40	1.31	1.32	Pass
b	0.70-0.90	0.82	0.82	Pass
b1	1.17-1.37	1.23	1.24	Pass
b2	1.42-1.62	1.45	1.45	Pass
c	0.45-0.60	0.53	0.53	Pass
D	15.20-16.00	15.95	15.95	Pass
D1	6.40-6.80	6.58	6.59	Pass
E	9.70-10.10	10.03	10.05	Pass
e	2.54(TYP)	2.54	2.54	Pass
L	12.88-13.28	13.03	13.04	Pass
L1	(3.00)	3.00	3.00	Pass
P(Φ)	3.50-3.70	3.56	3.56	Pass
Q	2.20-2.60	2.34	2.35	Pass
q	2.70-2.90	2.83	2.83	Pass

## 7. Test Vehicles

3 devices BTA425Y-800BT & BTA416Y-800C & BTA308Y-800C0T were chosen for qualification vehicle.

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## 8. Life Test Result

Evaluate lot of BTA425Y-800BT was chosen for Rel test.

Test items	Test condition	Sample size	Result
Temperature Cycle (TMCL)	1000 cycles at -65°C to 150°C.	BTA425Y-800BT 77units	Pass
Unbiased Highly Accelerated Stress Test (UHST)	96 hours at Ta = 130°C, RH = 85%	BTA425Y-800BT 77units	Pass
High Temperature, Humidity & Reverse Bias (THBS)	1000 hours at Tj = 85°C, RH = 85%, Reverse Bias = 80% rated voltage or 80V, whichever is lower. 1000 hours.	BTA425Y-800BT 77units	Pass
High Temperature Storage (HTSL)	1000 hours at Ta = 150°C or Ta=175°C 1000 hours.	BTA425Y-800BT 77units	Pass
Thermal Fatigue (TFAT)	10K cycles, DTj ≥ 80°C,	BTA425Y-800BT 77units	Pass
Solderability with Aging 16 hour dry bake	JESD22 B-102	BTA425Y-800BT 10units	Pass

## 9. Conclusions

Base on the qualification data, Yongzhi heat sink & leadframe meet the requirements of quality & reliability, which can be released for mass production.