

## PRODUCT / PROCESS CHANGE NOTIFICATION

### Generic Copy

**PCN#2203006**

• DATE: 18<sup>th</sup> March, 2022

**PCN Subject: Additional Copper High Density Leadframe for  
Package SOT-523**

• **PCN Change Category:**

**Material**

**Process**

**Datasheet/Specification**

**Reliability**

**Others ( )**

• **Description of Change Purpose or Reason:**

With the optimizing production efficiency and process flow, PANJIT would like to notify customer the qualification of Copper high density leadframe for selected devices of Package SOT-523. Along with the introduction of Copper high density leadframe, the process change of the de-flashing and plating is also required. For more detail, pls refer to below change information.

We recommend that you acknowledge receipt of this notification within 30 days of this PCN date. If you require samples for further evaluation, please feel free to contact your local sales representative and make a request. We are always pleased to serve you at any time.

• **Change Information**

Change category	Package	Current	Add
		SOT-523	SOT-523
Lead Frame (Option 1)	Supplier	LeFram Technology Corp.	JIH LIN TECHNOLOGY CO., LTD
	Material	Alloy 42	Copper
	Pcs/strip	768 pcs	1536 pcs
Appearance	Top view		
	Back view		
	Side view		
Molding Compound	Supplier	E'dale Technology Co., LTD.	SUMITOMO BAKELITE COMPANY LIMITED
	Type	ELER-8-500C-4	EME-G600FL
Process	De-flash	Electrolytic De-flash	Chemical De-flash
	Plating	Rack Plating	Strip Plating

• **Verification /Qualification Data:**

The electrical characterization and high reliability testing have been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. There will be no change to the Form, Fit, or Function of products affected.

• **Affected Product Type :**

Function: MOSFET					
2N7002KTB	2N7002KTBS	PJE138K	PJE138K-NC	PJE138L	PJE8406
PJE8407	PJE8408	PJE8416	PJE8416B	PJE8428	PJE8438
PJE8439	PJE8472B				
Function: Schottky					
BAT54CTB	BAT54TB	RB520S30CTB			
Function: Switching Diodes					
BAV70TB					
Function: Transistors					
AZMMBT3904TB	MMBT2222ATB	MMBT3904TB	MMBT3906TB		
Function: ESD Protection					
PEC2605C2E	PJE5V0U8TB	PJEC5V0V6TB			
Function: Zener Diodes					
STZ23C5V6TB	PJESDZ6V8-2G				

• **Effective Date : 18<sup>th</sup> June, 2022**

➤ **The reliability test results are summarized below:**

Product reliability test result: PASS

No.	DESCRIPTION	TEST CONDITION	DURATION	FAILURE RATE	
1	High Temperature Reverse Bias (HTRB)	Ta = 150°C , VR=100%VB, DC supply	1000 HOURS	0/77 PCS	3 LOTS PASS
2	Temperature Cycling (TCT)	Ta = -55°C~ +150°C ( 2 cycles / Hour )	1000 CYCLES	0/77 PCS	3 LOTS PASS
3	Autoclave (AC)	Ta = 121°C, P = 29.7psia ,100%RH	96 HOURS	0/77 PCS	3 LOTS PASS
4	High Humidity High Temp. Reverse Bias(H3TRB)	TA=85°C +/-2°C RH=85%+/-5% VR=80%VB DC Supply	1000 HOURS	0/77 PCS	3 LOTS PASS
5	Intermittent Forward Operation Life (I.O.L)	$\Delta T_j \geq 100^\circ\text{C}$ , Power On: 2 mins ; Power Off: 2 mins.	15000 CYCLES	0/77 PCS	3 LOTS PASS
6	Resistance to Solder Heat (RSH)	Temperature of solder pot = 260+5/-0°C Time for dipping in solder = 10 ±1 Sec	1 CYCLE	0/30 PCS	3 LOTS PASS
7	Solder ability (SD)	Temperature of solder pot = 245 ±5°C Time for dipping in solder = 5 ±0.5 Sec	1 CYCLE	0/10 PCS	3 LOTS PASS

• **ELECTRICAL CHARACTERISTICS SUMMARY:**

There is no change to the product electrical specifications.

• **SAMPLES NEED :**

Contact your local PANJIT sales representative.

• **TECHNICAL CONTACT :**

E-mail: alanliu@panjit.com.tw

• **FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local PANJIT sales representative.

• **ADDITIONAL RELIABILITY :**

Contact your local PANJIT sales representative.

• **CHANGED PART IDENTIFICATION :**

The tracking of 1<sup>st</sup> delivery after change can be identified by production lot number. Please contact your local sales for tracking lot number.

Please refer to below Lot number rule:

Lot number: **2924XXXXX**.

1st digit "2" denotes Year 2022.

2nd digit "9" denotes September.

3rd and 4th digits denote Day.

From 5<sup>th</sup> digits (XXXXX) denotes production serial number.



## Customer Acknowledgement Form

(To be filled out by the customer and returned to HQBU of PANJIT)

The indicated Customer Notification letter was received and acknowledged by the undersigned authority.

Company Name : \_\_\_\_\_

Customer Name : \_\_\_\_\_ (Signature) Date: \_\_\_\_\_

PCN number: PCN#2203006

Approval for the Product/Process change: Yes No

Comments/Additional requests:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thanks for your attention on this matter. Please return the acknowledgment form to your local PANJIT sales representative.

Please note that no objection within 30 days upon receiving will be deemed as being accepted and agreed with this Process Change Notification.

