


Standardized Information for Process/Product Change Notification (PCN)

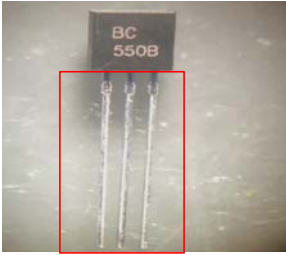
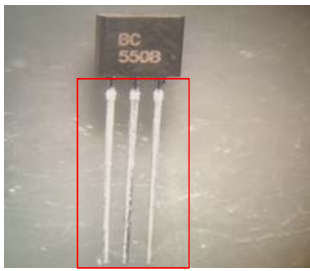
Form provided by ZVEI - Revision 3.0.0

1. PCN basic data		
1.1 Company		
1.2 PCN No.	PCN19001	
1.3 Title of PCN	TO-92 package of plating process changed from hang plating to solder dipping	
1.4 Product Category	Active Components - Discrete Components	
1.5 Issue date	2019/01/22	
1.6 PCN revision history (optional)	1.7 Issue date of previous revision (optional)	1.8 Delta to previous revision (optional)

2. PCN Team		
2.1 Contact supplier		
2.1.1 Name	Sunnie.lin	
2.1.2 Phone	886-2-8913-1588 Ext:2205	
2.1.3 Email	sunnie.lin@mail.ts.com.tw	
2.2 Team supplier (optional)		
2.2.1 Name (optional)	2.2.2 Phone (optional)	2.2.3 Email (optional)
Yanting Liu	086-022-59816699 Ext : 2051	qa@mail.tew.com.cn
Chris Lin	886-2-8913-1588 Ext.2406	chris_lin@mail.ts.com.tw

3. Changes			
No.	3.0 Ident	3.1 Category	3.2 Type of change
#1	SEM-PA-14	PROCESS - ASSEMBLY	Change in process technology (e.g. sawing, die attach, bonding, moulding, plating, trim and form, lead frame preparation, ...)
#2	SEM-EQ-01	EQUIPMENT	Production from a new equipment/tool which uses a different basic technology or which due to its unique form or function can be expected to influence the integrity of the final product
#3			
#4			
#5			

4. Description of change		
	Old	New
Change #1	Hang plating process. The method of hang plating is immersed in the whole, and the Soldering time is 25±5min.	Dip soldering process. The method of dip soldering is soaked the pins, and the level of the flux is closed to the product's plastics case, and the soaking time is 4±1 seconds.

Change #2	External summary of hang plating process: 	External summary of dip soldering process: 
Change #3	Hang plating tin layer average thickness is 8.65um.	Dip soldering process tin layer average thickness is 4.04um.
Change #4		
Change #5		
4.6 Anticipated impact on form, fit, function, reliability or processability?	Not impact the form, fit, function, reliability or processability	
4.7 Reference parts with customer number (optional)		

5. Reason / motivation for change	
5.1 Motivation	TO-92 package plating process changed from hang plating to solder dipping, because plating solution have to be used during hang planting process which will pollution the environment.
5.2 Additional explanation (optional)	

6. Marking of parts / traceability of change	
6.1 Description	Use date code to trace the change.

7. Timing / schedule		
7.1 Date of qualification results	2018/10/26	
7.2 Last order date (optional)	2019/07/21	
7.3 Last delivery date (optional)	2020/07/20	
7.4 Intended start of delivery	2019/07/21	
7.5 Qualification samples available?	Qualification samples can be provided within 2 weeks upon customer order confirmation.	
7.6 Customer feedback required until	2019/03/08	

8. Qualification / validation			
8.1 Description (e.g. qual. plan/report, AEC-Q...)	According to JESD22		
8.2 Qualification report and qualification results	available (see attachment)	issue date	2018/10/26

9. Input to customer for risk assessment process
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