

DATE: 20 December, 2023

PCN #: 2656

PCN Title: Qualification of Additional Wafer Source Using Different Back Metal and Thickness, and Qualification of Internal "Diodes Technology (Cheng Du) Company Limited" (CAT) as Additional Assembly & Test Site Using Different Back Metal and Thickness, PdCu Bond Wire, New Lead Frame and New Mold Compound Types for Select Automotive Products.

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request within 30 days as well. Otherwise, samples may not be built prior to this change. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



# PRODUCT CHANGE NOTICE

## PCN-2656 REV 1

20 December, 2023 20 March, 2024 Discrete Semiconductors Additional Wafer Source / Additional Assembly Bill of Materials 2656   TITLE   Qualification of Additional Wafer Source Using Different Back Metal Composition and Thickness, and Qualification of Internal "Diodes Technology (Cheng Du) Company Limited" (CAT) as Additional Assembly & Test Site Using Different Back Metal Composition and Thickness, PdCu Bond Wire, New Lead Frame, New Mold Compound Types for Select Automotive Products   DESCRIPTION OF CHANGE   This PCN is being issued to notify customers that in order to assure continuity of supply. Diodes has qualified Diodes internal JKFAB in HsinChu, Taiwan as additional wafer source using different back metal composition and thickness for select automotive products listed below.   INPOSCI CAT Sector CHANGE   This PCN is being issued to notify customers that in order to assure continuity of supply. Diodes has qualified Diodes internal JKFAB in HsinChu, Taiwan as additional wafer source using different back metal composition and thickness, PdCu bond wire, new lead frame, and new mold compound types for select automotive products listed below.   INPOSCI Sector Products   Full electrical characterization and high reliability testing has been completed on representative part numbers to ensure there is no change to device functional specifications in the datasheet. Refer to the attached qual report).   There will be no change to the Fit or Function of products affected.   PRODUCTS AFFECTED   PRODUCTS AFFECTED   <	Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:	
TITLE       Qualification of Additional Wafer Source Using Different Back Metal Composition and Thickness, and Qualification of Internal "Diodes Technology (Cheng Du) Company Limited" (CAT) as Additional Assembly & Test Site Using Different Back Metal Composition and Thickness, PdCu Bond Wire, New Lead Frame, New Mold Compound Types for Select Automotive Products       DESCRIPTION OF CHANGE       This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes has qualified Diodes internal JKFAB in HairoChu, Taiwan as additional wafer source using different back metal composition and thickness for select automotive products listed below.       In addition, Diodes has qualified internal "Diodes Technology (Cheng Du) Company Limited" (CAT) located in Chengdu, China as additional Assembly and Test site using different back metal composition and thickness, PdCu bond wire, new lead frame, and new mold compound types for select automotive products listed below.       FUI electrical characterization and high reliability testing has been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. Refer to the attached qualification report embedded in this file (to view, download this PCN file then open it with a PDF viewer to see the attached qual report).       There will be no change to the Fit or Function of products affected.       PRODUCTS AFFECTED       Please see the attached part list and part marking change in following Tables:       Table 1 – Add JKFAB as additional Art site using different back metal composition and thickness; PdCu bond w	20 December, 2023	20 March, 2024	Discrete Semiconductors	Additional Wafer Source / Additional Assembly & Test Site / Wafer and Assembly Bill of Materials	2656	
Qualification of Additional Wafer Source Using Different Back Metal Composition and Thickness, and Qualification of Internal 'Diodes Technology (Cheng Du) Company Limited'' (CAT) as Additional Assembly & Test Site Using Different Back Metal Composition and Thickness, PdCu Bond Wire, New Lead Frame, New Mold Compound Types for Select Automotive Products     DESCRIPTION OF CHANGE     This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes has qualified Diodes internal JKFAB in HsinChu, Taiwan as additional wafer source using different back metal composition and thickness for select automotive products listed below.     In addition. Diodes has qualified internal 'Diodes Technology (Cheng Du) Company Limited'' (CAT) located in Chengdu, China as additional Assembly and Test site using different back metal composition and thickness, PdCu bond wire, new lead frame, and new mold compound types for select automotive products listed below.     Full electrical characterization and high reliability testing has been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. Refer to the attached qualification report embedded in this file (to view, download this PCN file then open it with a PDF viewer to see the attached qual report).     There will be no change to the Fit or Function of products affected.   IMPACT     Continuity of Supply. No change in datasheet electrical parameters and product performance.   PRODUCTS AFFECTED     Please see the attached part list and part marking change in following Tables:   Table 2 - Add JKFAB as additional AT sit using different back metal composition and thickness<			TITLE			
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WEB LINKS     Manufacturer's Notice:   https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/     For More Information Contact:   https://www.diodes.com/about/contact-us/contact-sales/     Data Sheet:   https://www.diodes.com/catalog/     DISCLAIMER	Please see the attached part list and part marking change in following Tables: Table 1 – Add JKFAB as additional wafer source using different back metal composition and thickness Table 2 – Add CAT as additional A/T site using different back metal composition and thickness, PdCu bond wire, new lead frame and new mold compound types Table 3 – Part Marking Format					
Manufacturer's Notice:   https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/     For More Information Contact:   https://www.diodes.com/about/contact-us/contact-sales/     Data Sheet:   https://www.diodes.com/catalog/     DISCLAIMER	WEB LINKS					
For More Information Contact:   https://www.diodes.com/about/contact-us/contact-sales/     Data Sheet:   https://www.diodes.com/catalog/     DISCLAIMER	Manufacturer's Noti	Manufacturer's Notice: https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices				
Data Sheet: https://www.diodes.com/catalog/   DISCLAIMER	For More Informatio	n Contact: https://w	ww.diodes.com/about	contact-us/contact-sales/		
DISCLAIMER	Data Sheet:	https://w	ww.diodes.com/catalo	<u>g/</u>		

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Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.

Table 1 - Add JKFAB as additional wafer source using different back metal composition and thickness					
BZT52C13LPQ-7	BZT52C6V8LPQ-7	DFLZ11Q-7	DFLZ16Q-7	DFLZ5V6Q-7	DFLZ7V5Q-7
BZT52C13LPQ-7B	BZT52C9V1LPQ-7	DFLZ12Q-7	DFLZ18Q-7	DFLZ6V2Q-7	DFLZ8V2Q-7
BZT52C15LPQ-7	DDZ5V6ASFQ-7	DFLZ13Q-7	DFLZ20Q-7	DFLZ6V8Q-7	DFLZ9V1Q-7
BZT52C16LPQ-7	DFLZ10Q-7	DFLZ15Q-7			

Table 2 - Add CAT as additional A/T site using different back metal composition and thickness, PdCu bond wire, new lead frame					
		and mold cor	npound types	r	1
AZ23C27Q-7-F*	BZT52C3V3Q-7-F*	BZX84C12Q-13-F*	BZX84C3V6Q-13-F*	DDZ9701Q-7*	MMSZ5233BQ-7-F*
BZT52C10Q-7-F*	BZT52C3V3SQ-7-F*	BZX84C12Q-7-F*	BZX84C3V6Q-7-F*	MMBZ5221BQ-7-F*	MMSZ5234BQ-7-F*
BZT52C10SQ-7-F*	BZT52C3V6Q-7-F*	BZX84C13Q-13-F*	BZX84C3V9Q-13-F*	MMBZ5226BQ-7-F*	MMSZ5235BQ-7-F*
BZT52C11Q-7-F*	BZT52C3V6SQ-7-F*	BZX84C13Q-7-F*	BZX84C3V9Q-7-F*	MMBZ5231BQ-7-F*	MMSZ5236BQ-7-F*
BZT52C11SQ-7-F*	BZT52C3V9Q-7-F*	BZX84C15Q-13-F*	BZX84C4V3Q-13-F*	MMBZ5232BQ-7-F*	MMSZ5237BQ-13-F*
BZT52C12Q-13-F*	BZT52C3V9SQ-7-F*	BZX84C15Q-7-F*	BZX84C4V3Q-7-F*	MMBZ5235BQ-7-F*	MMSZ5237BQ-7-F*
BZT52C12Q-7-F*	BZT52C4V3Q-7-F*	BZX84C16Q-13-F*	BZX84C4V7Q-13-F*	MMBZ5242BQ-7-F*	MMSZ5239BQ-7-F*
BZT52C12SQ-7-F*	BZT52C4V3SQ-7-F*	BZX84C16Q-7-F*	BZX84C4V7Q-7-F*	MMBZ5244BQ-7-F*	MMSZ5240BQ-13-F*
BZT52C13Q-7-F*	BZT52C4V7Q-7-F*	BZX84C18Q-13-F*	BZX84C5V1Q-13-F*	MMBZ5245BQ-7-F*	MMSZ5240BQ-7-F*
BZT52C13SQ-7-F*	BZT52C4V7SQ-7-F*	BZX84C18Q-7-F*	BZX84C5V1Q-7-F*	MMBZ5245BWQ-7-F*	MMSZ5241BQ-7-F*
BZT52C15Q-7-F*	BZT52C5V1Q-7-F*	BZX84C20Q-13-F*	BZX84C5V6Q-13-F*	MMBZ5252BQ-7-F*	MMSZ5242BQ-13-F*
BZT52C16Q-7-F*	BZT52C5V1SQ-7-F*	BZX84C20Q-7-F*	BZX84C5V6Q-7-F*	MMSZ5223BQ-13-F*	MMSZ5242BQ-7-F*
BZT52C16SQ-7-F*	BZT52C5V6Q-7-F*	BZX84C22Q-13-F*	BZX84C6V2Q-13-F*	MMSZ5223BQ-7-F*	MMSZ5243BQ-7-F*
BZT52C18Q-7-F*	BZT52C5V6SQ-7-F*	BZX84C22Q-7-F*	BZX84C6V2Q-7-F*	MMSZ5225BQ-7-F*	MMSZ5245BQ-13-F*
BZT52C18SQ-7-F*	BZT52C6V2Q-7-F*	BZX84C24Q-13-F*	BZX84C6V8Q-13-F*	MMSZ5226BQ-7-F*	MMSZ5245BQ-7-F*
BZT52C20Q-7-F*	BZT52C6V2SQ-7-F*	BZX84C24Q-7-F*	BZX84C6V8Q-7-F*	MMSZ5227BQ-7-F*	MMSZ5246BQ-13-F*
BZT52C20SQ-7-F*	BZT52C6V8Q-7-F*	BZX84C27Q-13-F*	BZX84C7V5Q-13-F*	MMSZ5228BQ-7-F*	MMSZ5246BQ-7-F*
BZT52C22Q-7-F*	BZT52C7V5Q-7-F*	BZX84C27Q-7-F*	BZX84C7V5Q-7-F*	MMSZ5229BQ-7-F*	MMSZ5248BQ-13-F*
BZT52C24Q-7-F*	BZT52C7V5SQ-7-F*	BZX84C2V4Q-13-F*	BZX84C8V2Q-13-F*	MMSZ5230BQ-13-F*	MMSZ5248BQ-7-F*
BZT52C24SQ-7-F*	BZT52C8V2Q-7-F*	BZX84C2V4Q-7-F*	BZX84C8V2Q-7-F*	MMSZ5230BQ-7-F*	MMSZ5250BQ-7-F*
BZT52C27Q-7-F*	BZT52C8V2SQ-7-F*	BZX84C2V7Q-13-F*	BZX84C9V1Q-13-F*	MMSZ5231BQ-7-F*	MMSZ5251BQ-7-F*
BZT52C2V4Q-7-F*	BZT52C9V1Q-7-F*	BZX84C2V7Q-7-F*	BZX84C9V1Q-7-F*	MMSZ5232BQ-13-F*	MMSZ5252BQ-7-F*
BZT52C2V7Q-7-F*	BZX84C10Q-13-F*	BZX84C3V0Q-13-F*	DDZ9684Q-7*	MMSZ5232BQ-7-F*	MMSZ5254BQ-13-F*
BZT52C2V7SQ-7-F*	BZX84C10Q-7-F*	BZX84C3V3Q-13-F*	DDZ9685Q-13**	MMSZ5232BSQ-7-F	MMSZ5254BQ-7-F*
BZT52C3V0SQ-7-F*	BZX84C11Q-7-F*	BZX84C3V3Q-7-F*	DDZ9689Q-7*	MMSZ5233BQ-13-F*	UDZ9V1BQ-13

Note: "\*" Change bond wire from Au to PdCu "\*\*" Change bond wire from Cu to PdCu



Table 3: Part Marking Format –

## SOT-23



### SOT-323

SAT (Diodes Internal AT site Shanghai, China)	CAT (Diodes Internal AT Site Chengdu, China) Add bar "-" above Year D/C for CAT site	
Marking format example	Marking format example	
ABC ₹		

#### SOD-123

SAT (Diodes Internal AT site Shanghai, China)	CAT (Diodes Internal AT Site Chengdu, China) Add bar "-" above Year D/C for CAT site	
Marking format example	Marking format example	

### SOD-323

SAT (Diodes Internal AT site Shanghai, China)	CAT (Diodes Internal AT Site Chengdu, China) Add bar "-"above first character for CAT site	
Marking format example	Marking format example	