



DATE: 4<sup>th</sup> November, 2020

PCN #: 2484

PCN Title: Qualification of Internal "Diodes Technology (Cheng Du) Company Limited" (CAT) as Additional Assembly & Test Site Using PdCu or Au Bond Wire, And Standardization of Assembly Bill of Materials At The Existing CAT Site for Select Discrete 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-2484 REV 1**

<b>Notification Date:</b>	<b>Implementation Date:</b>	<b>Product Family:</b>	<b>Change Type:</b>	<b>PCN #:</b>
4 <sup>th</sup> November, 2020	4 <sup>th</sup> February, 2021	Discrete Semiconductors	Additional Assembly & Test Site / Assembly Bill of Materials / Part Top Marking	<b>2484</b>
<b>TITLE</b>				
Qualification of Internal "Diodes Technology (Cheng Du) Company Limited" (CAT) as Additional Assembly & Test Site Using PdCu or Au Bond Wire, And Standardization of Assembly Bill of Materials At The Existing CAT Site for Select Discrete Products				
<b>DESCRIPTION OF CHANGE</b>				
<p>This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes has qualified internal "Diodes Technology (Cheng Du) Company Limited" (CAT) located in Chengdu, China as an additional Assembly and Test site using PdCu or Au bond wire, and standardization of assembly bill of materials at the existing CAT site for select products listed in this PCN.</p> <p>Full electrical characterization and high reliability testing has been completed on representative part numbers to ensure 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).</p>				
<b>IMPACT</b>				
Continuity of Supply. No change in data sheet electrical parameters and product performance. Some packages will have top marking changes or POD changes as outlined in the tables below.				
<b>PRODUCTS AFFECTED</b>				
<p>Please see the attached part list, top marking changes or POD changes below in following Tables:</p> <p>Table 1 – Affected Part List to add CAT as A/T site using PdCu or Au bond wire.</p> <p>Table 2 – Affected Part List to standardize assembly bill of materials at the existing CAT site.</p> <p>Table 3 – Marking Code Formats for affected packages</p> <p>Table 4 – POD Format for affected package</p>				
<b>WEB LINKS</b>				
<b>Manufacturer's Notice:</b>	<a href="https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/">https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/</a>			
<b>For More Information Contact:</b>	<a href="http://www.diodes.com/contacts">http://www.diodes.com/contacts</a>			
<b>Data Sheet:</b>	<a href="http://www.diodes.com/products">http://www.diodes.com/products</a>			
<b>DISCLAIMER</b>				
<b>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.</b>				

**Table 1 - Affected Part List to add CAT as A/T site using PdCu or Au bond wire**


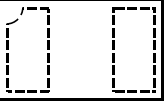

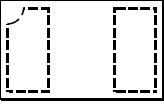

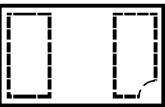

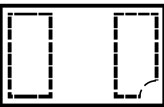




2N7002KX-7*	BS170FTA*	BSS84-13-F	DMN10H220LVT-7	DMNH6021SPDW-13	FZT489TA*
BAT54WS-13-F*	BSS123TA*	BZT52C5V6LP-7B	DMNH6021SPD-13	DMPH6050SPD-13	ZVN3306FTA*
BCM847BS-7*	BSS138TA*	DMN10H220LE-13			

**Table 2 – Affected Part List to standardize assembly bill of materials at the existing CAT site**

2N7002H-13*	DMN10H220L-13	DMN61D9UW-13*	DMN63D1LT-13*	DMN67D8LW-13*	DMP610DL-7*
2N7002H-7*	DMN2004TK-7*	DMN61D9UW-7*	DMN63D1LT-7*	DMN67D8LW-7*	MMBF170-13-F*
BSS138K-13*	DMN53D0LDW-13*	DMN63D1L-13*	DMN63D1LW-7*	DMP2004WK-7*	SBR0330CW-7*
BSS138K-7*	DMN53D0LT-7*	DMN63D1L-7*	DMN67D8L-7*	DMP2240UW-7*	ZXMN2F30FHTA
DMG1012T-13*	DMN601WK-7*	DMN63D1LDW-7*	DMN67D8LDW-13*	DMP510DL-7*	ZXMN2F34FHTA

Note: “\*” Change bond wire from Cu to PdCu

**Table 3 - Marking Code Formats**

DFN1006 Current Site:		New Site:	
SAT		CAT	
		Add bar “-” above first character for CAT site	
Marking orientation photo (Plan Form, Perspective - from top to bottom)		Marking orientation photo (Plan Form, Perspective - from top to bottom)	
<b>DFN1006-2, DFN1006H4-2</b>		<b>DFN1006-2, DFN1006H4-2</b>	
1. DFN1006-2, DFN1006H4-2, -7,-7B suffix marking orientation		1. DFN1006-2, DFN1006H4-2, -7,-7B suffix marking orientation	
 (Top)	 (Perspective)	 (Top)	 (Perspective)
2. DFN1006-2, DFN1006H4-2, -7,-7B suffix marking orientation		2. DFN1006-2, DFN1006H4-2, -7,-7B suffix marking orientation	
 (Top)	 (Perspective)	 (Top)	 (Perspective)
<b>DFN1006-3</b>		<b>DFN1006-3</b>	
1.DFN1006-3,DFN1006H4-3, -7B suffix marking orientation		1.DFN1006-3,DFN1006H4-3, -7B suffix marking orientation	
 (Top)	 (Perspective)	 (Top)	 (Perspective)

**SOT-223**

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

**SOT-23**

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

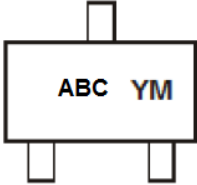
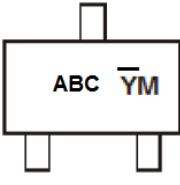
**SOT-323**

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

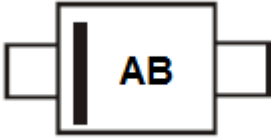
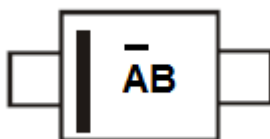
**SOT-363**

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

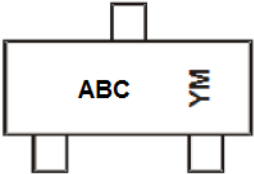
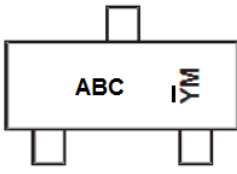
**SOT-523**

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

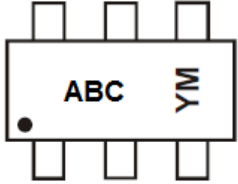
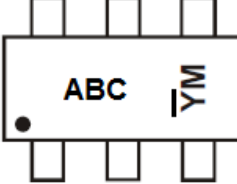
**SOD-323**

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

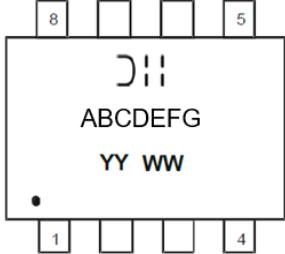
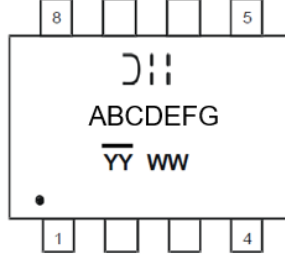
**SSOT-23**

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



**TSOT23-6**

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

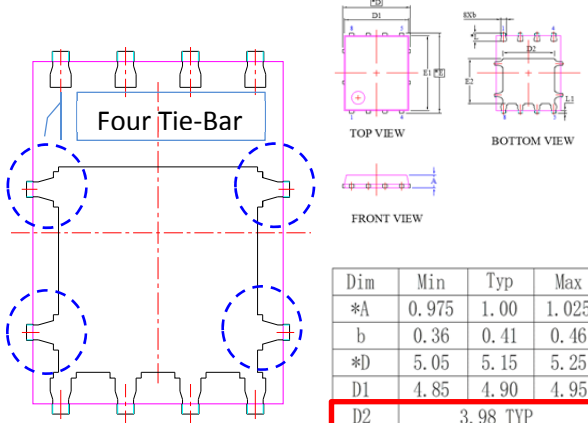
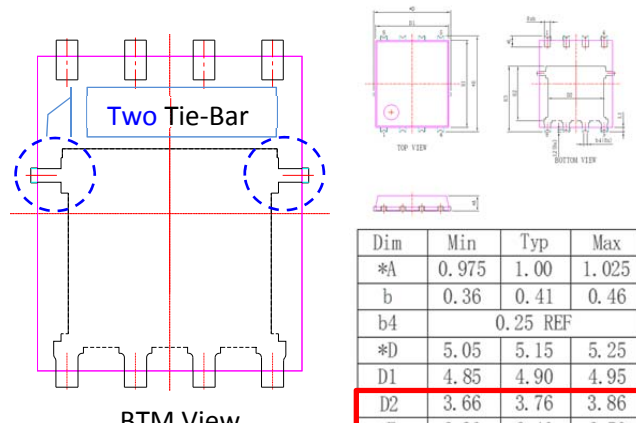
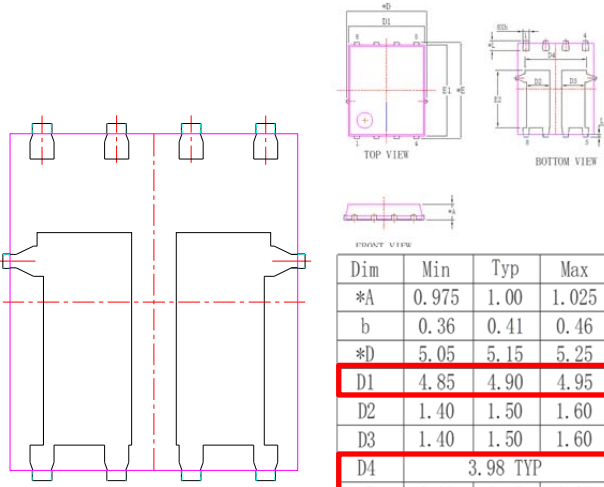
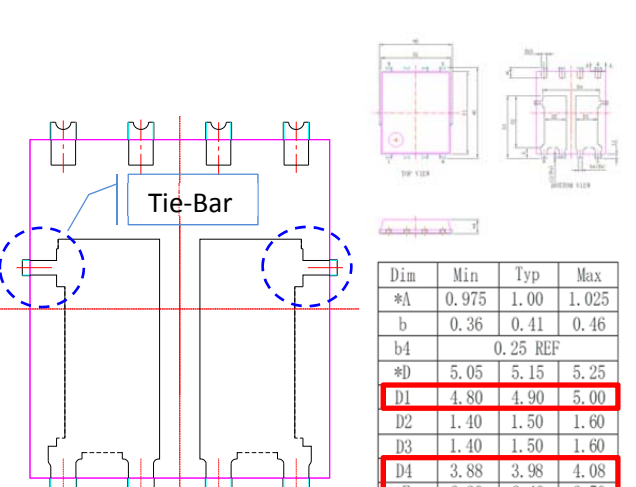
**SOP-8L**

SAT (Diodes Internal AT site Shanghai, China)	CAT (Diodes Internal AT Site Chengdu, China) <i>Add bar "-" above Year D/C for CAT site</i>
Marking format example	Marking format example
 <p>The diagram shows an SOP-8L package with pins 1, 4, 5, and 8 labeled. The marking on the package is: <math>\text{D}  </math>, ABCDEFG, YY WW.</p>	 <p>The diagram shows an SOP-8L package with pins 1, 4, 5, and 8 labeled. The marking on the package is: <math>\text{D}  </math>, ABCDEFG, <math>\overline{\text{YY}}</math> WW.</p>

**PowerDI5060-8L**

SAT (Current Diodes Internal AT site Shanghai, China)	CAT (Diodes Internal AT Site Chengdu, China) <i>Add bar "-" above Year D/C for CAT site</i>
Marking format example	Marking format example
 <p><math>\text{D}  </math> = Manufacturer's Marking          ABCDEFG = Product Type Marking Code          YYWW = Date Code Marking          YY = Year (ex: 13 = 2013)          WW = Week (01 - 53)</p>	 <p><math>\text{D}  </math> = Manufacturer's Marking          ABCDEFG = Product Type Marking Code  <math>\overline{\text{YY}}</math>WW = Date Code Marking          YY = Year (ex: 13 = 2013)          WW = Week (01 - 53)</p> <p>Other marking layout also will follow change for site Identifier</p>

**Table 4 - POD Format for PowerDI5060-8L**

<b>SAT</b>	<b>CAT</b>																																																																																																																
<b>PowerDI5060-8L Type (Without wettable flank)</b>	<b>SWP-PoweDI5060-8L Q Type (With wettable flank)</b>																																																																																																																
Base line: SAT exist POD design	Change from four tie-bars to two tie-bars																																																																																																																
 <p align="center"><b>Four Tie-Bar</b></p> <p align="center">TOP VIEW      BOTTOM VIEW</p> <p align="center">FRONT VIEW</p> <table border="1"> <thead> <tr> <th>Dim</th> <th>Min</th> <th>Typ</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>*A</td> <td>0.975</td> <td>1.00</td> <td>1.025</td> </tr> <tr> <td>b</td> <td>0.36</td> <td>0.41</td> <td>0.46</td> </tr> <tr> <td>*D</td> <td>5.05</td> <td>5.15</td> <td>5.25</td> </tr> <tr> <td>D1</td> <td>4.85</td> <td>4.90</td> <td>4.95</td> </tr> <tr> <td>D2</td> <td></td> <td>3.98 TYP</td> <td></td> </tr> <tr> <td>*F</td> <td>6.05</td> <td>6.15</td> <td>6.25</td> </tr> <tr> <td>E1</td> <td>5.75</td> <td>5.80</td> <td>5.85</td> </tr> <tr> <td>E2</td> <td>3.56</td> <td>3.66</td> <td>3.725</td> </tr> <tr> <td>*L</td> <td>0.51</td> <td>0.61</td> <td>0.71</td> </tr> <tr> <td>L1</td> <td>0.10</td> <td>0.175</td> <td>0.20</td> </tr> </tbody> </table> <p align="center"><b>BTM View</b></p>	Dim	Min	Typ	Max	*A	0.975	1.00	1.025	b	0.36	0.41	0.46	*D	5.05	5.15	5.25	D1	4.85	4.90	4.95	D2		3.98 TYP		*F	6.05	6.15	6.25	E1	5.75	5.80	5.85	E2	3.56	3.66	3.725	*L	0.51	0.61	0.71	L1	0.10	0.175	0.20	 <p align="center"><b>Two Tie-Bar</b></p> <p align="center">TOP VIEW      BOTTOM VIEW</p> <table border="1"> <thead> <tr> <th>Dim</th> <th>Min</th> <th>Typ</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>*A</td> <td>0.975</td> <td>1.00</td> <td>1.025</td> </tr> <tr> <td>b</td> <td>0.36</td> <td>0.41</td> <td>0.46</td> </tr> <tr> <td>b4</td> <td></td> <td>0.25 REF</td> <td></td> </tr> <tr> <td>*D</td> <td>5.05</td> <td>5.15</td> <td>5.25</td> </tr> <tr> <td>D1</td> <td>4.85</td> <td>4.90</td> <td>4.95</td> </tr> <tr> <td>D2</td> <td>3.66</td> <td>3.76</td> <td>3.86</td> </tr> <tr> <td>*E</td> <td>6.30</td> <td>6.40</td> <td>6.50</td> </tr> <tr> <td>E1</td> <td>5.75</td> <td>5.80</td> <td>5.85</td> </tr> <tr> <td>E2</td> <td>3.56</td> <td>3.66</td> <td>3.76</td> </tr> <tr> <td>*L</td> <td>0.635</td> <td>0.735</td> <td>0.835</td> </tr> <tr> <td>L1</td> <td>0.275</td> <td>0.300</td> <td>0.325</td> </tr> <tr> <td>L2</td> <td></td> <td>0.05 REF</td> <td></td> </tr> </tbody> </table> <p align="center"><b>BTM View</b></p>	Dim	Min	Typ	Max	*A	0.975	1.00	1.025	b	0.36	0.41	0.46	b4		0.25 REF		*D	5.05	5.15	5.25	D1	4.85	4.90	4.95	D2	3.66	3.76	3.86	*E	6.30	6.40	6.50	E1	5.75	5.80	5.85	E2	3.56	3.66	3.76	*L	0.635	0.735	0.835	L1	0.275	0.300	0.325	L2		0.05 REF																	
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