

DATE: 11/07/2023

PCN #: 2651

PCN Title: Qualified Additional FAB, Assembly Test Site, BOM, Datasheet, Die Revision and Tape and Reel Packing Quantity.

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-2651 REV 1

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
11/07/2023	02/07/2024	Analog	Additional FAB, AT Site, Die Revision, BOM, Datasheet, Tape and Reel Packing Quantity	2651
TITLE				
Qualified Additional Fab Source, Assembly Test Sites, Die Revision, BOM, Datasheet, Tape and Reel Packing Quantity.				
DESCRIPTION OF CHANGE				
<p>This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes Incorporated has qualified additional FAB Site (MXIC) located in Toufen, Taiwan. Diodes Internal A/T Site (SAT) located in Shanghai, China. Diodes internal FAB Site (SFAB2) located in Shanghai, China. Diodes Internal A/T Site (CAT) located in Chengdu, China. Diodes Internal wafer FAB Site (JKFAB) located in HsinChi, Taiwan.</p> <p>Diodes has also qualified an additional Bill of Materials (BOM) and Die Revision on select products. Lastly, the Tape and Reel Packing Quantity will be changed from 3000 units to 6000 units per reel for select products listed below.</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 unless specified in Table B.</p>				
IMPACT				
Continuity of Supply. There will be no change to the Form, Fit or Function of products affected, unless specifically indicated in Table A, B.				
PRODUCTS AFFECTED				
Table 1 - Additional FAB Site (MXIC) Table 2 - Additional Assembly Test Site (SAT) Table 3 - Additional BOM - LID (See Table C) Table 4 - Additional FAB Site (SFAB2) Table 5 - Additional Assembly Test Site (CAT) Table 6 - Additional FAB Site (JKFAB) Table 7 - Additional Die Revision (Metal Only) Table 8 - Additional BOM – SOP8 Die Attach (EN-4900GC), Mold Compound (CEL-9220HF13V) Table 9 - Additional Die Coat (Polyimide/ PIX-8144) Table 10 Additional BOM - TSSOP20 Die Attach (EN4900GC), Mold Compound (CEL-9220HF13V) Table 11 - Lead Length Change from Current (7.0mm) to New (5.0mm) Table 12 - Change to Packing Quantity of Tape and Reel (Current qty 3000, New qty 6000 per Reel) Table 13 - Additional BOM - Lead Frame (Etched Double Ring) Table 14 - Modify Datasheet (See Table B)				
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

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 - Additional FAB Site (MXIC)

PI3USB102EZLEX					
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Table 2 - Additional AT Site (SAT)

ZXCT1008FTA					
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Table 3 - Additional BOM – LID (See Table C)

FL1200088					
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Table 4 - Additional FAB Site (SFAB2)

AP3156FVG-7					
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Table 5 - Additional Assembly Test Site (CAT)

AP4310AMTR-AG1					
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Table 6 - Additional FAB Site (JKFAB)

AH49FDNTR-G1					
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Table 7 - Additional Die Revision (Metal Only)

AP3917BS7-13	AP3917CS7-13	AP3917DS7-13			
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Table 8 - Additional BOM – SOP8 Die Attach (EN-4900GC), Mold Compound (CEL-9220HF13V)

PT7C4302WEX	PT7C4307WEX	PT7C4311WEX	PT7C4337AWEX	PT7C4337WEX	PT7C433833AWEX
PT7C4339WEX	PT7C4363BWEX	PT7C4511WEX	PT7C4563BWEX		

Table 9 - Additional Die Coat (Polyimide/ PIX-8144)

AH175-PG-A-A	AH175-PG-A-B	AH175-PG-B-A	AH175-PG-B-B		
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Table 10 - Additional BOM - TSSOP20 Die Attach (EN4900GC), Mold Compound (CEL-9220HF13V)

AS324GTR-E1	AS324GTR-G1	AS339GTR-E1	AS339GTR-G1	AZ75232GTR-E1	AZ75232GTR-G1
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Table 11 - Lead Length Change from Current (7.0mm) to New (5.0mm)

G23270006	G23270013	G23270015	G23270016	G23270023	G23270024
G23270025					

Table 12 - Change to Packing Quantity of Tape and Reel (Current qty 3000, New qty 6000 per Reel)

US2500002Z	US2500003	US2500006	US2500014	US3200003	US3200005Z
US3840016	US3900002	US4000014	US6000001	US6000002Z	

Table 13 - Additional BOM - Lead Frame (Etched Double Ring)

PI3CH3305LEX	PI3VT3306LE	PI3VT3306LEX	PI6LC48C21LE	PI6LC48C21LEX	PI6LC48C21LIE
PI6LC48C21LIE	PI6LC48C51LE	PI6LC48C51LEX	PI6LC48C51LIE	PI6LC48C51LIE	PI6LC48P0101LIE
PI6LC48P0101LIE	PI6LC48P25104LE	PI6LC48P25104LEX	PI6LC48P25104LIE	PI6LC48P25104LIE	PT7C4372ALEX

Table 14 - Modify Datasheet (See Table B)

APX823-23W5G-7	APX823-26W5G-7	APX823-29W5G-7	APX823-31W5G-7	APX823-40W5G-7	APX823-44W5G-7
APX823-46W5G-7	APX824-23W5G-7	APX824-26W5G-7	APX824-29W5G-7	APX824-31W5G-7	APX824-40W5G-7
APX824-44W5G-7	APX824-46W5G-7	APX825A-23W6G-7	APX825A-26W6G-7	APX825A-29W6G-7	APX825A-31W6G-7
APX825A-40W6G-7	APX825A-44W6G-7	APX825A-46W6G-7			

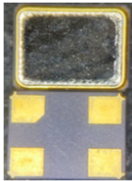

Table: A

	Current	New
Plating Area	Spot Ring	Double Ring
Method	Stamped	Etched
Lead Frame Drawing	<p align="center">U08U 87X126 (SPOT AG)</p>	<p align="center">U08U 87X12R (D-RING AG)</p>

Table: B

Current Datasheet						New Datasheet									
V _{TH}	Negative-going Input Threshold Voltage (see Note 3)	APX823/APX824/APX825A -23	T _A = 0°C -85°C	2.21	2.25	2.30	V	V _{TH}	Negative-going Input Threshold Voltage (see Note 3)	APX823/APX824/APX825A -23	T _A = 0°C -85°C	2.21	2.25	2.30	V
		APX823/APX824/APX825A -26		2.59	2.63	2.69				APX823/APX824/APX825A -26		2.59	2.63	2.69	
		APX823/APX824/APX825A -29		2.88	2.93	3.00				APX823/APX824/APX825A -29		2.88	2.93	3.00	
		APX823/APX824/APX825A -31		3.02	3.08	3.15				APX823/APX824/APX825A -31		3.02	3.08	3.15	
		APX823/APX824/APX825A -40		3.93	4.00	4.08				APX823/APX824/APX825A -40		3.93	4.00	4.08	
		APX823/APX824/APX825A -44		4.31	4.38	4.47				APX823/APX824/APX825A -44		4.31	4.38	4.47	
		APX823/APX824/APX825A -46	4.56	4.63	4.72	APX823/APX824/APX825A -46	4.56			4.63	4.72				
		APX823/APX824/APX825A -23	T _A = -40°C -85°C	2.20	2.25	2.30	V			APX823/APX824/APX825A -23	T _A = -40°C -85°C	2.15	2.25	2.34	V
		APX823/APX824/APX825A -26		2.57	2.63	2.69				APX823/APX824/APX825A -26		2.51	2.63	2.74	
		APX823/APX824/APX825A -29		2.86	2.93	3.00				APX823/APX824/APX825A -29		2.80	2.93	3.05	
		APX823/APX824/APX825A -31		3.00	3.08	3.15				APX823/APX824/APX825A -31		2.94	3.08	3.20	
		APX823/APX824/APX825A -40		3.92	4.00	4.08				APX823/APX824/APX825A -40		3.82	4.00	4.16	
		APX823/APX824/APX825A -44		4.29	4.38	4.47				APX823/APX824/APX825A -44		4.19	4.38	4.56	
		APX823/APX824/APX825A -46	4.54	4.63	4.72	APX823/APX824/APX825A -46	4.43			4.63	4.82				

Table: C

Comparison Table of 3225 Crystal -- Current ELP LID And New EP LID		
	Current ELP LID	New EP LID
Products category	3.2x2.5mm Seam Sealed Crystal	3.2x2.5mm Seam Sealed Crystal
Products Type	FL1200088	FL1200088
Ceramic LID Parts Number	A30610016	A30610043
Ceramic LID Vendor	Yoshikawa	Yoshikawa
Ceramic LID Drawing no.	Y0765	Y0588
Products Photo		
Mechanical Drawing As Datasheet	