

Date: May15, 2023

PCN No#: 051523-1

PCN Title: Wafer Design Upgrade For Select Parts

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Micro Commercial Components Corp(MCC) . We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local sales

representative to acknowledge receipt of this PCN.

If you have any questions about PCN's products, please contact your local sales

representative.

Sincerely,

MCC PCN Team



## **PRODUCT CHANGE NOTICE**

Notification Date	Implementation Date	Change Type	Classification	PCN No			
May 15, 2023	Aug 15, 2023	Wafer Design Upgrade	Major	051523-1			
	TITLE						
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DESCRIPTION OF CHANGE							
To optimize wafer structure & improve capacity, MCC has determined to upgrade wafer design for ESD24VD5-TP & ESDSLC16VLB-TP.Full electrical characterization and high reliability testing has been completed to ensure there is no change to device functionality or electrical specifications in the datasheet.							
IMPACT							
No change in datasheet electrical parameters and product performance. Table A: Chip layout comparison.							
PRODUCTS AFFECTED							
ESD24VD5-TP & ESDSLC16VLB-TP							
	V	VEB LINKS					
Terms And Conditions:	erms And Conditions: https://www.mccsemi.com/Home/TermsAndConditions						
For More Information Con	re Information Contact: https://www.mccsemi.com/Contact/Index						
Products:	https://www.mccsemi.com/ProductCategories						
	D	ISCLAIMER					
Unless a MCC 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 A - Chip Layout Comparison					
Chip layout Old		New			
ESD24VD5-TP					
ESDSLC16VLB-TP	1/O 1 1/O 2				



## **Reliability Report**

Part Number: ESD24VD5-TP Date: 2023-02-10 Test Results

	Test Item	Conditions	Duration	Quantity	Reject
	TEST				
	Pre- and Post-Stress Electrical Test	T <sub>a</sub> = 25 °C	N/A	all parts	see below
		JESD22A-113			
+	Pre-conditioning for MSL 1	1.Temperature Cycling:-40 ℃~60 ℃, 2.Bake:125 ℃,	5Cycles; 24 hours;		
		3.1 Moisture Soak:85 $^{\circ}$ C , 85%RH for MSL1;	168hours 308Pcs		0
		3.2 Moisture Soak:30℃, 60%RH for MSL3;	192hours		
		4. Reflow*3Cycles:260 C	3Cycles		
	HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 $T_j = T_{jmax}$ , 100% VR	1000 hours	77Pcs	0
	тс	JESD22-A104	1000Cycles (500hours)	77Pcs	0
	Temperature Cycling	-55 ℃ (+0,-10)/15Min~ 150(+15,-0)/15Min,			
	AC Autoclave	JESD22-A102 T <sub>a</sub> = 121 °C±2 °C, RH = 100 %, 15psig	96 hours	77Pcs	0
	H3TRB High Humidity High Temperature Reverse	JESD22-A101 $T_a = 85 \ ^{\circ}\text{C} \pm 2 \ ^{\circ} \ , \ \ \text{RH} = 85\% \pm 5\%,$ Bias $100 \ \% \ \text{VR} \ \ (\text{VR MAX} = 100\text{V})$	1000 hours	77Pcs	0
	RSH Resistance to Solder	JESD22-B106 Heat 260 °C (+5 , -0)	10 s	30Pcs	0
	SD	J-STD-002	3.0	400	0
	Solderability	235 °C ± 5 °C	3 s	10Pcs	0
	HTSL	JESD22-A103			
	High Temperature Storage Life	TstgMax	1000 hours 77Pcs		0

<sup>\*</sup>Remark : detail MSL of product refer to data sheet on MCC website.



## **Reliability Report**

Part Number: ESDSLC16VLB-TP

Date: 2022-12-22

	Test Item TEST	Conditions	Duration	Quantity	Rejects
	Pre- and Post-Stress Electrical Test	T <sub>a</sub> = 25 °C	N/A	all parts	see below
*	Pre-conditioning for MSL 1	JESD22A-113  1.Temperature Cycling:-40 °C ~60 °C,  2.Bake:125 °C,  3.1 Moisture Soak:85 °C, 85%RH for MSL1;	5Cycles; 24 hours; 168hours	308Pcs	0
		3.2 Moisture Soak:30 $^{\circ}\mathrm{C},~60\%\text{RH}$ for MSL3;	192hours		
		4. Reflow*3Cycles:260 C	3Cycles		
	<b>HTRB</b> High Temperature Reverse Bias	MIL-STD-750 Method 1038 $T_j = T_{jmax}$ , 100% VR	1000 hours	77Pcs	0
	<b>TC</b> Temperature Cycling	JESD22-A104 -55 ℃ (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
	AC Autoclave	JESD22-A102 T <sub>a</sub> = 121 °C±2 °C, RH = 100 %, 15psig	96 hours	77Pcs	0
	H3TRB High Humidity High Temperature Reverse	JESD22-A101 $T_a = 85 ^{\circ}\text{C} \pm 2 ^{\circ}\text{C} \; , \; \text{RH} = 85\% \pm 5\%, \\ \text{Bias} \qquad 100 \% \; \text{VR} \; (\text{VR MAX} = 100\text{V})$	1000 hours	77Pcs	0
	<b>RSH</b> Resistance to Solder	JESD22-B106 Heat 260 °C (+5, -0)	10 s	30Pcs	0
	<b>SD</b> Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
	HTSL High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0

<sup>\*</sup>Remark : detail MSL of product refer to data sheet on MCC website.