



130 W Cochran St, Unit B
 Simi Valley, CA 93065
 Tel:818-701-4933

Process Change Notification (PCN)

Notification number:	071224-1
Notification date:	12 Jul 2024
Proposed implementation date:	12 Oct 2024 (90 days notification before change, according to JEDEC standard)
Product type affected:	Please refer to table 1 in Appendix 1.
Change Category	Package design structure (Lead frame).
Change Classification	Minor
Change description:	Optimized lead frame design for TBS package by adding circular holes at key positions in the original lead frame to enhance product stress resistance. 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.
Reason for change:	To enhance product quality.
Deposition of old product	N/A
Identification of Changed product:	DC 2441 onwards
Contact person:	Please contact your respective Account manager (AM) / Inside sales representative (ISR/CSR) if you have further query.
Approved by:	Jason Gao (Director of Engineering) Steve Zhang (Director of Supply Chain) Seaman Wu (Director of Quality) Pamela Cheng (General Manager)



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Appendix 1: Table 1

Product type affected					
TBS20A-TP	TBS20B-TP	TBS20D-TP	TBS20G-TP	TBS20J-TP	TBS20K-TP
TBS20M-TP	TBS22A-TP	TBS22B-TP	TBS22D-TP	TBS22G-TP	TBS22J-TP
TBS22K-TP	TBS22M-TP	TBS30A-TP	TBS30B-TP	TBS30D-TP	TBS30G-TP
TBS30J-TP	TBS30K-TP	TBS30M-TP	RTBS30M-TP	TBS30KL-TP	

Change description

Change description	Original Lead frame	New Lead frame
Lead Frame change		

Note: The appearance and package dimensions have not changed



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Reliability test report:

Part Number: TBS30M-TP

Test Results : PASS

Test Item	Conditions	Duration	Quantity	Rejects
TEST Pre- and Post-Stress Electrical Test	T _a = 25 °C	N/A	all parts	see below
* Pre-conditioning	JESD22A-113 1. Temperature Cycling: -40 °C ~ 60 °C, 2. Bake: 125 °C, 3.1 Moisture Soak: 85 °C, 85%RH for MSL1 OR 3.2 Moisture Soak: 30 °C, 60%RH for MSL3; 4. Reflow*3Cycles: 260 °C	5Cycles; 24 hours; 168hours 192hours 3Cycles	308Pcs	0
HTRB High Temperature Reverse Bias	MIL-STD-750 Method 1038 T _j = T _{jmax} , 80% VR	1000 hours	77Pcs	0
TC Temperature Cycling	JESD22-A104 -55 °C (+0,-10)/15Min~ 150(+15,-0)/15Min,	1000Cycles (500hours)	77Pcs	0
AC Autoclave	JESD22-A102 T _a = 121 °C ± 2 °C, RH = 100 %, 15psig	96 hours	77Pcs	0
H3TRB High Humidity High Temperature Reverse Bias	JESD22-A101 T _a = 85 °C ± 2 °C, RH = 85% ± 5%, 80 % VR (VR MAX=100V)	1000 hours	77Pcs	0
IOL Intermittent Operating Life	MIL-STD-750 Method 1037 ON 2Min/OFF 2min, devices powered to insure ΔT _j ≥ 100 °C	15000 cycles (1000 hours)	77Pcs	0
RSH Resistance to Solder Heat	JESD22-B106 260 °C (+5, -0)	10 s	30Pcs	0
SD Solderability	J-STD-002 235 °C ± 5 °C	3 s	10Pcs	0
HTSL High Temperature Storage Life	JESD22-A103 TstgMax	1000 hours	77Pcs	0



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PCN Title: Optimized lead frame design for TBS package.

Dear Customer.

This is a PCN announcement to the above-mentioned product which is/are offered by Micro Commercial Components Corp (MCC). We would appreciate your acknowledgement of receipt of this notification within 30 days of the date of this PCN to your local ISR, sales representative. Please refer to the attached document for more information (including implementation date / product date code of this change). If you have any questions or concerns related to this PCN, please contact your local sales representative / ISR for support. *Sincerely, MCC*

PCN Team

Thank you.

Yours sincerely,

PCN Team