



Product Change Notification / NTDO-23HTHI228

Date:

27-Jan-2023

Product Category:

Linear Op Amps

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6113 Initial Notice: Qualification of MTAI as an additional assembly site for MCP6031T-E/OT, MCP6051T-E/OT, MCP6061T-E/OT and MCP6071T-E/OT catalog part numbers (CPN) available in 5L SOT-23 package.

Affected CPNs:

[NTDO-23HTHI228_Affected_CPN_01272023.pdf](#)

[NTDO-23HTHI228_Affected_CPN_01272023.csv](#)

Notification Text:

PCN Status:Initial Notification

PCN Type:Manufacturing Change

Microchip Parts Affected:Please open one of the files found in the Affected CPNs section.

Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change:Qualification of MTAI as an additional assembly site for MCP6031T-E/OT, MCP6051T-E/OT, MCP6061T-E/OT and MCP6071T-E/OT catalog part numbers (CPN) available in 5L SOT-23 package.

Pre and Post Change Summary:

		Pre Change	Post Change	
Assembly Site		UTAC Thai Limited (UTL-1) LTD. (NSEB)	UTAC Thai Limited (UTL-1) LTD. (NSEB)	Microchip Technology Thailand (HQ) (MTAI)
Wire Material		Au	Au	Au
Die Attach Material		8006NS	8006NS	8006NS
Mold Compound		G600	G600	G600
Lead frame	Material	C194	C194	CDA194*
	DAP Surface Prep	Ag	Ag	Ag-selective
	Treatment	No	No	Roughening

Note: *C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve productivity by qualifying MTAI as an additional assembly site.

Change Implementation Status:In Progress

Estimated Qualification Completion Date:March 2023

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	January 2023	>	March 2023
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Workweek	1	2	3	4	5		9	10	11	12	13
Initial PCN Issue Date				x							
Qual Report Availability											x
Final PCN Issue Date											x

Method to Identify Change:Traceability code

Qualification Plan:Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History:January 27, 2023: Issued initial notification.

The change described in this PCN does not alter Microchip’s current regulatory compliance regarding the material content of the applicable products.

Attachments:

[PCN_NTDO-23HTHI228_Pre and Post Change Summary.pdf](#)
[PCN_NTDO-23HTHI228_Qual_Plan.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

Terms and Conditions:

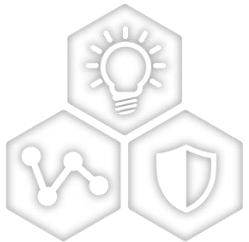
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If you wish to change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

CCB#: 6113
Pre and Post Change Summary
PCN #: NTDO-23HTHI228

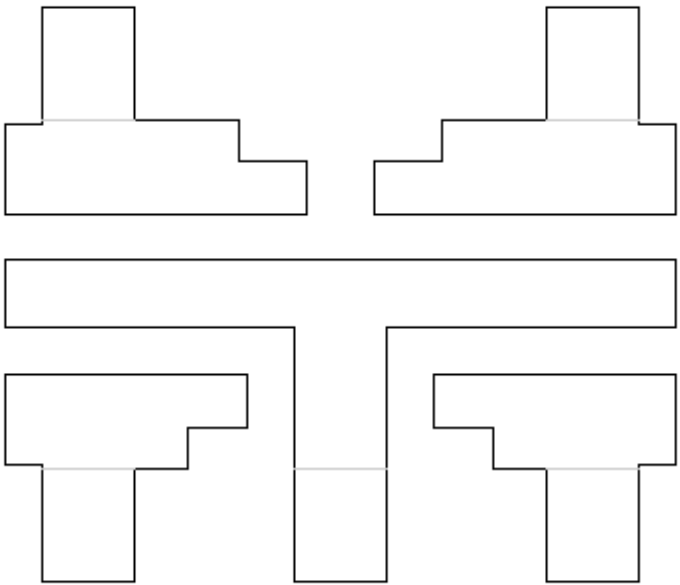
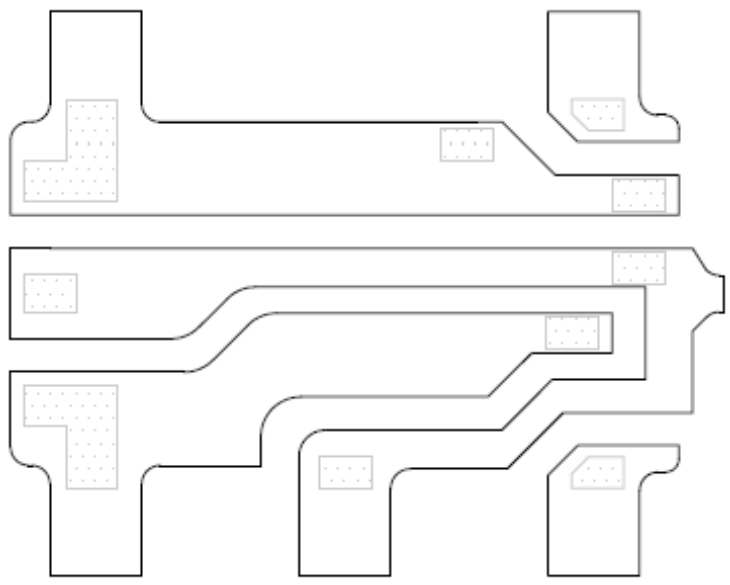


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Lead Frame Comparison

NSEB		MTAI	
 <p>The NSEB diagrams show three lead frame configurations. The top two are simple leaded packages with four leads each. The bottom one is a more complex package with eight leads. All are shown as clean outlines without surface treatments.</p>		 <p>The MTAI diagrams show three lead frame configurations. The top one is a simple leaded package with four leads, showing a stippled surface treatment on the leads. The middle one is a more complex package with eight leads, also showing stippled surface treatment. The bottom one is a similar complex package with eight leads, showing stippled surface treatment.</p>	
Material*	C194	Material*	CDA194
DAP Surface Prep	Ag	DAP Surface Prep	Ag-selective
Treatment	No	Treatment	Roughening

Note: *C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Affected Catalog Part Numbers (CPN)

MCP6031T-E/OT

MCP6051T-E/OT

MCP6061T-E/OT

MCP6071T-E/OT



QUALIFICATION PLAN SUMMARY

PCN#: NTDO-23HTHI228

Date
January 19, 2023

**Qualification of MTAI as an additional assembly site for
MCP6031T-E/OT, MCP6051T-E/OT, MCP6061T-E/OT and
MCP6071T-E/OT catalog part numbers (CPN) available in 5L
SOT-23 package**

Purpose: Qualification of MTAI as an additional assembly site for MCP6031T-E/OT, MCP6051T-E/OT, MCP6061T-E/OT and MCP6071T-E/OT catalog part numbers (CPN) available in 5L SOT-23 package.

CCB: 6113

Assembly site	MTAI
BD Number	BD-001247 -01
MP Code (MPC)	A7CJ1YP6XVA1
Part Number (CPN)	MCP6031T-E/OTVAO
MSL information	MSL1
Assembly Shipping Media (T/R, Tube/Tray)	T/R
Base Quantity Multiple (BQM)	3000
Reliability Site	MTAI
Paddle size	60x46
Material	CDA194
DAP Surface Prep	Ag-Selective
Treatment	Roughening
Process	Etched
Lead-lock	No
Part Number	10100504
Lead Plating	Matte tin
Material	Au
Part Number	8006NS
Conductive	Yes
Part Number	G600
PKG Type	SOT-23
Pin/Ball Count	5

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; Perform 8 hours of steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	>95% lead coverage	5	MTAI	MTAI	
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	-	5	MTAI	MTAI	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	-	5	MTAI	MTAI	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	-	5	MTAI	MTAI	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	MTAI	
HTSL (High Temp Storage Life)	JESD22-A103 +175°C	45	5	1	50	0	21 - 83	MTAI	MTAI	Spares should be properly identified.
Preconditioning - Required for surface mount devices	J-STD-020JESD22-A113+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type. MSL-1 @ 260°C	231	15	3	738	0	15	MTAI	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs	77	5	3	246	0	10 - 14	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs	77	5	3	246	0	10	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104 and Appendix 3 -65°C to +150°C	77	5	3	246	0	15 - 60	MTAI	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.