



Product Change Notification: BLAS-13MWGE002

Date:

04-Feb-2025

Product Category:

Linear Op Amps, Switching Regulators

Notification Subject:

CCB 7222 Final Notice: Qualification of MMT as an additional assembly site for MCP6V03T-E/MNY, MCP6232T-E/MNY, MCP6V06T-E/MNY, MCP6V08T-E/MNY, MCP6V01T-E/MNY, MCP6052T-E/MNY, MCP6062T-E/MNY, MCP6402T-E/MNY, MCP6072T-E/MNY, MCP651T-E/MNY, MCP6051T-E/MNY, MCP6071T-E/MNY, MCP6061T-E/MNY, MCP661T-E/MNY, MCP6442T-E/MNY, MCP621T-E/MNY, MCP631T-E/MNY, MCP6V28T-E/MNY, MCP6V26T-E/MNY, MCP16251T-I/MNY, MCP16252T-I/MNY catalog part numbers (CPN) available in 8L TDFN (2x3x0.8mm) package.

Affected CPNs:

[BLAS-13MWGE002_Affected_CPN_02042025.pdf](#)

[BLAS-13MWGE002_Affected_CPN_02042025.csv](#)

PCN Status: Final 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 MMT as an additional assembly site for MCP6V03T-E/MNY, MCP6232T-E/MNY, MCP6V06T-E/MNY, MCP6V08T-E/MNY, MCP6V01T-E/MNY, MCP6052T-E/MNY, MCP6062T-E/MNY, MCP6402T-E/MNY, MCP6072T-E/MNY, MCP651T-E/MNY, MCP6051T-E/MNY, MCP6071T-E/MNY, MCP6061T-E/MNY, MCP661T-E/MNY, MCP6442T-E/MNY, MCP621T-E/MNY, MCP631T-E/MNY, MCP6V28T-E/MNY, MCP6V26T-E/MNY, MCP16251T-I/MNY, MCP16252T-I/MNY catalog part numbers (CPN) available in 8L TDFN (2x3x0.8mm) package.

Pre and Post Summary Changes:

	Pre Change	Post Change

Assembly Site	UTAC Thai Limited (UTL-1) LTD. (NSEB)		UTAC Thai Limited (UTL-3) (UTL3)	UTAC Thai Limited (UTL-1) LTD. (NSEB)		UTAC Thai Limited (UTL-3) (UTL3)	Microchip Technology Thailand (Branch) (MMT)
Wire Material	Au		Au	Au		Au	Au
Die Attach Material	8200T	8600	8600	8200T	8600	8600	QMI519
Molding Compound Material	G770HCD	G700LTD	G700LTD	G770HCD	G700LTD	G700LTD	G700LTD
Lead-Frame Material	C194		C194	C194		C194	A194
Lead-Frame Paddle Size	83x71 mils		83x71 mils	83x71 mils		83x71 mils	83x71 mils
Lead-Frame Lead-lock	Yes		Yes	Yes		Yes	No
DAP Surface Prep	NiPdAu		NiPdAu	NiPdAu		NiPdAu	NiPdAu

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

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve on-time delivery performance by qualifying MMT as an additional assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 15 March 2025 (date code: 2511)

Note Below EFSD: Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Timetable Summary:

	October 2024					>	February 2025					March 2025				
Work Week	40	41	42	43	44		05	06	07	08	09	10	11	12	13	14
Initial PCN Issue Date			X													
Qual Report Availability								X								
Final PCN Issue Date								X								
Estimated Implementation Date													X			

Method to Identify Change: Traceability Code

Qualification Report: Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History: October 18, 2024: Issued initial notification.

February 04, 2025: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on March 15, 2025.

Note: The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable product.

Attachments:

[PCN_BLAS-13MWGE002_Pre_and_Post_Change_Summary.pdf](#)

[PCN_BLAS-13MWGE002_Qual_Report.pdf](#)

Please contact your local **Microchip sales office** with questions or concerns regarding this notification.

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MCP16251T-I/MNY
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MCP6061T-E/MNY
MCP6062T-E/MNY
MCP6071T-E/MNY
MCP6072T-E/MNY
MCP621T-E/MNY
MCP6232T-E/MNY
MCP631T-E/MNY
MCP6402T-E/MNY
MCP6442T-E/MNY
MCP651T-E/MNY
MCP661T-E/MNY
MCP6V01T-E/MNY
MCP6V03T-E/MNY
MCP6V06T-E/MNY
MCP6V08T-E/MNY
MCP6V26T-E/MNY
MCP6V28T-E/MNY

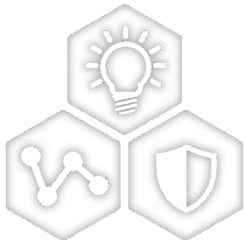
CCB 7222

Pre and Post Change Summary

PCN #: BLAS-13MWGE002

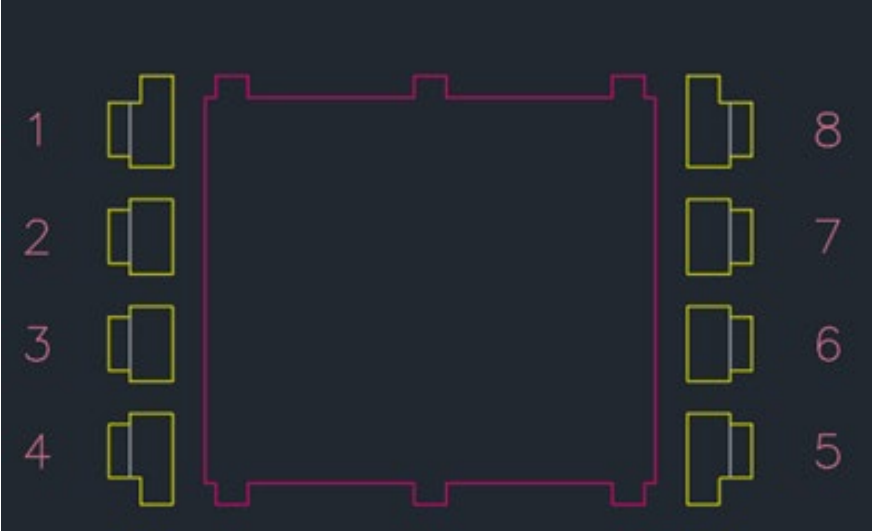
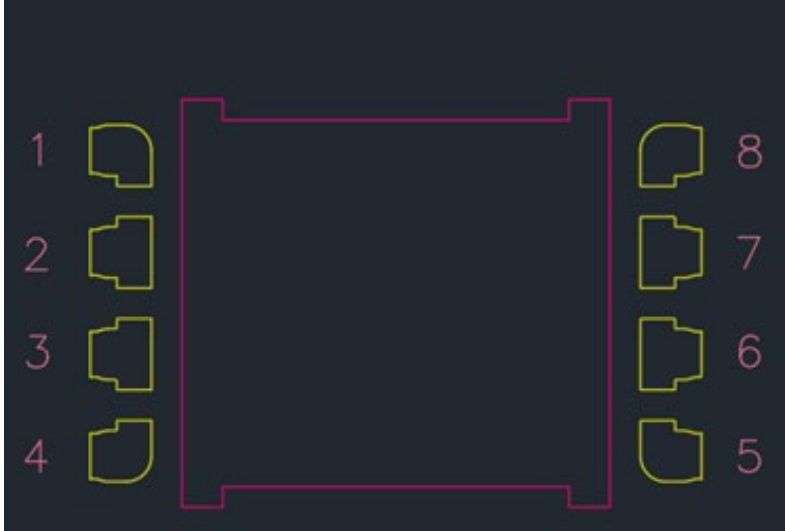


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SMART | CONNECTED | SECURE

LEAD FRAME COMPARISON

Pre Change	Post Change																
 The diagram shows a rectangular lead frame with a central square cavity. Eight leads are attached to the perimeter, numbered 1 through 8. Leads 1, 2, 3, and 4 are on the left side, and leads 8, 7, 6, and 5 are on the right side. Each lead has a rectangular paddle. The leads are highlighted in yellow, and the central cavity is outlined in red.	 The diagram shows a rectangular lead frame with a central square cavity. Eight leads are attached to the perimeter, numbered 1 through 8. Leads 1, 2, 3, and 4 are on the left side, and leads 8, 7, 6, and 5 are on the right side. Each lead has a rectangular paddle. The leads are highlighted in yellow, and the central cavity is outlined in red.																
<i>Note: Not to scale</i> <table><tr><td>Lead-Frame Material</td><td>C194</td></tr><tr><td>Lead-Frame Paddle Size</td><td>83x71 mils</td></tr><tr><td>Lead-Frame Lead-lock</td><td>Yes</td></tr><tr><td>DAP Surface Prep</td><td>NiPdAu</td></tr></table>	Lead-Frame Material	C194	Lead-Frame Paddle Size	83x71 mils	Lead-Frame Lead-lock	Yes	DAP Surface Prep	NiPdAu	<i>Note: Not to scale</i> <table><tr><td>Lead-Frame Material</td><td>A194</td></tr><tr><td>Lead-Frame Paddle Size</td><td>83x71 mils</td></tr><tr><td>Lead-Frame Lead-lock</td><td>No</td></tr><tr><td>DAP Surface Prep</td><td>NiPdAu</td></tr></table>	Lead-Frame Material	A194	Lead-Frame Paddle Size	83x71 mils	Lead-Frame Lead-lock	No	DAP Surface Prep	NiPdAu
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Note * C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference



QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN #: BLAS-13MWGE002

Date:
January 9, 2025

Qualification of MMT as an additional assembly site for MCP6V03T-E/MNY, MCP6232T-E/MNY, MCP6V06T-E/MNY, MCP6V08T-E/MNY, MCP6V01T-E/MNY, MCP6052T-E/MNY, MCP6062T-E/MNY, MCP6402T-E/MNY, MCP6072T-E/MNY, MCP651T-E/MNY, MCP6051T-E/MNY, MCP6071T-E/MNY, MCP6061T-E/MNY, MCP661T-E/MNY, MCP6442T-E/MNY, MCP621T-E/MNY, MCP631T-E/MNY, MCP6V28T-E/MNY, MCP6V26T-E/MNY, MCP16251T-I/MNY, MCP16252T-I/MNY catalog part numbers (CPN) available in 8L TDFN (2x3x0.8mm) package. This is a Q100 Grade 1 qualification.



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PACKAGE QUALIFICATION REPORT

Purpose Qualification of MMT as an additional assembly site for MCP6V03T-E/MNY, MCP6232T-E/MNY, MCP6V06T-E/MNY, MCP6V08T-E/MNY, MCP6V01T-E/MNY, MCP6052T-E/MNY, MCP6062T-E/MNY, MCP6402T-E/MNY, MCP6072T-E/MNY, MCP651T-E/MNY, MCP6051T-E/MNY, MCP6071T-E/MNY, MCP6061T-E/MNY, MCP661T-E/MNY, MCP6442T-E/MNY, MCP621T-E/MNY, MCP631T-E/MNY, MCP6V28T-E/MNY, MCP6V26T-E/MNY, MCP16251T-I/MNY, MCP16252T-I/MNY catalog part numbers (CPN) available in 8L TDFN (2x3x0.8mm) package. This is a Q100 Grade 1 qualification.

CN	E000249619
QUAL ID	R2401383 Rev. A
MP CODE	GBCB2Y5QXA00
Part No.	MCP651T-E/MNY
Bonding No.	BD-002690 Rev. 01
CCB No.	7222
<u>Package</u>	
Type	8L TDFN
Package size	2 x 3 x 0.8mm
<u>Lead Frame</u>	
Paddle size	83 x 71mils
Material	A194
Surface	NiPdAu
Process	Etched
Lead Lock	No
Part Number	10100853
Treatment	Rough PPF LF
<u>Material</u>	
Epoxy	QMI519
Wire	Au wire
Mold Compound	G700LTD
Plating Composition	Matte Sn



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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-253100458.000	TMPE224148892.130	2444UWY
MMT-253100893.000	TMPE224148892.130	2444WQM
MMT-253100894.000	TMPE224148892.130	2444WQP

Result

☒ Pass ☐ Fail ☐ _____

8L TDFN (2 x 3 x 0.8mm) assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C and 125°C System: ETS300	JESD22- A113	693(0)	0/693	Pass	Good Devices
	Bake 150°C, 24 hrs. System: CHINEE	JIP/ IPC/JEDEC J-STD-020E		693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test: +25°C and 125°C System: ETS300		693(0)	0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -55°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 125°C System: ETS300		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>2.50 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: ETS300		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 6.0 Volts System: HAST 6000X	JESD22-A110		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 125°C System: ETS300		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 500 hrs. System: TPS Bake Oven	JESD22- A103		0/45		45 units
	Electrical Test: +25°C and 125°C System: ETS300		45(0)	0/45	Pass	
Solderability Temp 215°C	Steam Aging: Temp 93°C, 1Hrs. System: SAS-3000 Solder Dipping: Solder Temp. 215°C Solder material: SnPb Sn63, Pb37 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22(0)	0/22		
				0/22		
				0/22	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C, 1Hrs. System: SAS-3000 Solder Dipping: Solder Temp. 245°C Solder material: Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22(0)	0/22		
				0/22		
				0/22	Pass	
Bond Strength Data Assembly	Wire Pull (>2.50 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>15.00 grams)	CDF-AEC- Q100-001	30(0) bonds	0/30	Pass	