Product Change Notification / MFOL-28NMYX712

Date:

01-Jul-2022

Product Category:

Interface- Controller Area Network (CAN)

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5167 Initial Notice: Qualification of MMT as an additional assembly site for selected MCP2561 and MCP2562 device families available in 8L DFN (3x3x0.9mm) package.

Affected CPNs:

MFOL-28NMYX712_Affected_CPN_07012022.pdf
MFOL-28NMYX712_Affected_CPN_07012022.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 MMT as an additional assembly site for selected MCP2561 and MCP2562 device families available in 8L DFN (3x3x0.9mm) 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 (Branch) (MMT)
Wire Material	Au	Au	Au/2N
Die Attach Material	8600 / 8200T	8600 / 8200T	3280
Molding Compound Material	G700LTD / G770HCD	G700LTD / G770HCD	G700LTD
Lead-Frame Material	EFTEC-64T	EFTEC-64T	C194
Lead-Frame Lead Lock	No	No	Yes

Impacts to Data Sheet: 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 Qualification Completion Date: August 2022

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:

	July 2022					August 2022				
Workweek	27	28	29	30	31	32	33	34	35	36
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: July 01, 2022: 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_MFOL-28NMYX712_Pre and Post Change Summary.pdf
PCN_MFOL-28NMYX712_Qual Plan.pdf

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

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our PCN home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the PCN FAQ section.

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.

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QUALIFICATION PLAN

PCN#: MFOL-28NMYX712

Date:
June 23, 2022

Qualification of MMT as an additional assembly site for selected MCP2561 and MCP2562 device families available in 8L DFN (3x3x0.9mm) package. This is AEC Q100 Grade 0 qualification.

Purpose: Qualification of MMT as an additional assembly site for selected MCP2561 and MCP2562 device families available in 8L DFN (3x3x0.9mm) package. This is AEC Q100 Grade 0 qualification.

CCB: 5167

MP Code: _____V7BB1MA7XVA1

Part No.: _____MCP2561-H/MFVAO

BD No: _____BD-000735 rev. 02

Package:

Type: _____ 8L DFN

Width or Size:_____ 3 x 3 x 0.9 mm

Leadframe:

Paddle Size: _____ 102 x 71 mils

Paddle Plating:_____ Cu-RT

Process: _____ ETCHED

Treatment: _____ BOT

Lead Lock: _____ YES

Material: _____ C194

Part Number: _____ 10100851

Wire:

Material: _____ Au/2N

Die Attach Epoxy:

Part Number _____ 3280

Conductive _____ Yes

Mold Compound:

Part Number: _____ G700LTD

Lead Finish:_____ 100% Matte Sn

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	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	Pkg. Type	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				Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	MTAI	MTAI		30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	MTAI	MTAI		30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108			10	0	3	30	0	5				
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) Temp Storage Life)	JESD22-A103 +125, +150°C or +175°C	Grade 0: 1000 hrs (+175°C)	Grade 0: +25°C, +85°C, +125°C, +150°C	45	5	1	50	0	21 - 83	MTAI	MTAI		Spares should be properly identified.

Test Name	Conditions	Reliability Stress Read Point	Pre & Post Reliability Stress Test Temperature	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	Pkg. Type	Special Instructions
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, Autoclave, Temp Cycle test.
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs	Grade 0: 96 hrs (+130°C/85% RH)	Grade 0: +25°C, +85°C, +125°C, +150°C	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	Grade 0: 96 hrs (+130°C/85% RH)	Grade 0: +25°C	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 -55ºC to +125ºC, -55ºC to +150ºC	Grade 0: 2000 cycles (-55ºC to +150ºC)	Grade 0: +85°C, +125°C, +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.

CCB 5167
Pre and Post Change Summary
PCN# MFOL-28NMYX712

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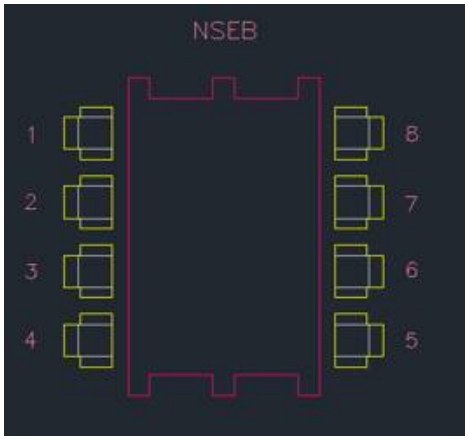
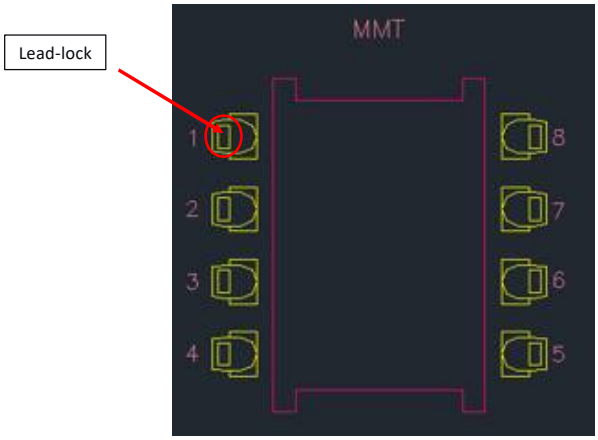
Lead Frame Comparison

NSEB	MMT
	
Lead-lock: No	Lead-lock: Yes

Note: Mold compound material fills the lead-lock hole, which provides improved protection against moisture penetration along the edge of the leads (pins) of the package.

MFOL-28NMYX712 - CCB 5167 Initial Notice: Qualification of MMT as an additional assembly site for selec

Affected Catalog Part Numbers(CPN)

MCP2561-E/MF
MCP2561FD-E/MF
MCP2561T-H/MF
MCP2561FDT-H/MF
MCP2561T-H/MFVAO
MCP2561FDT-H/MFVAO
MCP2561-H/MF
MCP2561FD-H/MF
MCP2561-H/MFVAO
MCP2561T-E/MF
MCP2561FDT-E/MF
MCP2562-E/MF
MCP2562FD-E/MF
MCP2562-E/MFVAO
MCP2562FD-E/MFVAO
MCP2562T-H/MF
MCP2562FDT-H/MF
MCP2562-H/MF
MCP2562FD-H/MF
MCP2562T-E/MF
MCP2562FDT-E/MF
MCP2562T-E/MFVAO
MCP2562FDT-E/MFVAO