



Product Change Notification / RMES-26KYQW833

Date:

22-Feb-2022

Product Category:

Analog to Digital Converters, Battery Management and Fuel Gauges - Battery Chargers, Digital Potentiometers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4845 Final Notice: Qualification of UTL3 as an additional assembly site for selected MCP42xx, MCP46xx, MCP738xx and MCP34xx device families available in 10L DFN (3x3x0.9mm) package.

Affected CPNs:

[RMES-26KYQW833_Affected_CPN_02222022.pdf](#)

[RMES-26KYQW833_Affected_CPN_02222022.csv](#)

Notification Text:

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 UTL3 as an additional assembly site for selected MCP42xx, MCP46xx, MCP738xx and MCP34xx device families available in 10L DFN (3x3x0.9mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change	
Assembly Site	UTAC Thai Limited (UTL-1) LTD.	UTAC Thai Limited (UTL-1) LTD.	UTAC Thai Limited (UTL-3)

	(NSEB)	(NSEB)	(UTL3)
Wire material	Au	Au	Au
Die attach material	8600	8600	8600
Molding compound material	G700LTD	G700LTD	G700LTD
Lead frame material	C194	C194	C194

Impacts to Data Sheet:

None

Change Impact:None

Reason for Change:To improve manufacturability and productivity by qualifying UTL3 as an additional assembly site.

Change Implementation Status:In Progress

Estimated First Ship Date:March 30, 2022 (date code: 2214)

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

Time Table Summary:

Workweek	September 2021					>	February 2022				March 2022			
	36	37	38	39	40		06	07	08	09	10	11	12	13
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:September 27, 2021: Issued initial notification.**February 22, 2022:** Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on March 30, 2022.

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

Attachments:

[PCN_RMES-26KYQW833_Qual_Report.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.



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: RMES-26KYQW833

Date:
January 31, 2022

**Qualification of UTL3 as an additional assembly site for
selected MCP42xx, MCP46xx, MCP738xx and MCP34xx
device families available in 10L DFN (3x3x0.9mm) package.**



MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose **Qualification of UTL3 as an additional assembly site for selected MCP42xx, MCP46xx, MCP738xx and MCP34xx device families available in 10L DFN (3x3x0.9mm) package.**

CCB No.	4845
CN	ES363638
QUAL ID	R2101067 Rev. A
MP CODE	D5AL2YE2XR05
Part No.	MCP4262T-502E/MF
Bonding No.	A-031096 Rev. G
<u>Package</u>	
Type	10LD DFN
Package size	3x3x0.9 mm
<u>Lead Frame</u>	
Paddle size	71x102 mils
Material	C194
Surface	Ag on lead only
Process	Etched
Lead Lock	U-groove
Part Number	FR0040
<u>Material</u>	
Epoxy	8600
Wire	Au wire
Mold Compound	G700LTD
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
NSEB222600478.000	TMPE222098452.A00	2138459
NSEB222600479.000	TMPE222098452.A00	213845A
NSEB222600480.000	TMPE222098452.A00	213945B

Result

Pass

Fail

10LD DFN (3x3x0.9 mm) assembled by NSEB 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
<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 1)	<p>Electrical Test: +25°C and 125°C System: J750</p> <p>Bake 150°C, 24 hrs System: CHINEE</p> <p>85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH</p> <p>3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243</p> <p>Electrical Test: +25°C and 125°C System: J750</p>	<p>JESD22- A113</p> <p>JIP/ IPC/JEDEC J-STD-020E</p>	<p>693(0)</p>	<p>693</p> <p>693</p> <p>693</p> <p>693</p> <p>0/693</p>	<p>Pass</p>	<p>Good Devices</p>

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C 77 units / lot
	Electrical Test: +125°C System: J750		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (> 2.5 grams)		15 (0)	0/15	Pass	
	Bond Shear (>15.00 grams)		15 (0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		231		Parts had been pre-conditioned at 260°C 77 units / lot
	Electrical Test: +25°C System: J750		231(0)	0/231	Pass	
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C 77 units / lot
	Electrical Test: +25°C and 125°C System: J750		231(0)	0/231	Pass	

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, 504 hrs System: SHEL LAB	JESD22- A103		45		45 units
	Electrical Test: +25°C and 125°C System: J750		45(0)	0/45	Pass	
Physical Dimensions	Physical Dimension, 10 units from 1 lot	JESD22- B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (> 3.00 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	