



Product Change Notification - RMES-16DZWG089

Date:

17 Apr 2019

Product Category:

Successive Approximation Register (SAR) A/D Converters

Affected CPNs:**Notification subject:**

CCB 2929.001 Initial Notice: Qualification of NSEB as a new assembly site for selected products available in 10L MSOP (3x3mm) package.

Notification text:**PCN Status:**

Initial notification

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

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

Description of Change:

Qualification of NSEB as a new assembly site for selected products available in 10L MSOP (3x3mm) package.

Pre Change:

Assembled at ANAP site using 8290 die attach and G700K mold compound material

Post Change:

Assembled at NSEB site using 8200T die attach and G600 mold compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Amkor Technology Philippines (ANAP)	UTAC Thai Limited (NSEB)
Wire material	Au	Au
Die attach material	8290	8200T
Molding compound material	G700K	G600
Lead frame material	C7025	C7025

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on time delivery performance by qualifying NSEB as a new assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

April 2019

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:

	April 2019				
Workweek	14	15	16	17	18
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:

April 17, 2019: 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.

Attachment(s):

[PCN_RMES-16DZWG089_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.

Affected Catalog Part Numbers (CPN)

MCP33111-05-E/MS
MCP33111-05T-E/MS
MCP33111-10-E/MS
MCP33111-10T-E/MS
MCP33111D-05-E/MS
MCP33111D-05T-E/MS
MCP33111D-10-E/MS
MCP33111D-10-I/MS
MCP33111D-10T-E/MS
MCP33111D-10T-I/MS
MCP33121-05-E/MS
MCP33121-05T-E/MS
MCP33121-10-E/MS
MCP33121-10T-E/MS
MCP33121D-05-E/MS
MCP33121D-05T-E/MS
MCP33121D-10-E/MS
MCP33121D-10-I/MS
MCP33121D-10T-E/MS
MCP33121D-10T-I/MS
MCP33131-05-E/MS
MCP33131-05T-E/MS
MCP33131-10-E/MS
MCP33131-10T-E/MS
MCP33131D-05-E/MS
MCP33131D-05T-E/MS
MCP33131D-10-E/MS
MCP33131D-10-I/MS
MCP33131D-10T-E/MS
MCP33131D-10T-I/MS



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QUALIFICATION PLAN SUMMARY

PCN #: RMES-16DZWG089

**Date:
April 15, 2019**

Qualification of NSEB as a new assembly site for selected products available in 10L MSOP (3x3mm) package.

Purpose: _____ Qualification of NSEB as a new assembly site for selected products available in 10L MSOP (3x3mm) package.

<u>Misc.</u>	Assembly site	UTL
	BD Number	BDE-004277 Rev. 02 / BDE-005353
	MP Code (MPC)	ZA2A14E3XA00 / TAPA44E3XA11
	Part Number (CPN)	MCP47CMB01-E/UN / MCP33111-10-E/MS
	CCB No	2929.001
<u>Lead-Frame</u>	Paddle size	82x94 mils
	Material	C7025
	DAP Surface Prep	Ag Spot plated
	Treatment	None
	Process	Stamped
	Lead-lock	No
	Part Number	FM0009
	Lead Plating	Matte Tin
	Strip Size	56x239.5 mm
	Strip Density	192 units/strip
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	8200T
	Conductive	Yes
<u>MC</u>	Part Number	G600
<u>PKG</u>	PKG Type	MSOP
	Pin/Ball Count	10
	PKG width/size	3x3mm
<u>Die</u>	Die Thickness	8 mils
	Die Size	60.7x84.3 mils
	Fab Process (site)	0.18um TSMC
<u>MSL</u>	MSL 1 @ 260°C	

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	Special Instructions
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hour 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		
Wire Bond Pull - WBP	MIL-STD-883 (Test method 2011)	10	0	3	30			30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	JESD22-B116	10	0	3	30			30 bonds from a min. 5 devices.
Wire Sweep								Required for any reduction in wire bond thickness.
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	
HTSL (High Temp Storage Life)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp.	45	5	1	50	0		Qualification result is already available. Reference Qual Report # Q17126
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type. Electrical test pre and post stress at +25°C. MSL1 260	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
uHAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	Qualification result is already available. Reference Qual Report # Q17126
Bias HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp	77	5	3	246	0	10	Qualification result is already available. Reference Qual Report # Q17126
Temp Cycle	-65°C to +150°C for 500cycles. Electrical test pre and post stress at room temp hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.