



Product Change Notification / RMES-06ZXIX068

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**Date:**

06-Dec-2021

**Product Category:**

FPGA Configuration Memory

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4241.001 Initial Notice: Qualification of G700LS molding compound for AT17LV002-10SU catalog part number (CPN) available in 20L SOIC package (300 mils) at ANAP assembly site.

**Affected CPNs:**

[RMES-06ZXIX068\\_Affected\\_CPN\\_12062021.pdf](#)  
[RMES-06ZXIX068\\_Affected\\_CPN\\_12062021.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 G700LS molding compound for AT17LV002-10SU catalog part number (CPN) available in 20L SOIC package (300 mils) at ANAP assembly site

**Pre and Post Change Summary:**

	Pre Change	Post Change
Assembly Location	Amkor Technology Philippine (P1/P2), INC. / ANAP	Amkor Technology Philippine (P1/P2), INC. / ANAP

<b>Wire material</b>	Au	Au
<b>Die attach material</b>	8290	8290
<b>Molding compound material</b>	G600	G700LS
<b>Lead frame material</b>	C194	C194
<b>Lead Lock</b>	Yes	Yes
<b>Lead frame treatment</b>	Non-Roughened	Roughened
<b>Lead frame Comparison</b>	Please see attached pre and post change summary	

**Impacts to Data Sheet:**None

**Change Impact:**None

**Reason for Change:**To improve productivity by qualifying G700LS molding compound

**Change Implementation Status:**In Progress

**Estimated Qualification Completion Date:**

January 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:**

	December 2021				>	January 2022					
	4 9	5 0	5 1	5 2		0 1	0 2	03	0 4	0 5	06
Workweek											
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:**

**December 06, 2021:** 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\\_RMES-06ZXIX068\\_Qual\\_Plan.pdf](#)

[PCN\\_RMES-06ZXIX068\\_Pre and Post\\_Change Summary.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)

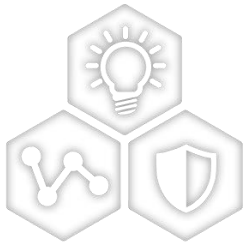
AT17LV002-10SU

**CCB 4241.001**  
**Pre and Post Change Summary**  
**PCN #: RMES-06ZXIX068**



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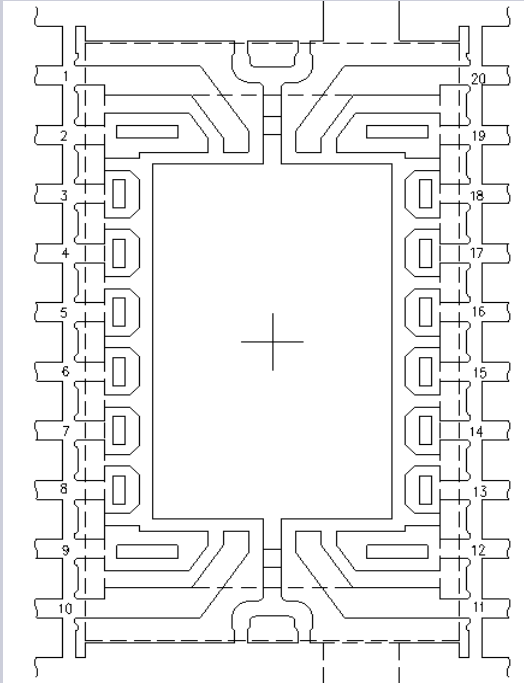
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SMART | CONNECTED | SECURE

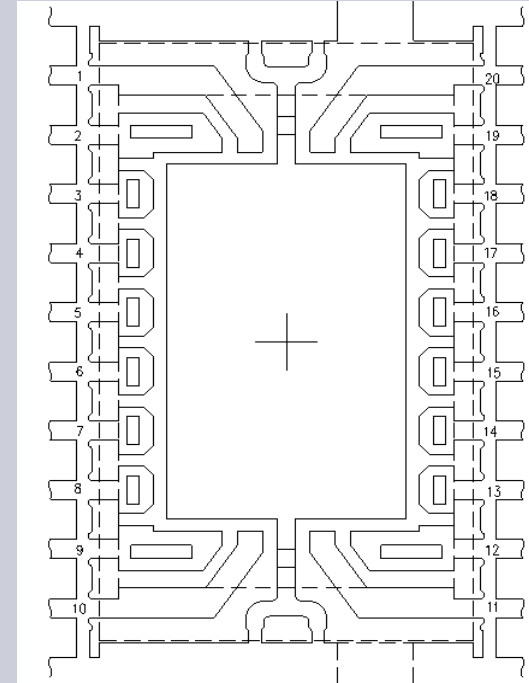
# Pre and Post Change Summary – Cover Tape

## Pre Change



Lead frame material	C194
Lead Lock	Yes
Lead frame treatment	Non-Roughened*

## Post Change



Lead frame material	C194
Lead Lock	Yes
Lead frame treatment	Roughened*

\*Remarks: Same bond shell; only roughening on the front and back of lead frame



**MICROCHIP**

## **QUALIFICATION PLAN SUMMARY**

**PCN #: RMES-06ZXIX068**

**Date:  
October 28, 2021**

**Qualification of G700LS molding compound for  
AT17LV002-10SU catalog part number (CPN) available  
in 20L SOIC package (300 mils) at ANAP assembly  
site.**

**Purpose:** Qualification of G700LS molding compound for AT17LV002-10SU catalog part number (CPN) available in 20L SOIC package (300 mils) at ANAP assembly site.

**CCB No.** 4241.001

<u>Misc.</u>	Assembly site	ANAP
	BD Number	W35502SXU
	MP Code (MPC)	355027G5XC01
	Part Number (CPN)	AT17LV002-10SU
	MSL information	MSL 1, 260C
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	37
	Reliability Site	MCSO
<u>Lead-Frame</u>	Paddle size	190X300mils
	Material	C194
	DAP Surface Prep	Cu-Ag
	Treatment	Roughened
	Process	Etched
	Lead-lock	Yes
	Part Number	101420282
	Lead Plating	Matte Sn
	Strip Size	70x250mm
	Strip Density	56
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	8290
	Conductive	Conductive
<u>MC</u>	Part Number	G700LS
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	20
	PKG width/size	300mils



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	Pkg. Type	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; 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.	5	5	1	10	> 95% lead coverage	5	MCSO	MCSO	SOIC	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	MCSO	MCSO	SOIC	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	MCSO	MCSO	SOIC	30 bonds from a min. 5 devices.
Wire Sweep								MCSO	MCSO	SOIC	
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	1	10	0	5	MCSO	MCSO	SOIC	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	1	ALL	0	5	MCSO	MCSO	SOIC	

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	Pkg. Type	Special Instructions
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-020E for package type; Electrical test pre and post stress at +25°C. <b>MSL 1, 260C</b>	45	15	1	60	0	15	MCSO	MCSO	SOIC	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.