



Product Change Notification - RMES-21XSGR557

Date:

22 May 2020

Product Category:

8-bit Microcontrollers

Affected CPNs:**Notification subject:**

CCB 4242 Initial Notice: Qualification of MMT as a new assembly site for selected Atmel products available in 40L PDIP (600 mils) 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 MMT as a new assembly site for selected Atmel products available in 40L PDIP (600 mils) package.

Pre Change:

Assembled at LPI using CRM-1033BF die attach and G600 molding compound material

Post Change:

Assembled at MMT using CRM-1064L die attach and GE800 molding compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Lingsen Precision Industries, Taiwan (LPI)	Microchip Technology Thailand (Branch) (MMT)
Wire material	CuPdAu	CuPdAu
Die attach material	CRM-1033BF	CRM-1064L
Molding compound material	G600	GE800
Lead frame material	CDA194	CDA194

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve productivity by qualifying MMT as a new assembly site. Due to unforeseen business conditions the LPI location will be discontinued as an assembly site for 40L PDIP package.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

July 2020

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:

Workweek	May 2020					->	July 2020				
	18	19	20	21	22		27	28	29	30	31
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:

May 22, 2020: 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-21XSGR557_Qual_Plan.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: RMES-21XSGR557

**Date:
May 14, 2020**

Qualification of MMT as a new assembly site for selected Atmel products available in 40L PDIP (600 mils) package.

Purpose: Qualification of MMT as a new assembly site for selected Atmel products available in 40L PDIP (600 mils) package.

CCB Number: 4242

<u>Misc.</u>	Assembly site	MMT
	BD Number	BDM-002455/A
	MP Code (MPC)	568TE7S2XC03
	Part Number (CPN)	AT89C51RB2-3CSUM
	MSL information	N/A
	Assembly Shipping Media (T/R, Tube/Tray)	Tube
	Base Quantity Multiple (BQM)	10
	Reliability Site	MTAI
<u>Lead-Frame</u>	Paddle size	200x200 mils
	Material	CDA194
	DAP Surface Prep	Ag Spot Plated
	Treatment	None
	Process	Stamped
	Lead-lock	Yes
	Part Number	10104001
	Lead Plating	Matte Tin
	Strip Size	158.50x57.66mm
	Strip Density	6 units/strip
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	CRM-1064L
	Conductive	Yes
<u>MC</u>	Part Number	GE800
<u>PKG</u>	PKG Type	PDIP
	Pin/Ball Count	40
	PKG width/size	600 mils

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	Test Site	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	15	0 fails after TC	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	15	0	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		MMT	Required for any reduction in wire bond thickness.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MMT/ MTAI	
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	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

RMES-21XSGR557 - CCB 4242 Initial Notice: Qualification of MMT as a new assembly site for selected Atr

Affected Catalog Part Numbers(CPN)

AT89C51RB2-3CSUM

AT89C51RC2-3CSUM

AT89C51RB2-3CSUL

AT80C51RD2-3CSUM