



Product Change Notification - LIAL-27HWYL569

Date:

12 Sep 2018

Product Category:

8-bit Microcontrollers; Interface- Serial Peripherals

Affected CPNs:**Notification subject:**

CCB 3529 and 3529.001 Initial Notice: Qualification of 8390A die attach material for selected products of the 120K, 150K, 160K and 200K wafer technologies available in 28L and 20L SSOP package at MTAI assembly site.

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 8390A die attach material for selected products of the 120K, 150K, 160K and 200K wafer technologies available in 28L and 20L SSOP package at MTAI assembly site.

Pre Change:

Using 3280 die attach material

Post Change:

Using 8390A die attach material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Microchip Technology Thailand HQ (MTAI)	Microchip Technology Thailand HQ (MTAI)
Wire material	CuPdAu	CuPdAu
Die attach material	3280	8390A
Molding compound material	G600	G600
Lead frame material	CDA194	CDA194

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying 8390A die attach material.

Change Implementation Status:



In Progress

Estimated Qualification Completion Date:

October 2018

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:

		September 2018					October 2018				
	Workweek	35	36	37	38	39	40	41	42	43	44
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:

September 12, 2018: 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_LIAL-27HWYL569_QUAL_PLAN.pdf](#)

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

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QUALIFICATION PLAN SUMMARY

PCN#: LIAL-27HWYL569

Date

August 20, 2018

Qualification of 8390A die attach material for selected products of the 120K, 150K, 160K and 200K wafer technologies available in 28L SSOP package at MTAI assembly site. The selected products available in 20L SSOP package will qualify by similarity (QBS)

Purpose: Qualification of 8390A die attach material for selected products of the 120K, 150K, 160K and 200K wafer technologies available in 28L SSOP package at MTAI assembly site. The selected products available in 20L SSOP package will qualify by similarity (QBS)

CCB No.: 3529 and 3529.001

<u>Miscellaneous</u>	Assembly site	MTAI
	BD Number	BDM-001842 rev.A
	MP Code (MPC)	LEAN17N2XB04
	Part Number (CPN)	PIC16F723A-I/SS
<u>Lead-Frame</u>	Paddle size	153x200 mils
	Material	CDA194
	Surface	Bare Cu paddle
	Treatment	Roughening
	Process	Stamped
	Lead-lock	No
	Part Number	10102834
	Lead Plating	Matte Tin
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	8390A
	Conductive	Yes
<u>Mold Compound</u>	Part Number	G600
<u>PKG</u>	PKG Type	SSOP
	Pin/Ball Count	28
	PKG width/size	208 mils
<u>Die attach</u>	Die Thickness	15 mils
	Die Size	73.4 x 70.0 mils
	MSL	MSL1/260

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	1	5	0 fails after TC	5	MTAI	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	MTAI	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	
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	10	MTAI	Must be in progress at time of package release to production, but completion is not required for release to production. For hot temp testing, pre/post test 1 lot at 85°C and 125°C (if applicable)
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. MSL1/260	231	15	3	738	0	15	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.

HAST	+130°C/85% RH for 96 , 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.
UHAST	+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.

Affected Catalog Part Numbers (CPN)

PIC16LF723AT-I/SS027
PIC16LF723AT-I/SSC02
HA0140-I/SS
HA0140T-I/SS
HA4768-I/SS
HA4768T-I/SS
MCP23008-E/SS
MCP23008T-E/SS
MCP23009-E/SS
MCP23009T-E/SS
MCP23S08-E/SS
MCP23S08-E/SSAPL
MCP23S08T-E/SS
MCP23S08T-E/SSAPL
PIC16C54C-04/SS
PIC16C54C-04E/SS
PIC16C54C-04I/SS
PIC16C54C-20/SS
PIC16C54C-20E/SS
PIC16C54C-20I/SS
PIC16C54CT-04I/SS
PIC16C54CT-20/SS
PIC16F1507-E/SS
PIC16F1507-I/SS
PIC16F1507T-E/SS
PIC16F1507T-I/SS
PIC16F527-E/SS
PIC16F527-I/SS
PIC16F527-I/SSC01
PIC16F527-I/SSC03
PIC16F527T-I/SS
PIC16F527T-I/SS021
PIC16F527T-I/SSC01
PIC16F527T-I/SSC03
PIC16F54-E/SS
PIC16F54-I/SS
PIC16F54T-E/SS
PIC16F54T-I/SS
PIC16F54T-I/SS027
PIC16F716-E/SS
PIC16F716-I/SS
PIC16F716-I/SS067
PIC16F716T-E/SS
PIC16F716T-I/SS
PIC16F716T-I/SS045
PIC16F716T-I/SS056

PIC16F716T-I/SS062
PIC16F716T-I/SS063
PIC16F716T-I/SS064
PIC16F716T-I/SS065
PIC16F716T-I/SS067
PIC16F716T-I/SS068
PIC16F716T-I/SS069
PIC16F716T-I/SS070
PIC16F716T-I/SS071
PIC16F716T-I/SS072
PIC16F716T-I/SSC10
PIC16F720-E/SS
PIC16F720-I/SS
PIC16F720T-I/SS
PIC16F721-E/SS
PIC16F721-I/SS
PIC16F721T-I/SS
PIC16F721T-I/SS020
PIC16LC54C-04/SS
PIC16LC54C-04I/SS
PIC16LF1507-E/SS
PIC16LF1507-I/SS
PIC16LF1507T-I/SS
PIC16LF1507T-I/SS020
PIC16LF720-E/SS
PIC16LF720-I/SS
PIC16LF720T-I/SS
PIC16LF721-E/SS
PIC16LF721-I/SS
PIC16LF721T-I/SS
MCP23017-E/SS
MCP23017T-E/SS
MCP23S17-E/SS
MCP23S17T-E/SS
PIC16F570-E/SS
PIC16F570-I/SS
PIC16F570T-I/SS
PIC16F57-E/SS
PIC16F57-I/SS
PIC16F57T-E/SS
PIC16F57T-I/SS
PIC16F57T-I/SS024
PIC16F57T-I/SS025
PIC16F57T-I/SS027
PIC16F722A-E/SS
PIC16F722A-I/SS
PIC16F722A-I/SS023
PIC16F722AT-E/SS
PIC16F722AT-I/SS

PIC16F722AT-I/SS020
PIC16F722AT-I/SS021
PIC16F722AT-I/SS022
PIC16F722AT-I/SS024
PIC16F723A-E/SS
PIC16F723A-I/SS
PIC16F723AT-E/SS
PIC16F723AT-I/SS
PIC16LF1902-E/SS
PIC16LF1902-I/SS
PIC16LF1902T-I/SS
PIC16LF1903-E/SS
PIC16LF1903-I/SS
PIC16LF1903T-I/SS
PIC16LF722A-E/SS
PIC16LF722A-I/SS
PIC16LF722AT-I/SS
PIC16LF723A-E/SS
PIC16LF723A-I/SS
PIC16LF723A-I/SS021
PIC16LF723A-I/SSC01
PIC16LF723A-I/SSC02
PIC16LF723AT-I/SS
PIC16LF723AT-I/SS020
PIC16LF723AT-I/SS021
PIC16LF723AT-I/SS023
PIC16LF723AT-I/SS024
PIC16LF723AT-I/SS025
PIC16LF723AT-I/SS026