



Product Change Notification / LIAL-23USLU235

Date:

12-Oct-2020

Product Category:

8-bit Microcontrollers, Interface- Controller Area Network (CAN), Interface- Serial Peripherals

PCN Type:

Manufacturing Change

Notification Subject:

CCB 3979 and 3979.001 Initial Notice: Qualification of QMI-519 die attach material for selected products available in 28L SOIC (.300in) and 18L SOIC (.300in) packages at MTAI assembly site

Affected CPNs:

[LIAL-23USLU235_Affected_CPN_10122020.pdf](#)
[LIAL-23USLU235_Affected_CPN_10122020.csv](#)

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

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

Description of Change: Qualification of QMI-519 die attach material for selected products available in 28L SOIC (.300in) and 18L SOIC (.300in) packages at MTAI assembly site

Pre Change:

Using 3280 die attach material

Post Change:

Issue Date										
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Method to Identify Change: Traceability code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan

Revision History: **October 12, 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.

Attachments:

[PCN_LIAL-23USLU235_Qual Plan.pdf](#)

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

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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)

PIC16CR54CT-20/SO012
CF745-04/SO
PIC16LC54C-04/SO
PIC16C54C-04/SO
PIC16C54C-20/SO
PIC16C54C-40/SO
PIC16C54C-04/SOC04
PIC16C54C-20E/SO
PIC16LC54C-04I/SO
PIC16C54C-04I/SO
PIC16C54C-20I/SO
PIC16C54CT-20/SO068
PIC16LC54CT-04/SO150
PIC16C54CT-04/SO
PIC16C54CT-04I/SO104
PIC16C54CT-04I/SO
MCP23008-E/SO
MCP23008T-E/SO
MCP23S08-E/SO
MCP23S08T-E/SO
MCP23017-E/SO
MCP23017T-E/SO
MCP23S17-E/SO
MCP23S17T-E/SO
MCP2515-E/SO
MCP2515-E/SORB2
MCP2515-E/SORB4
MCP2515-I/SO
MCP2515-I/SORB2
MCP2515-I/SORB4
MCP2515T-I/SO
MCP2515T-I/SORB2
MCP2515T-I/SORB4
MCP2515T-E/SO
MCP2515T-E/SORB2
MCP2515T-E/SORB4
PIC16F54-E/SO
PIC16F54-I/SO023
PIC16F54-I/SO043
PIC16F54-I/SO
PIC16F54T-I/SO036
PIC16F54T-I/SO042
PIC16F54T-I/SO043
PIC16F54T-I/SO
PIC16F54T-E/SO040
PIC16F57-E/SO

PIC16F57-I/SO
MCV28A-I/SO
PIC16F57T-I/SO028
PIC16F57T-I/SO
PIC16F57T-E/SO
PIC16F570-I/SO
PIC16F716-E/SO
PIC16F716-I/SO
PIC16F716T-I/SO048
PIC16F716T-I/SO061
PIC16F716T-I/SO
PIC16F716T-E/SO
MCP23018-E/SO
MCP23018T-E/SO
MCP23S18-E/SO
MCP23S18T-E/SO
PIC16LF1902-I/SO
PIC16LF1903-I/SO
PIC16F723A-E/SO
PIC16F723A-I/SO
PIC16F723AT-I/SO
PIC16F722A-E/SO
PIC16F722A-I/SO
PIC16F722AT-I/SO
PIC16LF723A-E/SO
PIC16LF723A-I/SO
PIC16LF722A-E/SO
PIC16LF722A-I/SO



QUALIFICATION PLAN SUMMARY

PCN#: LIAL-23USLU235

Date
September 17, 2020

Qualification of QMI-519 die attach material for selected products available in 28L SOIC (.300in) and 18L SOIC (.300in) packages at MTAI assembly site

Purpose: Qualification of QMI-519 die attach material for selected products available in 28L SOIC (.300in) and 18L SOIC (.300in) packages at MTAI assembly site

<u>Miscellaneous</u>	Assembly site	MTAI
	BD Number	BDM-001843/D
	MP Code (MPC)	LEAN14N3XB04
	Part Number (CPN)	PIC16F723A-E/SO
	CCB	3979 and 3979.001
<u>Lead-Frame</u>	Paddle size	200x240mils
	Material	C194
	Surface	Bare Cu on DAP
	Treatment	Yes
	Process	Stamped
	Lead-lock	Yes
	Part Number	10102807
	Lead Plating	Matte Tin
<u>Bond Wire</u>	Material	CuPdAu
	Wire Diameter	0.8 mil
<u>Die Attach</u>	Part Number	QMI-519
	Conductive	Yes
<u>Mold Compound</u>	Part Number	G600
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	28
	PKG width/size	300 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	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	30 bonds from a min. 5 devices.
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. MSL-1 @ 260°C	231	15	3	738	0	15	Spares should be properly identified.
HAST	+130°C/85% RH for 96 & 192 hours. Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	Spares should be properly identified.
Unbiased HAST	+130°C/85% RH for 96 & 192 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	Spares should be properly identified.
Temp Cycle	-65°C to +150°C for 500 & 1000 cycles. Electrical test pre and post stress at 25C 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.