



Product Change Notification / JAON-27EDPR425

Date:

10-Aug-2020

Product Category:

Bluetooth Silicon

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4329 and 4329.001 Initial Notice: Qualification of MMT as a new assembly site for IS1870SF and IS1871SF device families available in 32L VQFN (4x4x0.9mm) and 48L VQFN (6x6x0.9mm) packages.

Affected CPNs:

[JAON-27EDPR425_Affected_CPN_08102020.pdf](#)
[JAON-27EDPR425_Affected_CPN_08102020.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 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 IS1870SF and IS1871SF device families available in 32L VQFN (4x4x0.9mm) and 48L VQFN (6x6x0.9mm) packages.

Pre Change:

Assembled at ASCL using palladium coated copper (PdCu) bond wire and EN-4900 die attach material with MSL-3 classification.

Post Change: Assembled at MMT using palladium coated copper with gold flash (CuPdAu) bond wire and 3280 die attach material with MSL-1 classification.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	ASE Group Chung-Li (ASCL)	Microchip Technology Thailand Branch (MMT)
Bond Wire material	PdCu	CuPdAu
Die attach material	EN-4900	3280
Molding compound material	G700	G700
Lead frame material	A194	A194
MSL Level	MSL 3	MSL 1

Impacts to Data Sheet: No

Change Impact:None

Reason for Change:To improve on-time delivery performance by qualifying MMT as a new assembly site.

Change Implementation Status:In Progress

Estimated Qualification Completion Date:
October 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:

	August 2020					-->	October 2020				
Workweek	3 2	3 3	3 4	3 5	3 6		4 0	4 1	4 2	4 3	4 4
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:August 10, 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_JAON-27EDPR425_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.

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QUALIFICATION PLAN SUMMARY

PCN #: JAON-27EDPR425

Date
July 22, 2020

Qualification of MMT as a new assembly site for IS1870SF device family available in 48L VQFN (6x6x0.9mm) package.

The qualification of MMT as a new assembly site for IS1871SF device family available in 32L VQFN (4x4x0.9mm) will qualify by similarity (QBS).

Purpose: _____ Qualification of MMT as a new assembly site for
IS1870SF device family available in 48L VQFN
(6x6x0.9mm) package. The qualification of MMT as a
new assembly site for IS1871SF device family available
in 32L VQFN (4x4x0.9mm) will qualify by similarity (QBS).

MP Code: _____ STF014VNXB02/STF01TVNXB02

Part No.: _____ IS1870SF-202

BD No: _____ BDM-002371

CCB No: _____ 4329 and 4329.001

Package:

Type: _____ 48L VQFN 6x6

Leadframe:

Paddle Size: _____ 181x181 mils

Paddle Plating: _____ Double Ring

Process: _____ Etched

Treatment: _____ Roughening

Lead Lock: _____ No

Material: _____ A194

Part Number: _____ 10104814

Thickness: _____ 11 mils

Strip Size: _____ 70x250mm

Strip Density: _____ 315 pads/strip

Wire:

Material: _____ CuPdAu

Die Attach Epoxy:

Part Number _____ 3280

Conductive _____ Yes

Mold Compound:

Part Number: _____ G700

Lead Finish: _____ 100% Matte Sn

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	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.	22	5	1	27	> 95% lead coverage	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	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		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		
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	
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 @260C	231	15	3	738	0	Spares should be properly identified.
UHASt	+130°C/85% RH for 96 hrs Electrical test pre and post stress at +25°C	77	5	3	246	0	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	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

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Affected Catalog Part Numbers(CPN)

IS1871SF-202-TRAY

IS1870SF-202-TRAY

IS1871SF-102-TRAY

IS1870SF-102-TRAY

IS1871SF-102

IS1871SF-202

IS1870SF-102

IS1870SF-202