Product Change Notification / ALAN-29DTAM414

Date:

11-Jan-2022

Product Category:

Bluetooth Silicon

PCN Type:

Manufacturing Change

Notification Subject:

CCB 3680.001 Final Notice: Qualification of MSL 1 for BM83SM1 device family available in 50L MODULE (32x15x2.5mm) package assembled at MMT assembly site.

Affected CPNs:

ALAN-29DTAM414_Affected_CPN_01112022.pdf
ALAN-29DTAM414_Affected_CPN_01112022.csv

Notification Text:

PCN Status: Final 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 MSL 1 for BM83SM1 device family available in 50L MODULE (32x15x2.5mm) package assembled at MMT assembly site.

Pre and Post Change Summary:

	Pre Change	Post Change

Assembly Location	Microchip Technology Thailand (Branch) (MMT)	Microchip Technology Thailand (Branch) (MMT)
MSL	MSL 3	MSL 1

Impacts to Data Sheet: None

Change Impact None

Reason for Change: To improve on-time delivery performance by qualifying MSL 1 for BM83SM1 device family.

Change Implementation Status: In Progress

Estimated First Ship Date: January 25, 2022 (date code: 2205)

Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Time Table Summary:

	January 2022				
Workweek	1	2	3	4	5
Qual Report Availability			X		
Final PCN Issue Date			X		
Estimated First ship date					X

Method to Identify Change: Traceability code

Qualification Report: Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History:January 11, 2022: Issued final 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_ALAN-29DTAM414_ Qual Report.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.

QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN#: ALAN-29DTAM414

Date:
January 7, 2022

Qualification of MSL 1 for BM83SM1 device family available in 50L MODULE (32x15x2.5mm) package assembled at MMT assembly site.

MICROCHIP

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of MSL 1 for BM83SM1 device family available in 50L MODULE (32x15x2.5mm) package assembled at MMT assembly site.
CN	ES360456
QUAL ID	R2101212 Rev. A
MP CODE	ZY0237XZXM01
Part No.	BM83SM1-00AA
Bonding No.	A-066919 Rev. B
CCB#	3680.001
Package	
Type	50L Module

MICROCHIP

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Device	Date Code
E218AAN1.1	BM83SM1	1
E218AAO1.1	BM83SM1	2
E218AAM1.1	BM83SM1	3

Result ☒ Pass ☐ Fail ☐ ____________________

50L Module assembled by MMT is qualified the Moisture/ Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Precondition Prior Perform Reliability Tests **(At MSL Level 1)**	**Electrical Test:** +25°C System: ANRITSU	IPC/JEDEC	96(0)	96		Good Devices
	Bake 150°C, 24 hrs System: BLUE-M	JESD22-A113		96		32 units / lot
	85°C/85%RH Moisture Soak 168 hrs. System: ENVIROTRONIC	J-STD-020		96		
	3x Convection-Reflow 265°C max			96		
	System: ChipFlo-4					
	Electrical Test: +25°C System: ANRITSU			0/96	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	**Stress Condition:** -40°C to +125°C, 500 Cycles System: VOTSCH	JESD22-A104		24		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	8 units / lot
	Stress Condition: -40°C to +125°C, 1000 Cycles System: VOTSCH			24		
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	
	Bond Strength: Wire Pull (> 2.5 grams)		15 (0)	0/15	Pass	
	Bond Shear (>15.00 grams)		15 (0)	0/15	Pass	
UNBIASED-HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		24		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	8 units / lot
Unbiased Temperature/ Humidity	**Stress Condition:** +85°C/85%RH, 500 hrs. System: ENVIROTRONIC			24		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	
	Stress Condition: +85°C/85%RH, 1000 hrs. System: ENVIROTRONIC			24		8 units / lot
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	**Stress Condition:** Bake 150°C, 504 hrs System: BLUE-M	JESD22-A103		24		8 units / lot
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	
	Stress Condition: Bake 175°C, 1008 hrs System: BLUE-M			24		
	Electrical Test: +25°C System: ANRITSU		24(0)	0/24	Pass	

Affected Catalog Part Numbers (CPN)

BM83SM1-00AA
BM83SM1-00AB
BM83SM1-00TA
BM83SM1-00TB