Product Change Notification - RMES-11XZBK215

Date:
04 Mar 2020
Product Category:
Memory
Affected CPNs:

Notification subject:
CCB 4104 Final Notice: Qualification of MTAI as a new assembly site for selected products available in 8L SOIJ (.208 in) package.
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 above to see all listed items.
NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).
Description of Change:
Qualification of MTAI as a new assembly site for selected products available in 8L SOIJ (.208 in) package.
Pre-Change:
Assembled at LPI assembly site using 8290 die attached material.
Post Change:
Assembled at MTAI assembly site using 8006NS die attached material.
Pre and Post Change Summary:

	Pre-Change	Post Change
Assembly Site	Lingsen Precision Industries, Taiwan. (LPI)	Microchip Technology Thailand (HQ) / MTAI
Wire material	Au	Au
Lead frame material	C194	C194
Die attach material	8290	8006NS
Molding compound material	G600	G600

Impacts to Data Sheet:
None
Change Impact:
None
Reason for Change:
To improve productivity by qualifying MTAI as a new assembly site.
Change Implementation Status:
In Progress
Estimated First Ship Date:
March 15, 2020 (date code: 2012)
NOTE: Please be advised that after the estimated first ship date customers may receive pre and

post change parts.

Time Table Summary:

	February 2020					March 2020				
Workweek	05	06	07	08	09	10	11	12	13	14
Initial PCN Issue Date				X						
Final PCN Issue Date						X				
Qual Plan Availability						X				
Estimated Implementation 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:

February 17, 2020: Issued initial notification.

March 4, 2020: Issued final notification. Attached the qualification report. Provided the estimated first ship date to be on March 15, 2020.

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-11XZBK215_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.

Affected Catalog Part Numbers (CPN)

SST25VF016B-50-4C-S2AF-DCQ
SST25VF016B-50-4C-S2AF
SST25VF016B-50-4C-S2AF-PP018
SST25VF016B-50-4C-S2AF-PP022
SST25VF016B-50-4C-S2AF-PP013
SST25VF016B-50-4I-S2AF
SST25VF016B-50-4I-S2AF-PP022
SST25VF016B-50-4I-S2AF-DCA
SST25VF016B-50-4I-S2AF-GYR
SST25VF016B-50-4C-S2AF-DCQ-T
SST25VF016B-50-4C-S2AF-T
SST25VF016B-50-4C-S2AF-PP013-T
SST25VF016B-50-4I-S2AF-T
SST25VF016B-50-4I-S2AF-DCA-T
SST25VF016B-50-4I-S2AF-GYR-T

QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN #: RMES-11XZBK215

Date
February 26, 2020

Qualification of MTAI as a new assembly site for selected products available in 8L SOIJ (.208 in) package.

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PACKAGE QUALIFICATION REPORT

Purpose	Qualification of MTAI as a new assembly site for selected products available in 8L SOIJ (.208 in) package.
CN	ES334343
QUAL ID	Q20007 rev. A
MP CODE	T000174BXD50
Part No.	SST25VF016B-50-4I-S2AF
Bonding No.	BDM-002319 Rev. A
CCB No.	4104

Package

Type	8L SOIJ
Package size	208 mils

Lead Frame

Paddle size	140 x 160 mils
Material	CDA194
Surface	NiPdAu
Process	Stamped
Lead Lock	No
Part Number	10100837
Treatment	Roughened

Material

Epoxy	8006NS
Wire	Au wire
Mold Compound	G600V
Plating Composition	Matte Tin

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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI203602842.000	GC01920284888.100	19496Y0
MTAI203700453.000	GC01920284888.100	19507Q0
MTAI203700454.000	GC01920284888.100	19507Q1

Result [X] Pass [ ] Fail [ ] _____

8L SOIJ assembled by MTAI pass reliability test per QCI-39000.This package was qualified the Moisture/Reflow Sensitivity Classification Level 3 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 3)	**Electrical Test :**+25°C,95°C and -40°C System: NEXTEST_PT2	JESD22-A113	693(0)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE	JIP/ IPC/JEDEC J-STD-020E		693		
	30°C/60%RH Moisture Soak 192 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test :+25°C and 95°C System: NEXTEST_PT2			0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	**Stress Condition:** -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test :+95°C System: NEXTEST_PT2		231(0)	0/231	Pass	77 units / lot
	Bond Strength:		15 (0)	0/15	Pass	
	Wire Pull (> 2.5 grams)					
	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		231		Parts had been pre-conditioned at 260°C
	Electrical Test :+25°C System: NEXTEST_PT2		231(0)	0/231	Pass	77 units / lot
HAST	**Stress Condition:** +130°C/85%RH, 96 hrs. **Bias Volt:** 3.6 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test :+25°C and 95°C System: NEXTEST_PT2		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	**Stress Condition:** Bake 175°C, 504 hrs System: SHEL LAB **Electrical Test :**+25°C and 95°C System: NEXTEST_PT2	JESD22-A103	45(0)	45 0/45	Pass	45 units
Bond Strength **Data Assembly**	Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)	M2011 JESD22-B116	30 (0) Wires 30 (0) bonds	0/30 0/30	Pass Pass	