



## Product Change Notification / ASER-18BMYN527

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**Date:**

20-Oct-2020

**Product Category:**

Memory

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4218 Final Notice: Qualification of MMT as a new assembly site for selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package.

**Affected CPNs:**

[ASER-18BMYN527\\_Affected\\_CPN\\_10202020.pdf](#)

[ASER-18BMYN527\\_Affected\\_CPN\\_10202020.csv](#)

**Notification Text:**

**PCN Status:** Final 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 selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package.

**Pre Change:**

Assembled at LPI or GTK assembly site using 8340 die attach and C151 lead frame material.

**Post Change:** Assembled at MMT using 3280 die attach and A194 lead frame material.

**Pre and Post Change Summary:**

	Pre Change		Post Change
<b>Assembly Site</b>	Lingsen Precision Industries, LTD.  (LPI)	Greatek Electronic Inc.  (GTK)	Microchip Technology Thailand  (MMT)
<b>Wire material</b>	Au	Au	Au
<b>Die attach material</b>	8340	8340	3280
<b>Molding compound material</b>	G600	G600	G600
<b>Lead frame material</b>	C151	C151	A194

**Impacts to Data Sheet:** None

**Change Impact:**None

**Reason for Change:**Due to unforeseen business conditions, MMT has been qualified as a new assembly effective immediately.

**Change Implementation Status:**In Progress

**Estimated First Ship Date:**September 20, 2020 (date code: 2039)

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

**Time Table Summary:**

	April 2020						September 2020				
Workweek	1 4	1 5	1 6	1 7	1 8	-->	3 6	3 7	3 8	3 9	4 0
Initial PCN Issue Date				X							
Final PCN Issue Date								X			
Qual Report Availability										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:****April 21, 2020:** Issued initial notification.**September 18, 2020:** Issued final notification.**October 20, 2020:** Re-issued the final notification to include the Qualification Report. Corrected pre and post change to correct the word bond wire to die attach material.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

## **Attachments:**

[PCN\\_ASER-18BMYN527\\_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)

SST39LF040-55-4C-NHE  
SST39LF020-55-4C-NHE  
SST39LF010-55-4C-NHE  
SST39LF020-55-4C-NHE-RVL  
SST39LF040-55-4C-NHE-RVL  
SST39VF040-70-4C-NHE  
SST39VF020-70-4C-NHE  
SST39VF010-70-4C-NHE  
SST39VF040-70-4C-NHE-DP003  
SST39VF040-70-4C-NHE-PP013  
SST39VF040-70-4C-NHE-RVL  
SST39LF040-55-4C-NHE-A3  
SST39VF020-70-4C-NHE-RVL  
SST39LF010-55-4C-NHE-RVL  
SST39VF010-70-4C-NHE-RVL  
SST39VF040-70-4I-NHE  
SST39VF020-70-4I-NHE  
SST39VF010-70-4I-NHE  
SST39LF020-55-4C-NHE-RVL-T  
SST39LF040-55-4C-NHE-RVL-T  
SST39VF040-70-4C-NHE-T  
SST39VF020-70-4C-NHE-T  
SST39VF010-70-4C-NHE-T  
SST39VF040-70-4C-NHE-RVL-T  
SST39LF040-55-4C-NHE-A3-T  
SST39VF020-70-4C-NHE-RVL-T  
SST39LF010-55-4C-NHE-RVL-T  
SST39VF010-70-4C-NHE-RVL-T  
SST39VF040-70-4I-NHE-T  
SST39VF010-70-4I-NHE-T  
SST39LF020-55-4C-NHE-T  
SST39LF010-55-4C-NHE-T  
SST39LF040-55-4C-NHE-T  
SST39VF020-70-4I-NHE-T  
SST39SF040-55-4C-NHE  
SST39SF020A-55-4C-NHE  
SST39SF010A-55-4C-NHE  
SST39SF040-70-4C-NHE  
SST39SF020A-70-4C-NHE  
SST39SF010A-70-4C-NHE  
SST39SF040-70-4C-NHE-PP009  
SST39SF040-55-4I-NHE  
SST39SF020A-55-4I-NHE  
SST39SF010A-55-4I-NHE  
SST39SF040-70-4I-NHE  
SST39SF020A-70-4I-NHE

SST39SF010A-70-4I-NHE  
SST39SF040-55-4C-NHE-T  
SST39SF020A-55-4C-NHE-T  
SST39SF010A-55-4C-NHE-T  
SST39SF040-70-4C-NHE-T  
SST39SF020A-70-4C-NHE-T  
SST39SF010A-70-4C-NHE-T  
SST39SF040-55-4I-NHE-T  
SST39SF020A-55-4I-NHE-T  
SST39SF010A-55-4I-NHE-T  
SST39SF040-70-4I-NHE-T  
SST39SF020A-70-4I-NHE-T  
SST39SF010A-70-4I-NHE-T  
SST39SF010A-45-4I-NHE  
SST39SF010A-45-4I-NHE-T



**MICROCHIP**

**QUALIFICATION REPORT SUMMARY**  
RELIABILITY LABORATORY

**PCN #: ASER-18BMYN527**

**Date**  
**October 09, 2020**

**Qualification of MMT as a new assembly site for selected  
SST39xxx products available in 32L PLCC (11.5x14x3.37mm)  
package.**



## **MICROCHIP** **PACKAGE QUALIFICATION REPORT**

**Purpose** Qualification of MMT as a new assembly site for selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package.

**CN** ES344447

**QUAL ID** R2000331 rev A

**MP CODE** Z00017P3XM70

**Part No.** SST39SF040-70-4I-NHE

**Bonding No.** BDM-002397 Rev. B

**CCB No.** 4218

### **Package**

**Type** 32L PLCC

**Package size** 11.5x14x3.37mm

### **Lead Frame**

**Paddle size** 200 x 200 mils

**Material** A194

**Surface** Ag Ring Plated

**Process** Etched

**Lead Lock** Yes

**Part Number** 10103208

**Treatment** BOT

### **Material**

**Epoxy** 3280

**Wire** Au wire

**Mold Compound** G600

**Plating Composition** Matte Tin



# MICROCHIP PACKAGE QUALIFICATION REPORT

## Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-210600777.000	GC01920284943.200	20191GQ
MMT-210601379.000	GC01920284943.200	2019765
MMT-210601382.000	GC01920284943.200	2019P7B

**Result**

Pass     Fail     \_\_\_\_\_

32L PLCC assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 3 at 245°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
<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 3)	<b>Electrical Test:</b> +25°C, 95°C and -40°C System: KALOS1	JESD22-A113	693(0)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE	JIP/IPC/JEDEC		693		
	30°C/60%RH Moisture Soak 192 hrs. System: TABAI ESPEC Model PR-3SPH	J-STD-020E		693		
	3x Convection-Reflow 250°C max  System: Vitronics Soltec MR1243			693		
	<b>Electrical Test:</b> +25°C and 95°C System: KALOS1			0/693	Pass	

## PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>Temp Cycle</b>	<b>Stress Condition:</b> -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22- A104		231		Parts had been pre-conditioned at 250°C
	<b>Electrical Test:</b> + 95°C System: KALOS1		231(0)	0/231	Pass	77 units / lot
	<b>Bond Strength:</b> Wire Pull (> 2.5 grams)		15 (0)	0/15	Pass	
	Bond Shear (>15.00 grams)		15 (0)	0/15	Pass	
<b>UNBIASED-HAST</b>	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22- A118		231		Parts had been pre-conditioned at 250°C
	<b>Electrical Test:</b> +25°C System: KALOS1		231(0)	0/231	Pass	77 units / lot
<b>HAST</b>	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. <b>Bias Volt:</b> 5.5 Volts System: HAST 6000X	JESD22- A110		231		Parts had been pre-conditioned at 250°C
	<b>Electrical Test:</b> +25°C and 95°C System: KALOS1		231(0)	0/231	Pass	77 units / lot

# PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>High Temperature Storage Life</b>	<b>Stress Condition:</b> Bake 175°C, 504 hrs System: SHEL LAB	JESD22-A103		45		45 units
	<b>Electrical Test:</b> +25°C and 95°C System: KALOS1		45(0)	0/45	Pass	
<b>Solderability Temp 215°C</b>	<b>Steam Aging:</b> Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.215°C Solder material: SnPb Sn63, Pb37 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	
<b>Solderability Temp 245°C</b>	<b>Steam Aging:</b> Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	
<b>Wire sweep</b>	Wire sweep Inspection 15 Wires / lot	-	45(0) Wires	0/45	Pass	
<b>Physical Dimensions</b>	Physical Dimension, 10 units from 1 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
<b>Bond Strength Data Assembly</b>	Wire Pull (> 4.00 grams)	Mil.Std. 883-2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>18.00 grams)	CDF-AEC-Q100-001	30 (0) bonds	0/30	Pass	