

Product Change Notification - ASER-18BMYN527

Date:

23 Apr 2020 Product Category: Memory Affected CPNs: Notification subject: CCB 4218 Initial Notice: Qualification of MMT as a new assembly site for selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package. 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 selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package.

Pre Change:

Assembled at LPI or GTK assembly site using 8340 bond wire material and C151 lead frame material.

Post Change:

Assembled at MMT using 3280 bond wire material and A194 lead frame material.

Pre and Post Change Summary:

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

Impacts to Data Sheet:

None.

Change Impact:



None.

Reason for Change:

To improve manufacturability by qualifying MMT as a new assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

June 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:

	April 2020			>	June 2020						
Workweek	14	15	16	17	18	>	23	24	25	26	27
Initial PCN Issue Date				Х							
Qual Report Availability										Х	
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:

April 23, 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. **Attachment(s)**:

PCN_ASER-18BMYN527_Qual Plan.pdf

Please contact your local <u>Microchip sales office</u> with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to <u>receive Microchip PCNs via email</u> please register for our PCN email service at our <u>PCN home page</u> select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the <u>PCN FAQ</u> section.

If you wish to <u>change your PCN profile</u>, <u>including opt out</u>, please go to the <u>PCN home page</u> 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)

SST39LF010-55-4C-NHE SST39LF010-55-4C-NHE-RVL SST39LF010-55-4C-NHE-RVL-T SST39LF010-55-4C-NHE-T SST39LF020-55-4C-NHE SST39LF020-55-4C-NHE-RVL SST39LF020-55-4C-NHE-RVL-T SST39LF020-55-4C-NHE-T SST39LF040-55-4C-NHE SST39LF040-55-4C-NHE-A3 SST39LF040-55-4C-NHE-A3-T SST39LF040-55-4C-NHE-RVL SST39LF040-55-4C-NHE-RVL-T SST39LF040-55-4C-NHE-T SST39SF010A-45-4I-NHE SST39SF010A-45-4I-NHE-T SST39SF010A-55-4C-NHE SST39SF010A-55-4C-NHE-T SST39SF010A-55-4I-NHE SST39SF010A-55-4I-NHE-T SST39SF010A-70-4C-NHE SST39SF010A-70-4C-NHE-T SST39SF010A-70-4I-NHE SST39SF010A-70-4I-NHE-T SST39SF020A-55-4C-NHE SST39SF020A-55-4C-NHE-T SST39SF020A-55-4I-NHE SST39SF020A-55-4I-NHE-T SST39SF020A-70-4C-NHE SST39SF020A-70-4C-NHE-T SST39SF020A-70-4I-NHE SST39SF020A-70-4I-NHE-T SST39SF040-55-4C-NHE SST39SF040-55-4C-NHE-T SST39SF040-55-4I-NHE SST39SF040-55-4I-NHE-T SST39SF040-70-4C-NHE SST39SF040-70-4C-NHE-PP009 SST39SF040-70-4C-NHE-T SST39SF040-70-4I-NHE SST39SF040-70-4I-NHE-T SST39VF010-70-4C-NHE SST39VF010-70-4C-NHE-RVL SST39VF010-70-4C-NHE-RVL-T SST39VF010-70-4C-NHE-T SST39VF010-70-4I-NHE

ASER-18BMYN527 - CCB 4218 Initial Notice: Qualification of MMT as a new assembly site for selected SST39xxx products available in 32L PLCC (11.5x14x3.37mm) package.

SST39VF010-70-4I-NHE-T SST39VF020-70-4C-NHE SST39VF020-70-4C-NHE-RVL SST39VF020-70-4C-NHE-RVL-T SST39VF020-70-4I-NHE-T SST39VF020-70-4I-NHE-T SST39VF040-70-4C-NHE SST39VF040-70-4C-NHE-DP003 SST39VF040-70-4C-NHE-RVL SST39VF040-70-4C-NHE-RVL SST39VF040-70-4C-NHE-RVL-T SST39VF040-70-4C-NHE-RVL-T SST39VF040-70-4C-NHE-RVL-T SST39VF040-70-4C-NHE-RVL-T



QUALIFICATION PLAN SUMMARY

PCN #: ASER-18BMYN527

Date: April 16, 2020

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

CCB No.: 4218

Misc.	Assembly site	MMT
	BD Number	BDM-002397/B
	MP Code (MPC)	Z00017P3XM70
	Part Number (CPN)	SST39SF040-70-4I-NHE
	MSL information	MSL-3/260
	Assembly Shipping Media (T/R, Tube/Tray)	TUBE
	Base Quantity Multiple (BQM)	30
	Reliability Site	MTAI
	Paddle size	200x200 mils
	Material	A194
	DAP Surface Prep	Ag Ring Plated
	Treatment	BOT
Lead-	Process	Etched
Frame	Lead-lock	Yes
	Part Number	10103208
	Lead Plating	Matte Tin
	Strip Size	8.749x2.756 in.
	Strip Density	24 units/strip
Bond Wire	Material	Au
Die Attach	Part Number	3280
	Conductive	Yes
MC	Part Number	G600
PKG	PKG Type	PLCC
	Pin/Ball Count	32
	PKG width/size	11.5x14x3.37mm

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Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be pronerly marked)	Qtv of Lots		Fail Accept Qty	Est. Dur. Days	Test Site	Special Instructions
Standard Pb- free Solderability	J-STD-002 ; 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	5	MTAI	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.
Backward Solderability	J-STD-002 ;Perform 8 hours steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Backward: Matte tin/ NiPdAu finish, SnPb solder, wetting temp 215°C for SMD.	22	5	1	27	> 95% lead coverage	5	MTAI	
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	15	0	5	MMT/ MTAI	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	15	0	5	MMT/ MTAI	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		MMT	Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	MMT	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MMT/ MTAI	
HTSL (High Temp Storage Life)	+175 C for 504 hours. Electrical test pre and post stress at +25°C and hot temp.	45	5	1	50	0	25	MTAI	Must be in progress at time of package release to production, but completion is not required for release to production.
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. MSL3@260°C	231	15	3	738	0	15	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MTAI	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	15	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.