

Product Change Notification / KSRA-18BGHS695

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23-Feb-2021

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4559 Initial Notice: Qualification of SIGN as a new assembly site for selected SST39LFxxxx and SST39VFxxxx device families available in 48L TSOP (12x20mm) package.

Affected CPNs:

KSRA-18BGHS695_Affected_CPN_02232021.pdf KSRA-18BGHS695_Affected_CPN_02232021.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 SIGN as a new assembly site for selected SST39LFxx and SST39VFxx device families available in 48L TSOP (12x20mm) package.

Pre Change:

Assembled at LPI using lead frame with paddle size 207x142mils, 183x161mils or 160x130mils.

Post Change:

Assembled at SIGN using lead frame with paddle size 209x165mils or 159x165mils

Pre and Post Change Summary:

		Pre Change		Post Change			
Assembly Site	Lingsen Pre	ecision Industries	s, LTD. (LPI)	Signetics Corporation (SIGN)			
Bond Wire material		Au		Au			
Die Attach material		8340		8340			
Mold compound material		G700		G700			
Lead frame material		C7025		C7025			
DAP Surface plating		Ring plating		Double ring plating			
Load frama naddla siza	207x142mils 183x161mils 160x130mils			209x165mils	159x165mils		
Lead frame paddle size		See a	attached pre and	post change comparison			

Impacts to Data Sheet: None

Change Impact:None

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

Change Implementation Status:In Progress or complete

Estimated Qualification Completion Date:August 2021

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:

	February 2021				>	August 2021					
Workweek	06	07	08	09	10		32	33	34	35	36
Initial PCN Issue Date				Х							
Qual Report Availability								Χ			
Final PCN Issue Date								Х			

Method to Identify Change: Traceability code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History:February 23, 2021: 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_KSRA-18BGHS695_Pre and Post Change_Summary.pdf PCN_KSRA-18BGHS695_Qual_Plan.pdf

Please contact your local Microchip sales office 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</u> home page 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, 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.

KSRA-18BGHS695 - CCB 4559 Initial Notice: Qualification of SIGN as a new assembly site for selected SST39LFxxxx and SST39VFxxxx device families available in 48L TSOP (12x20mm) package.

Affected Catalog Part Numbers (CPN)

SST39LF400A-55-4C-EKE

SST39VF400A-70-4C-EKE

SST39VF400A-70-4I-EKE

SST39LF400A-55-4C-EKE-T

SST39VF400A-70-4C-EKE-T

SST39VF400A-70-4I-EKE-T

SST39LF800A-55-4C-EKE

SST39VF800A-70-4C-EKE

SST39VF800A-70-4I-EKE

SST39VF800A-70-4I-EKE-TZ009

SST39VF800A-70-4C-EKE-T

SST39VF800A-70-4I-EKE-T

SST39VF1601-70-4C-EKE

SST39VF1602-70-4C-EKE

SST39VF1681-70-4C-EKE

SST39VF1682-70-4C-EKE

SST39VF1601-70-4C-EKE-PP013

SST39VF1601-70-4I-EKE

SST39VF1602-70-4I-EKE

SST39VF1681-70-4I-EKE

SST39VF1682-70-4I-EKE

SST39VF1601-70-4I-EKE-TZ009

SST39VF1601-70-4C-EKE-T

SST39VF1602-70-4C-EKE-T

SST39VF1681-70-4C-EKE-T

SST39VF1682-70-4C-EKE-T

SST39VF1601-70-4I-EKE-T

SST39VF1602-70-4I-EKE-T

SST39VF1681-70-4I-EKE-T

SST39LF200A-55-4C-EKE

SST39VF200A-70-4C-EKE

SST39VF200A-70-4I-EKE

SST39LF200A-55-4C-EKE-T

SST39VF200A-70-4C-EKE-T

SST39VF200A-70-4I-EKE-T

SST39VF3201B-70-4C-EKE

SST39VF3202B-70-4C-EKE

SST39VF3201B-70-4I-EKE

SST39VF3202B-70-4I-EKE

SST39VF3201B-70-4I-EKE-MCL

SST39VF3202B-70-4I-EKE-MCM

SST39VF3201B-70-4I-EKE-T

CCB 4559 Pre and Post Change Summary PCN # KSRA-18BGHS695



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



Lead frame Comparison

Pre Change Post Change LPI **SIGN**





QUALIFICATION PLAN SUMMARY

PCN#: KSRA-18BGHS695

Date: February 04, 2021

Qualification of SIGN as a new assembly site for selected SST39LFxxxx and SST39VFxxxx device families available in 48L TSOP (12x20mm) package.

Purpose: Qualification of SIGN as a new assembly site for selected SST39LFxxxx

and SST39VFxxxx device families available in 48L TSOP (12x20mm)

package.

CCB No.: 4559

	Assembly site	SIGN				
	BD Number	BFLD00001				
	MP Code (MPC)	X02057W9XM70				
	Part Number (CPN)	SST39VF3201B-70-4I-EKE				
Misc.	MSL information	MSL 3 / 260				
	Assembly Shipping Media (T/R, Tube/Tray)	Tray				
	Base Quantity Multiple (BQM)	96				
	Reliability Site	MTAI				
	Paddle size	209x165				
	Material	C7025				
	DAP Surface Prep	Double Ring Plating				
	Treatment	Roughened				
<u>Lead-</u>	Process	Stamped				
<u>Frame</u>	Lead-lock (With Locking Holes)	No				
	Part Number	FLF-00001				
	Lead Plating	Matte Sn				
	Strip Size	211X60mm				
	Strip Density	24 units/strip				
Bond Wire	Material	Au				
Dia Atta-l-	Part Number	8340				
Die Attach	Conductive	Yes				
MC	Part Number	G700				
	PKG Type	TSOP				
<u>PKG</u>	Pin/Ball Count	48L				
	PKG width/size	12x20mm				

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	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	5	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	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		5	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
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 at room temp 25°C and hot temp 95°C. MSL3 / 260c	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at room temp 25°C and hot temp 95°C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Preconditioning.
UHAST	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at room temp 25°C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Preconditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp 95°C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Preconditioning.