Product Change Notification / GBNG-30ZMTP819

Date:

23-Feb-2021

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4284 Initial Notice: Qualification of GTK as a new assembly site for selected SST39VF640xxx and SST39VF320xxx device families available in 48L TSOP (12x20mm) package.

Affected CPNs:

GBNG-30ZMTP819_Affected_CPN_02232021.pdf
GBNG-30ZMTP819_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 GTK as a new assembly site for selected SST39VF640xxx and SST39VF320xxx device families available in 48L TSOP (12x20mm) package.

Pre Change: Assembled at LPI using 8340 die attach, G700 molding compound material, 276 x 350 or 190 x 250 mils paddle size and double ring plating DAP Surface Prep.

Post Change: Assembled at GTK using EN-4900GC die attach, G600F molding compound material, 330 x 260 mils paddle size and ring plating DAP Surface Prep.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Lingsen Precision Industries, LTD. (LPI)	Greatek Electronic Inc. (GTK)
Wire material	Au	Au
Die attach material	8340	EN-4900GC
Molding compound material	G700	G600F
Lead frame material	C7025	C7025
Paddle size	276 x 350 mils 190 x 250 mils	330 x 260 mils
DAP Surface Prep	Double ring plating	Ring plating
Lead Lock (Locking Hole)	No	No

Impacts to Data Sheet: None

Change Impact: None

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

Change Implementation Status: In Progress

Estimated Qualification Completion Date: February 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:

	July 2020					>	**February 2021**			
Workweek	27	28	29	30	31		06	07	08	09
Initial PCN Issue Date	X									
Qual Report Availability										X
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: July 02, 2020: Issued initial notification. **February 23, 2021:** Re-issued initial notification. Added SST39VF320xxx device family in notification subject, description of change and affected CPN list. Updated the qual plan title and purpose. Added paddle size, DAP surface PREP and lead lock information in Pre and Post change description and table summary.

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

Attachments:

PCN_GBNG-30ZMTP819__Qual_Plan.pdf
PCN_GBNG-30ZMTP819_Pre and Post Change Summary.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)

SST39VF3201-70-4C-EKE
SST39VF3202-70-4C-EKE
SST39VF3201-70-4I-EKE
SST39VF3202-70-4I-EKE
SST39VF3201-70-4C-EKE-T
SST39VF3201-70-4I-EKE-T
SST39VF6401B-70-4C-EKE
SST39VF6402B-70-4C-EKE
SST39VF6401B-70-4I-EKE-100
SST39VF6401B-70-4I-EKE-101
SST39VF6401B-70-4I-EKE
SST39VF6402B-70-4I-EKE
SST39VF6401B-70-4I-EKE-MCL
SST39VF6401B-70-4I-EKE-TZ009
SST39VF6401B-70-4C-EKE-T
SST39VF6402B-70-4C-EKE-T
SST39VF6401B-70-4I-EKE-T

QUALIFICATION PLAN SUMMARY

PCN #: GBNG-30ZMTP819

Date:
January 19, 2021

Qualification of GTK as a new assembly site for selected SST39VF640xxx and SST39VF320xxx device families available in 48L TSOP (12x20mm) package.

Purpose: **Qualification of GTK as a new assembly site for selected SST39VF640xxx and SST39VF320xxx device families available in 48L TSOP (12x20mm) package.**

Misc.	Assembly site	GTK
	BD Number	TBD
	MP Code (MPC)	T00081W9XM70
	Part Number (CPN)	SST39VF6401B-70-4C-EKE
	MSL information	MSL 3 / 260
	Assembly Shipping Media (T/R, Tube/Tray)	Tray
	Base Quantity Multiple (BQM)	96
	Reliability Site	MTAI
	CCB No	4284
Lead-Frame	Paddle size	330 x 260
	Material	C7025
	DAP Surface Prep	Ring Plating
	Treatment	none
	Process	Stamped
	Lead-lock	No
	Part Number	11-07048-003
	Lead Plating	Matte Sn
	Strip Size	40X210mm
	Strip Density	16 units/strip
Bond Wire	Material	Au
Die Attach	Part Number	EN-4900GC
	Conductive	Yes
MC	Part Number	G600F
PKG	PKG Type	48L
	Pin/Ball Count	12x20x1.0mm
	PKG width/size	48L

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	ATE Test Site	REL Test Site	Pkg. Type	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	MTAI	MTAI	TSOP48L	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	MTAI	MTAI	TSOP48L	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	MTAI	MTAI	TSOP48L	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		5	MTAI	MTAI	TSOP48L	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	MTAI	TSOP48L	
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 room (25°C) and hot temp 70°C. MSL3 / 260c	231	15	3	738	0	15	MTAI	MTAI	TSOP48L	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.

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	ATE Test Site	REL Test Site	Pkg. Type	Special Instructions
HAST	+130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at room (25°C) and hot temp 70°C.	77	5	3	246	0	10	MTAI	MTAI	TSOP48L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
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	MTAI	MTAI	TSOP48L	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 70°C. ; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MTAI	MTAI	TSOP48L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CCB 4284
Pre and Post Change Summary
PCN #: GBNG-30ZMTP819

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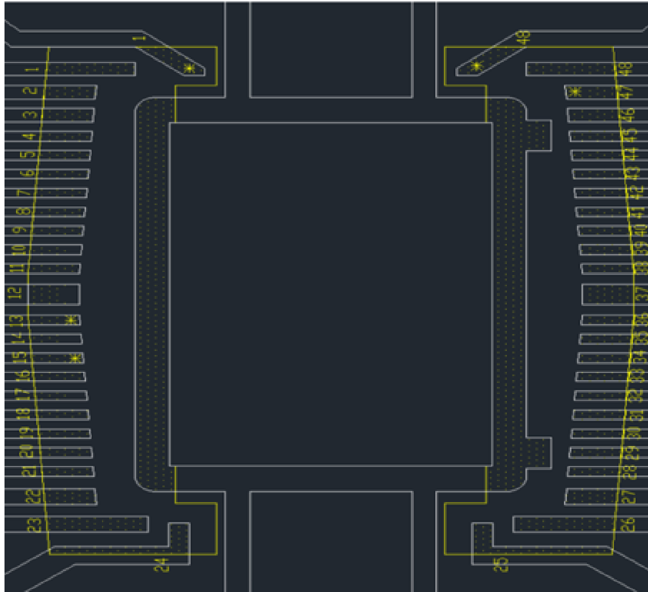
Qualification of GTK as a new assembly site for selected SST39VF640xxx and SST39VF320xxx device families available in 48L TSOP (12x20mm) package.

LEAD FRAME COMPARISON

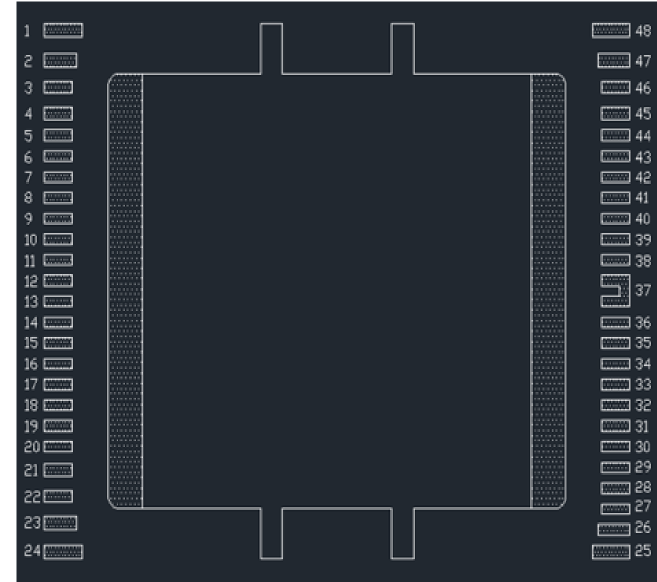
LPI	GTK

LPI



Paddle size	276 x 350 or 190 x 250 mils
Lead Lock	Yes
DAP Surface Prep	Double ring plating

GTK



Paddle size	330 x 260 mils
Lead Lock	No
DAP Surface Prep	Ring plating

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