Product Change Notification / ASER-25RLDG830

Date:

12-Feb-2021

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4279.002 Initial Notice: Qualification of GTK as a new assembly site for selected SST39VF3201xx and SST39VF3202xx device families available in 48L TSOP (12x20mm) package.

Affected CPNs:

ASER-25RLDG830_Affected_CPN_02122021.pdf
ASER-25RLDG830_Affected_CPN_02122021.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 to the right.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .csv).

Description of Change: Qualification of GTK as a new assembly site for selected SST39VF3201xx and SST39VF3202xx device families available in 48L TSOP (12x20mm) package.

Pre Change: Assembled at LPI using 8340 die attach material, G700 mold compound and 183x161 mils lead frame paddle size.

Post Change:
Assembled at GTK using EN-4900GC die attach material, G600F mold compound and 280x210 mils lead frame paddle size.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Lingsen Precision Industries, LTD. (LPI)	GREATEK ELETRONIC INC. (GTK)
Wire material	Au	Au
Die attach material	8340	EN-4900GC
Molding compound material	G700	G600F
Lead frame material	C7025	C7025
Lead frame paddle size	183x161 mils	280x210 mils

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: March 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				March 2021				
Workweek	6	7	8	9	10	11	12	13	14
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:February 12, 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.

Attachments:

PCN_ASER-25RLDG830__Qual_Plan.pdf
PCN_ASER-25RLDG830_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.

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QUALIFICATION PLAN SUMMARY

PCN #: ASER-25RLDG830

Date:
November 23, 2020

Qualification of GTK as a new assembly site for selected SST39VF3201xx and SST39VF3202xx device families available in 48L TSOP (12x20mm) package.

Purpose: Qualification of GTK as a new assembly site for selected SST39VF3201xx and SST39VF3202xx device families available in 48L TSOP (12x20mm) package.

Misc.	Assembly site	GTK
	BD Number	TBD
	MP Code (MPC)	X02031W9XN90
	Part Number (CPN)	SST38VF6401-90-5C-EKE
	MSL information	MSL 3 / 260
	Assembly Shipping Media (T/R, Tube/Tray)	Tray
	Base Quantity Multiple (BQM)	96
	Reliability Site	MTAI
	CCB No	4279, 4279.001 and 4279.002
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	16u/strip
Bond Wire	Material	Au
Die Attach	Part Number	EN-4900GC
	Conductive	Yes
MC	Part Number	G600F
PKG	PKG Type	TSOP
	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	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	TSOP 48L	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-002D ; Perform 8 hour steam aging for Matte tin finish and 1 hr 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		
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0	5	TSOP 48L	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	TSOP 48L	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	TSOP 48L	
Lead Integrity	TM2004 B2 JESD22-B105	3				0			45 leads
External Visual	Mil. Std. 883-2009	All devices prior to submission for qualification testing	0	3	ALL	0	5	TSOP 48L	
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 temp (25°C). MSL3 / 260c	231	15	3	738	0	15	TSOP 48L	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 -55°C, +25°C, +125°C	77	5	3	246	0	10	TSOP 48L	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 -55°C, +25°C, +125°C	77	5	3	246	0	10	TSOP 48L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-55°C to +125°C for 500 cycles and 1000 cycles. Electrical test pre and post stress at -55°C, +25°C, +125°C .; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	TSOP 48L	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CCB 4279.002
Pre and Post Change Summary
PCN #: ASER-25RLDG830

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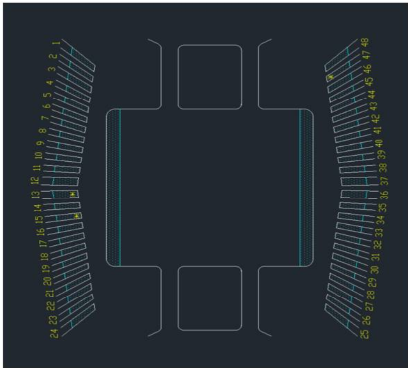
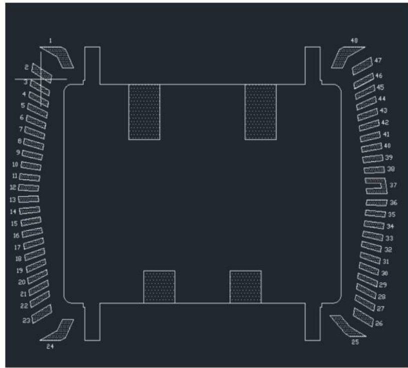
Qualification of GTK as a new assembly site for selected SST39VF3201xx and SST39VF3202xx device families available in 48L TSOP (12x20mm) package.

Lead frame Comparison

LPI	GTK
	

Paddle size	183 x 161 mils

Paddle size	280 x 210 mils

ASER-25RLDG830 - CCB 4279.002 Initial Notice: Qualification of GTK as a new assembly site for selected S

Affected Catalog Part Numbers(CPN)

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