



## Product Change Notification / GBNG-16RJZN641

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**Date:**

17-Jul-2020

**Product Category:**

Memory

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4315 Initial Notice: Qualification of GTK as a new assembly site for selected SST38VF640xx device family available in 48L TSOP (12x20mm) package.

**Affected CPNs:**

[GBNG-16RJZN641\\_Affected\\_CPN\\_07172020.pdf](#)  
[GBNG-16RJZN641\\_Affected\\_CPN\\_07172020.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 SST38VF640xx device family available in 48L TSOP (12x20mm) package.

**Pre Change:**

Assembled at LPI assembly site using 8340 die attach and G700 molding compound material.

**Post Change:**

Assembled at GTK assembly site using EN-4900GC die attach and G600F molding compound material.

**Pre and Post Change Summary:**

	Pre Change	Post Change
<b>Assembly Site</b>	Lingsen Precision Industries, LTD. (LPI)	GREATEK ELETRONIC INC. (GTK)
<b>Wire material</b>	Au	Au
<b>Die attach material</b>	8340	EN-4900GC
<b>Molding compound material</b>	G700	G600F
<b>Lead frame material</b>	C7025	C7025

**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:**

December 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:**

Workweek	July 2020					-->	December 2020			
	27	28	29	30	31		49	50	51	52
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 17, 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\\_GBNG-16RJZN641\\_Qual\\_Plan.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.



# **QUALIFICATION PLAN SUMMARY**

**PCN #: GBNG-16RJZN641**

**Date:  
July 07, 2020**

**Qualification of GTK as a new assembly site for selected  
SST38VF640xx device family available in 48L TSOP  
(12x20mm) package.**

**Purpose: Qualification of GTK as a new assembly site for selected SST38VF640xx device family available in 48L TSOP (12x20mm) package.**

		Qual Vehicle
<u>Misc.</u>	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	4315
<u>Lead-Frame</u>	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
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	EN-4900GC
	Conductive	Yes
<u>MC</u>	Part Number	G600F
<u>PKG</u>	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	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 temp (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 temp (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.

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Affected Catalog Part Numbers(CPN)

SST38VF6401-90-5C-EKE

SST38VF6402-90-5C-EKE

SST38VF6403-90-5C-EKE

SST38VF6404-90-5C-EKE

SST38VF6401-90-5I-EKE

SST38VF6402-90-5I-EKE

SST38VF6403-90-5I-EKE

SST38VF6404-90-5I-EKE

SST38VF6401-90-4I-EKE

SST38VF6404-90-5I-EKE-NCM

SST38VF6401-90-5C-EKE-T