

## Product Change Notification - GBNG-30ZMTP819

#### Date:

02 Jul 2020

Product Category:

Memory

Affected CPNs:

#### 7

#### Notification subject:

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

## Notification text:

## 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 device family available in 48L TSOP (12x20mm) package.

#### Pre Change:

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

## Post Change:

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

#### Pre and Post Change Summary:

	Pre Change	Post Change				
Assembly Site	Lingsen Precision	Greatek Electronic Inc.				
-	Industries, LTD. (LPI)	(GTK)				
Wire material	Au	Au				
Die attach material	8340	EN-4900GC				
Molding compound material	G700	G600F				
Lead frame material	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:

		Jı	uly 202	20		>	December 2020			
Workweek	27	28	29	30	31	-	49	50	51	52
Initial PCN Issue Date	Х									
Qual Report Availability									Х	
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:**

July 02, 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 GBNG-30ZMTP819 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)

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-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 June 25, 2020

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

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

	Assembly site	GTK				
	BD Number	TBD				
	MP Code (MPC)	T00081W9XM70				
<u>Misc.</u>	Part Number (CPN)	SST39VF6401B-70-4C-EKE				
	MSL information	MSL 3 / 260				
	Assembly Shipping Media (T/R, Tube/Tray)	Тгау				
	Base Quantity Multiple (BQM)	96				
	Reliability Site	ΜΤΑΙ				
	CCB No	4284				
	Paddle size	330 x 260				
	Material	C7025				
	DAP Surface Prep	Ring Plating				
	Treatment	none				
Lead-Frame	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				
Dia Attach	Part Number	EN-4900GC				
Die Attach	Conductive	Yes				
MC	Part Number	G600F				
	PKG Type	48L				
<u>PKG</u>	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	ΜΤΑΙ	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	
Lead Integrity	JESD22 B105	5	0	1	5	0 (No lead breakage or cracks)	5	MTAI	MTAI	TSOP48L	10 leads from each of 5 parts. Not required for SMD, only required for through-hole.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	MTAI	TSOP48L	

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
HTSL (High Temp Storage Life)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at room (25°C) and hot temp 70°C.	45	5	1	50	0	10	MTAI	MTAI	TSOP48L	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 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.
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.