Product Change Notification / GBNG-28IJEQ202

Date:

29-Sep-2021

Product Category:

8-bit Microcontrollers, USB Security Controllers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4840 Initial Notice: Qualification of UTL3 as an additional assembly site for selected SMSC SEC1100, SEC1110 and USX1011 device families available in 16L QFN (5x5x0.9mm) package.

Affected CPNs:

GBNG-28IJEQ202_Affected_CPN_09292021.pdf
GBNG-28IJEQ202_Affected_CPN_09292021.csv

Notification Text:

PCN Status: Initial notification

PCN Type: Manufacturing Change

Microchip Parts Affected: Please open one of the files found in the Affected CPNs section.

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

Description of Change: Qualification of UTL3 as an additional assembly site for selected SMSC SEC1100, SEC1110 and USX1011 device families available in 16L QFN (5x5x0.9mm) package.

Pre and Post Change Summary:

	Pre Change	Post Change

Assembly Site	UTAC Thai Limited (UTL-1) LTD. (NSEB)	UTAC Thai Limited (UTL-1) LTD. (NSEB)	UTAC Thai Limited (UTL-3) (UTL3)
Wire material	CuPdAu	CuPdAu	CuPdAu
Die attach material	8600	8600	8600
Molding compound material	G700LTD	G700LTD	G700LTD
Lead frame material	EFTEC64T	EFTEC64T	EFTEC64T

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying UTL3 as an additional assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

March 2022

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:

	September 2021					**-->**	**March 2022**				
Workweek	36	37	38	39	40		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:

September 29, 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_GBNG-28IJEQ202_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-28IJEQ202

Date:
September 16, 2021

Qualification of UTL3 as an additional assembly site for selected SMSC SEC1100, SEC1110 and USX1011 device families available in 16L QFN (5x5x0.9mm) package.

Purpose: Qualification of UTL3 as an additional assembly site for selected SMSC SEC1100, SEC1110 and USX1011 device families available in 16L QFN (5x5x0.9mm) package.

Misc.	Assembly site	UTL3
	BD Number	TBD (refer to wire bond layout BD#A-058858A)
	MP Code (MPC)	XA602SUKXC01
	Part Number (CPN)	SEC1110-1100A5
	MSL information	MSL-3 @260C
	Assembly Shipping Media (T/R, Tube/Tray)	T/R
	Base Quantity Multiple (BQM)	5,000 units
	Reliability Site	MTAI
	CCB No.	4840
Lead-Frame	Paddle size	138x138 mils
	Material	EFTEC64T
	DAP Surface Prep	Ag Ring
	Treatment	Roughened
	Process	Etched
	Lead-lock	Dimple
	Part Number	FR1091
	Lead frame Thickness	8 mils
	Lead Plating	Matte Tin
	Strip Size	250x70 mm
	Strip Density	440 units/strip
Bond Wire	Material	CuPdAu
Die Attach	Part Number	8600
	Conductive	Yes
MC	Part Number	G700LTD
PKG	PKG Type	QFN
	Pin/Ball Count	16
	PKG width/size	5x5x0.9mm

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	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5		UTL3	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5		UTL3	30 bonds from a min. 5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30		5		UTL3	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5		UTL3	
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 +25°C. MSL-3@ 260C	231	15	3	738	0	15	SIGT	MTAI	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/192 hours Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	SIGT	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs/192 hrs Electrical test pre and post stress at +25°C	77	5	3	246	0	10	SIGT	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

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	Special Instructions
Temp Cycle	-65°C to +150°C for 500 cycles/1000 cycles Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	SIGT	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Affected Catalog Part Numbers (CPN)

USX1011-A5-02
SEC1100-A5-02
SEC1100-A5-02NC-TR
SEC1110-A5-02NC
SEC1110-A5-02
SEC1110-A5-02G1
SEC1110-A5-03G1
SEC1110-A5-04G1
SEC1110I-A5-02
SEC1110I-A5-02G1
SEC1110-A5-02NC-TR
SEC1110-A5-02-TR
SEC1110-1100A5
SEC1110I-A5-02-TR