Product Change Notification - LIAL-08UVRX401

Date:

23 Jan 2019

Product Category:

Others; Ethernet Controllers

Affected CPNs:

Notification subject:

CCB 3285 Final Notice: Qualification of ASE as a new assembly site for selected products of the 0.18um wafer technology at DBHU available in 48L LQFP (7x7x1.4mm) package.

Notification text:

PCN Status:

Final 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 ASE as a new assembly site for selected products of the 0.18um wafer technology at DBHU available in 48L LQFP (7x7x1.4 mm) package.

Pre Change:

Assembled at TICP assembly site using CEL-9200 mold compound material

Post Change:

Assembled at ASE assembly site using EME-G631H mold compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Taiwan IC Packing Corp. (TICP)	ASE Inc. (ASE)
Wire material	Au	Au
Die attach material	EN4900	EN4900
Molding compound material	CEL-9200	EME-G631H
Lead frame material	C7025	C7025

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve manufacturability by qualifying ASE as new assembly site

Change Implementation Status:

In Progress

Estimated First Ship Date:

February 23, 2019 (date code: 1908)

NOTE: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Time Table Summary:

	March 2018					->	January 2019					February 2019			
Workweek	09	10	11	12	13		01	02	03	04	05	06	07	08	09

Initial PCN Issue Date					X										
Qual Report Availability										X					
Final PCN Issue Date										X					
Estimated Implementation Date														X	

Method to Identify Change:
Traceability code
Qualification Report:
Please open the attachments included with this PCN labeled as PCN_#_Qual_Report
Revision History:
March 28, 2018: Issued initial notification.
April 20, 2018: Re-issued initial notification to update the Qual plan and to correct the date on initial notification revision history.
April 30, 2018: Re-issued initial notification to correct the attachment for the affected CPN list.
January 23, 2019: Issued final notification. Added the qualification report and estimated first ship date by February 23, 2019.
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_LIAL-08UVRX401_QUAL_REPORT.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 REPORT SUMMARY

PCN #: LIAL-08UVRX401

Date
January 03, 2019

Qualification of ASE as a new assembly site for selected products of the 0.18um wafer technology at DBHU available in 48L LQFP (7x7x1.4 mm) package.

Purpose: **Qualification of ASE as a new assembly site for selected products of the 0.18um wafer technology at DBHU available in 48L LQFP (7x7x1.4 mm) package.**

CCB No.: **3285**

Document Control Number: ML#122018009D Rev. A

Misc.	**Assembly site**	ASE
	BD Number	AAH@079530604 Rev. 0
	MP Code (MPC)	TKDB17CAAA02
	Part Number (CPN)	KSZ8851-16MLLU
Lead-Frame	**Paddle size**	5.0 mm X 5.0 mm
	Material	C7025
	Surface	Double Ring Ag Plating
	Treatment	Non-Rough
	Process	Stamped
	Part Number	A07953-0
	Lead Plating	Sn
Bond Wire	**Material**	Au
Die Attach	**Part Number**	EN4900F
	Conductive	Yes
MC	**Part Number**	EME-G631H
PKG	**PKG Type**	LQFP
	Pin/Ball Count	48
	PKG width/size	7 X 7 X 1.4 mm
Die	**Die Thickness**	14 mils
	Die Size	2216 x 2843 um
	Fab Process /Site	180nm_Dongbu

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	Test Site	Special Instructions
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hours of 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/ASE	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	5	ASE	30 bonds from a min.5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	ASE	30 bonds from a min.5 devices.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	ASE	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	SJ	
HTSL (High Temp Storage Life)	JESD22A-103. 150°C for 1008. Electrical test pre and post stress at +25°C and hot temp at +85°C	45	5	3	150	0	10	SJ	Spares should be properly identified.
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 MSL3 @+260°C	231	15	3	738	0	15	SJ	Spares should be properly identified
HAST	130°C/85% RH for 96hrs. Electrical test pre and post stress at +25°C and hot temp at +85°C	77	5	3	246	0	10	SJ	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96hrs. Electrical test pre and post stress at 25°C	77	5	3	246	0	10	SJ	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C/ +150°C for 500 cycles	77	5	3	246	0	15	SJ	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Affected Catalog Part Numbers (CPN)

KSZ8851-16MLL
KSZ8851-16MLLI
KSZ8851-16MLLI-TR
KSZ8851-16MLLJ
KSZ8851-16MLL-TR
KSZ8851-16MLLU
KSZ8851-16MLLU-TR
SPNY801062
SPNZ801062