



Product Change Notification - KSRA-28LZZV242

Date:

18 Mar 2019

Product Category:

Ethernet Controllers; Ethernet Switches

Affected CPNs:**Notification subject:**

CCB 3735 Initial Notice: Qualification of ASE as a new assembly site for selected Micrel products of KSZ88XX device families available in 128L PQFP (14x20x2.72mm) package.

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 ASE as a new assembly site for selected Micrel products of KSZ88XX device families available in 128L PQFP (14x20x2.72mm) package.

Pre Change:

Assembled at OSE Assembly site using G700L molding compound material

Post Change:

Assembled at ASE Assembly site using EME-G631H molding compound material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Orient Semiconductor Electronics, Ltd / OSE	ASE Inc. / ASE
Wire material	Au	Au
attach material	EN4900G	EN4900G
Molding compound material	G700L	EME-G631H
Lead frame material	C7025	C7025

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve productivity by qualifying ASE as a new assembly site

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

July 2019

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. 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	March 2019					-->	July 2019				
	09	10	11	12	13		27	28	29	30	31
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:

March 18, 2019: 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_KSRA-28LZZV242_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.

Affected Catalog Part Numbers (CPN)

KSZ8841-16MQL
KSZ8841-32MQL
KSZ8841-PMQL
KSZ8841-PMQLI
KSZ8842-16MQL
KSZ8842-32MQL
KSZ8842-PMQL
KSZ8842-PMQLI
KSZ8862-16MQL
KSZ8862-16MQL-FX
KSZ8862-32MQL
KSZ8862-32MQL-FX
KSZ8893FQL
KSZ8893FQL-FX
KSZ8893FQLI-FX
KSZ8893MQL
KSZ8893MQLI



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN#: KSRA-28LZZV242

**Date:
February 21, 2019**

**Qualification of ASE as a new assembly site for selected
Micrel products of KSZ88XX device families available in 128L
PQFP (14x20x2.72mm) package.**

Purpose: Qualification of ASE as a new assembly site for selected Micrel products of KSZ88XX device families available in 128L PQFP (14x20x2.72mm) package.

CCB No.: 3735

Misc.	Assembly site	ASE
	BD Number	AAH@K-I-0128-70A644-0
	MP Code (MPC)	TARA11C2AA02
	Part Number (CPN)	KSZ8841-32MQL
Lead-Frame	Paddle size	236x236
	Material	C7025
	DAP Surface Prep (Spot/Ring/DRP)	Double Ring Plating
	Treatment (roughened/ brown oxide(BOT) /micro-etched/ none)	None
	Process (stamped/Etched)	Stamped
	Lead-lock (Y/N)	No
	Part Number	1100566141
	Lead Plating (Matte Sn, SnPb, PPF)	Matte Sn
	Strip Size	90x270
	Strip Density	36 units/strip
Bond Wire	Material	Au
Die Attach	Part Number	EN-4900G
	Conductive	Yes
MC	Part Number	EME-G631H
PKG	PKG Type	QFP
	Pin/Ball Count	128L
	PKG width/size	14x20x2.72
Die	Die Thickness	20 mils
	Die Size	120x190
	Fab Process (site)	TSMSC 0.15um

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	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	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	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	30 bonds from a min. 5 devices.
Physical Dimmensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
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 / 260°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
UHASt	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	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; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.