



## Product Change Notification - KSRA-23ZKEX562

**Date:**

30 Mar 2020

**Product Category:**

Others; Ethernet PHYs

**Affected CPNs:****Notification subject:**

CCB 3285.001 Final Notice: Qualification of ASE as a new assembly site for selected Micrel KSZ8041xx device family available in 48L LQFP (7x7x1.4mm) package.

**Notification text:****CN 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 Micrel KSZ8041xx device family available in 48L LQFP (7x7x1.4mm) package.

**Pre Change:**

Assembled at OSE assembly site using CEL-9200HF 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
Die attach material	EN4900	EN4900
Molding compound material	CEL-9200HF	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 a new assembly site

**Change Implementation Status:**

In Progress

**Estimated First Ship Date:**


May 29, 2020 (date code: 2022)

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

**Time Table Summary:**

	March 2019	May 2020



Workweek	10	11	12	13	14		18	19	20	21	22
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 30, 2020:** Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on May 29, 2020

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-23ZKEX562\\_QUAL\\_REPORT.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

**Terms and Conditions:**

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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)

KSZ8041MLL

SPNZ801088

KSZ8041MLLI

KSZ8041MLL-TR

KSZ8041MLLI-TR

SPNY801088-TR



## **QUALIFICATION REPORT SUMMARY**

**PCN #: KSRA-23ZKEX562**

**Date**  
**January 03, 2019**

**Qualification of ASE as a new assembly site for selected Micrel products available in 48L LQFP (7x7x1.4mm) package. This KSZ8041xx device family will qualify by similarity (QBS).**

**Purpose:** Qualification of ASE as a new assembly site for selected Micrel products available in 48L LQFP (7x7x1.4mm) package. This KSZ8041xx device family will qualify by similarity (QBS).

<b><u>Misc.</u></b>	<b>Assembly site</b>	ASE
	<b>BD Number</b>	AAH@079530604 Rev. 0
	<b>MP Code (MPC)</b>	TKDB17CAAA02
	<b>Part Number (CPN)</b>	KSZ8851-16MLLU
	<b>CCB No.</b>	3285 and 3285.001
	<b>Document Control Number:</b>	ML#122018009D Rev. A
<b><u>Lead-Frame</u></b>	<b>Paddle size</b>	5.0 mm X 5.0 mm
	<b>Material</b>	C7025
	<b>Surface</b>	Double Ring Ag Plating
	<b>Treatment</b>	Non-Rough
	<b>Process</b>	Stamped
	<b>Part Number</b>	A07953-0
	<b>Lead Plating</b>	Sn
<b><u>Bond Wire</u></b>	<b>Material</b>	Au
<b><u>Die Attach</u></b>	<b>Part Number</b>	EN4900F
	<b>Conductive</b>	Yes
<b><u>MC</u></b>	<b>Part Number</b>	EME-G631H
<b><u>PKG</u></b>	<b>PKG Type</b>	LQFP
	<b>Pin/Ball Count</b>	48
	<b>PKG width/size</b>	7 X 7 X 1.4 mm

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.