

Product Change Notification - RMES-09VPXZ131

Date:

24 Aug 2019

Product Category:

Others; Ethernet PHYs

Affected CPNs:

人

Notification subject:

CCB 2922 Final Notice: Qualification of ASEK as an additional assembly site for selected products of the 0.18 wafer technology at DBHU available in 48L TQFP package using gold (Au) bond wire.

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 an additional assembly site for selected products of the 0.18 wafer technology at DBHU available in 48L TQFP package using gold (Au) bond wire.

Pre Change:

Assembled at TICP using gold (Au) bond wire and CEL9200 molding compound material.

Post Change:

Assembled at ASE using gold (Au) bond wire and G631H molding compound material.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Taiwan IC Packing Corp (TICP)	ASE Inc. (ASE)
Lead frame material	C7025	C7025
Wire material	Au	Au
Die attach material	EN4900	CRM-1076WA
Mold compound material	CEL9200	G631H

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve productivity by qualifying ASE as an additional assembly site.

Change Implementation Status:

In Progress

Estimated First Ship Date:

March 08, 2018 (date code:1810)

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

Time Table Summary:



	April 2017			->	February 2018		March 2018							
Workweek	14	15	16	17		05	06	07	08	09	10	11	12	13
Initial PCN Issue Date				Χ										
Qual Report Availability							Χ							
Final PCN Issue Date							Х							
Estimated Implementation Date											Χ			

Qualification Report:Method to Identify Change:

Traceability code

Please open the attachments included with this PCN labeled as PCN # Qual Report.

Revision History:

April 28, 2017: Issued initial notification.

May 8, 2017: Re-issued the initial notification to notify all affected customers.

February 08, 2018: Issued final notification. Attached the Qualification Report. Revised the affected parts list. Provided estimated first ship date on March 08, 2018.

April 20, 2018: Re-issued final PCN to update the Qualification Report.

August 24, 2019: Re-issued final PCN to revise affected CPN list to include parts that are only assembled in TICP.

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 RMES-09VPXZ131 Qual Report.pdf

Please contact your local <u>Microchip sales office</u> with questions or concerns regarding this notification.

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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.

RMES-09VPXZ131 - CCB 2922 Final Notice: Qualification of ASEK as an additional assembly site for selected products of the 0.18 wafer technology at DBHU available in 48L TQFP package using gold (Au) bond wire.

Affected Catalog Part Numbers (CPN)

KSZ8041FTL

KSZ8041FTLI

KSZ8041FTLI-TR

KSZ8041FTL-TR

KSZ8041TL

KSZ8041TLI

KSZ8041TLI-TR

KSZ8041TL-TR

SPNY801037

SPNZ801037

SPNZ801037-TR

SPNZ801053

SPNZ801053-TR

SPNZ801087

Date: Friday, August 23, 2019



QUALIFICATION REPORT SUMMARY

PCN#: RMES-09VPXZ131

Date
January 8, 2018

Qualification of ASE as an additional assembly site for selected products of the 0.18 wafer technology at DBHU available in 48L TQFP package using gold (Au) bond wire.

Purpose: Qualification of ASE as an additional assembly site for selected products of the 0.18 wafer technology at DBHU available in 48L TQFP package using gold (Au) bond wire.

CCB No.: 2922

Device Description:

Device	KSZ8041TLI-
Mask	TKDA1
Process	Dongbu, CMOS 0.18um
Document Revision	С

Package Information

Package Type	TQFP-48L
Package Body Size	7x7 x 1.0 mm
MP Codes	TKDA17CQAA02

Package Material

Lead frame	
Part number	A08588-0
Paddle size	3.81 mm X 3.81 mm
Material	C7025
Lead frame Internal Plating (spot/ring/double ring)	Double Ring Ag Plating
Treatment Surface roughened / brown oxide (BOT) micro-etched / none	N/A
Process (Etched/Stamped)	Stamped
Lead lock	No
Strip type	2 * 8
Shipped Strip/Singulated	Strip
Wire:	
Material	Au
Die Attach Epoxy:	
Part Number	CRM-1076WA
Conductive	Yes
Mold Compound:	
Part Number	EME-G631H
Lead finish:	Matte Sn

Manufacturing Information

Lot No.	WF No.	Date Code
ASE181400227.000	DU02917235824.100	1726VCA
ASE181400228.000	DU02917246315.100	1726VCA
ASE-181400229.000	DU02917246315.100	1726VCK

Qualification Material:

Test Lot	Lot 1	Lot 2	Lot 3
DEVICE	KSZ8041TLI	KSZ8041TLI KSZ8041TLI	
MASK, REV	TKDA17CQAA02/A4	TKDA17CQAA02/A4	TKDA17CQAA02/A4
WAFER FAB	DONGBU	DONGBU	DONGBU
WAFER PROCESS	CMOS 0.18 um	CMOS 0.18 um	CMOS 0.18 um
WAFER LOT	DU02917235824.100/	DU02917246315.100/	DU02917246315.100/
	167459	167457	167457
ASSEMBLY LOT	ASE181400227.000	ASE181400228.000	ASE-181400229.000
PACKAGE	TQFP-48	TQFP-48	TQFP-48
ASSEMBLY SITE	ASEK	ASEK	ASEK
FINAL TEST	OSE	OSE	OSE
QUAL#	37086-1	37086-2	37086-3
QUAL TESTS	HAST, UHAST, TCY, HTSL	HAST, UHAST, TCY, HTSL	HAST, UHAST, TCY, HTSL

Qualification Data:

Package Preconditioning

Test Method/ Condition	JEDEC J-STD-020D and JESD22-A113F
	MSL Level 3 soak and 260₀C peak Reflow
	Temperature
Lot #	Results (Fail/Pass)
Lot 1	0/260
Lot 2	0/260
Lot 3	0/260

Ubias HAST

Test Method/ Condition	JESD22-A118, Ta = +130 _° C/85%RH, 96 HRS
Lot #	Results (Fail/Pass)
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

HAST (Highly Accelerated Temperature and Humidity Stress Test)

Test Method/ Condition	JESD22-A110, Ta = +130 ₀ C/85%RH,VCC, 96 HRS
Lot #	Results (Fail/Pass)
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

TEMP CYCLE

Test Method/ Condition	JESD22-A104,Ta = -65°C / +150°C , 500 cycles
Lot #	Results (Fail/Pass)
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

High Temperature Storage Life

Test Method/ Condition	JESD22-A103 ,Ta = +150°C, 1000 hrs
Lot #	Results (Fail/Pass)
Lot 1	0/50

Wire Bond Pull

Test Method/ Condition	Mil. Std 883, Method 2011
Lot #	Results (Fail/Pass)
Lot 2	0/200
Lot 3	0/200

Wire Ball Shear

Test Method/ Condition	Mil. Std 883, Method 2011
Lot #	Results (Fail/Pass)
Lot 2	0/100
Lot 3	0/100

Wire Sweep

Lot #	Results (Fail/Pass)
Lot 1	0/20 wires (performed at ASE)
Lot 2	0/20 wires (performed at ASE)
Lot 3	0/20 wires (performed at ASE)

Solderability Test

Test Method/ Condition	JESD22B-102E
Lot #	Results (Fail/Pass)
Lot 1	0/ 5 (performed at ASE)
Lot 2	0/ 5 (performed at ASE)
Lot 3	0/ 5 (performed at ASE)

External Visual Inspection

Lot #	Results (Fail/Pass)
Lot 1	0/ 315 (performed at ASE)
Lot 2	0/ 315 (performed at ASE)
Lot 3	0/ 315 (performed at ASE)