

Product Change Notification - BCDM000042 - JAON-11SIPZ900

Date:

19 Mar 2019

Product Category:

Switching Regulators

Affected CPNs:



Notification subject:

CCB 1737.04 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the BCDM process technology to Microchip Fab.

Notification text:

PCN Status:

Final Notification

Note: This final PCN only pertains to the products listed in this PCN. Additional final PCNs may be issued for this combination of product type and process technology.

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:

Release to production of listed Micrel Regulator product type manufactured with the BCDM process technology to Microchip Fab.

NOTE: Please review the FAQ linked here for additional information about this change.

Pre Change:

Fabricated at Micrel fabrication site (San Jose, CA, USA) using 6 inch wafers.

Post Change:

Fabricated at Microchip fabrication site using 8 inch wafers.

Pre and Post Change Summary:

	Pre Change	Post Change
	Micrel fabrication site	
Fab Site		Microchip fabrication site
	(San Jose, CA, USA)	
Wafer Size	6 inch wafers	8 inch wafers

Impacts to Data Sheet:

None

Reason for Change:

To improve productivity with the closure of the Micrel fab as part of the integration of Micrel and Microchip.

Change Implementation Status:

In Progress

Estimated First Ship Date:

As identified for each CPN listed in the attached parts list.

Summary Time Table of notable events to date:

September 2015 -> April 2016 -> March 2019 April 2
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Workweek	36	37	38	39	40	14	15	16	17	09	10	11	12	13	14	15	16	17	18
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Markings to Distinguish Revised from Unrevised Devices:

Traceability code and shipping label see FAQ.

Revision History:

September 1, 2015: Issued initial notification as PCN number CYER-31JLEX869.

April 14, 2016: Issued intermediate notification as PCN number <u>JAON-11SIPZ900</u>. Attached the Qualification Report. Revised the estimated first ship date (EFSD) to inform that the EFSD will be revealed in the final PCN.

March 19, 2019: Issued final notification as PCN number JAON-11SIPZ900-BCDM000042 for listed Micrel's Regulator products manufactured with the BCDM process technology. Provided estimated first ship date (EFSD) for each CPN listed in the attached parts list.

The change described in this PCN does not alter Micrel's or Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

PCN JAON-11SIPZ900-BCDM000042 Qual Report.pdf PCN JAON-11SIPZ900-BCDM000042 Affected CPN.pdf PCN JAON-11SIPZ900-BCDM000042 Affected CPN.xls

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

Terms and Conditions:

If you wish to <u>receive Microchip PCNs via email</u> 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 <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.

JAON-11SIPZ900 - CCB 1737.04 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the BCDM process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

MIC2172YM

MIC3172YM

MIC2172YN

MIC2172YM-TR

MIC3172YM-TR

Date: Monday, March 18, 2019

JAON-11SIPZ900 - BCDM000042 - CCB 1737.04 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the BCDM process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-11SIPZ900-BCDM000042						
CATALOG_PART_NBR Estimated First Ship Date (EFSD)						
MIC2172YM	April 19, 2019					
MIC3172YM	April 19, 2019					
MIC2172YN	April 19, 2019					
MIC2172YM-TR	April 19, 2019					
MIC3172YM-TR	April 19, 2019					



QUALIFICATION REPORT SUMMARY RELIABILITY LABORATORY

PCN #: JAON-11SIPZ900-BCDM000042

Date March 24, 2016

Qualification of Microchip 8 inch Fabrication site for Micrel products manufactured with the BCDM Process Technology.

PART NUMBER / MASK	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC29302WU / 20801	TO263-5L	GTBF,CHINA	8"	BCDM

DIE QUALIFICATION RESULTS

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	168 HR Rej/ss	1000 HR Rej/ss	COMMENTS
HTOL	JESD22, Method 108	1543P	V21618566.000MQB	0/77	0/77	
High Temperature Operating Life Test	TA= + 125°C	1543P	V21618566.100MQA	0/77	0/77	
	VCC = +26V	1543P	V21618566.111MQA	0/77	0/77	

ELECTROSTATIC DISCHARGE

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
ESD-HBM	R= 1500 Ohms	1543P	V21618566.000MQB	+/-500V	0/3	
Human Body Model ATE Test @ Room +25C	C= 100 pF 1X +/- Voltage					Note: ESD ratings are device specific. All Products qualified on the 8" Micrel process technologies will have the same or better
ESD-CDM	JESD22-C101	1543P	V21618566.000MQB	+/-1500V	0/3	ESD and Latch-up performance as the 6" San
Charged Device Model	1X +/- Voltage					Jose Products.
ATE Test @ Room +25C						
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78	1543P	V21618566.000MQB	I/O LU	0/6	LU Same as 6" process
				O/V LU	0/6	
	TA = +25°C					

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	Rej/ss		COMMENTS
Level 3 Pre-conditioning Flow	JESD22-A113	1543P	V21618566.000MQB	0/321		
		1543P	V21618566.100MQA	0/143		
		1543P	V21618566.111MQA	0/143		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss		COMMENTS
PRESSURE POT	JESD22-A102	1543P	V21618566.000MQB	0/45		
With Level 3 Pre- conditioning	Ta = +121°C/100%RH	1543P	V21618566.100MQA	0/45		
Tpeak + 260°C 3X Reflow	15 PSIG	1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss		COMMENTS
HAST	JESD22-A110 (BIASED)	1543P	V21618566.000MQB	0/45		
With Level 3 Pre- conditioning	Ta= +130°C/85%RH	1543P	V21618566.100MQA	0/45		
Tpeak + 260°C 3X Reflow	VCC = +26V	1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 CY Rej/ss		COMMENTS
TEMP CYCLE	JESD22-A104	1543P	V21618566.000MQB	0/45		
With Level 3 Pre-	Ta = -65°C / +150°C	1543P	V21618566.100MQA	0/45		
Tpeak + 260°C 3X Reflow		1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss		COMMENTS
HTSL	JESD22-A103	1543P	V21618566.000MQB	0/76		
High Temperature Storage Life Tpeak + 260°C 3X Reflow	Ta = +150°C					
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 HR Rej/ss	1000 HR Rej/ss	COMMENTS
HTSL	JESD22-A103	1543P	V21618566.000MQB	0/76	0/76	
High Temperature Storage Life Tpeak + 260°C 3X Reflow	Ta = +175°C					
FLAMMABILITY	UL-94V-0 Certified	material fla	ompounds used by Micrel rammability certifications. Mouse and we verify the ce	licrel requires	a Certificate of	