### Product Change Notification - BCDM000032 - JAON-11SIPZ900

04 Sep 2017 **Product Category:** Driver / Interface ICs

**Notification subject:** CCB 1737.04 Final Notice: Release to production of listed Micrel Driver product type manufactured

with the BCDM process technology to Microchip Fab.

**PCN Status: Notification text:** 

**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.

**Microchip Parts Affected:** 

Please open the attachments found in the attachments field below labeled as

PCN\_#\_Affected\_CPN.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

**Description of Change:** 

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

NOTE: Please review the FAQ linked <u>here</u> for additional information about this change.

**Pre Change:** 

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

Fabricated at Microchip fabrication site using 8 inch wafers.

### **Pre and Post Change Summary:**

	Pre Change	Post Change
Fab Site	Micrel fabrication site (San Jose, CA, USA)	Microchip fabrication site
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:

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Workweek	36	37	38	39	40		14	15	16	17		35	36	37	38	39	40	41	42	43
Initial PCN Issue Date CYER- 31JLEX869	X																			
Qual Report Available JAON- 11SIPZ900								Х												
Final PCN Issue Date JAON- 11SIPZ900- BCDM000032													X							
Estimated First Ship Date														As att	ach	ed led list	in t pa	he rts		

## **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 JAON-11SIPZ900. Attached the Qualification Report. Revised the estimated first ship date (EFSD) to inform that the EFSD will be revealed in the final PCN.

September 4, 2017: Issued final notification as PCN number JAON-11SIPZ900-BCDM000032 for listed Micrel's Driver 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-BCDM000032\_Qual Report.pdf

PCN\_JAON-11SIPZ900-BCDM000032\_Affected\_CPN.pdf PCN\_JAON-11SIPZ900-BCDM000032\_Affected\_CPN.xls

Please contact your local Microchip sales office with questions or concerns regarding this notification.

### **Terms and Conditions:**

If you wish to change your product/process change notification (PCN) profile please log on to our website at http://www.microchip.com/PCN sign into myMICROCHIP to open the myMICROCHIP home page, then select a profile option from the left navigation bar.

To opt out of future offer or information emails (other than product change notification emails), click here to go to microchipDIRECT and login, then click on the "My account" link, click on "Update profile" and un-check the box that states "Future offers or information about Microchip's products or services."

JAON-11SIPZ900 - BCDM000032 - CCB 1737.04 Final Notice: Release to production of listed Micrel Driver product type manufactured with the BCDM process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-11SIPZ900-BCDM000032						
CATALOG_PART_NBR Estimated First Ship Date (EFSI						
MIC2981/82YN	October 13, 2017					
MIC2981/82YWM	October 13, 2017					
MIC2981/82YWM-TR	September 15, 2017					



# QUALIFICATION REPORT SUMMARY RELIABILITY LABORATORY

PCN #: JAON-11SIPZ900-BCDM000032

**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.	<b>168 HR</b> Rej/ss	<b>1000 HR</b> 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 ATE Test @ Room +25C	1X +/- Voltage					Jose Products.
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°C3X 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°C3X 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- conditioning Tpeak+260°C3X Reflow	Ta = -65°C / +150°C	1543P	V21618566.100MQA	0/45		
Tpeak+200 C3X Nellow		1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	<b>1000 HR</b> Rej/ss		COMMENTS
HTSL	JESD22-A103	1543P	V21618566.000MQB	0/76		
<b>High Temperature</b> <b>Storage Life</b> Tpeak+260°C3X 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	
<b>High Temperature</b> <b>Storage Life</b> Tpeak+260°C 3X Reflow	Ta = +175°C					
FLAMMABILITY	UL-94V-0 Certified	material fl	ompounds used by Micrel r ammability certifications. M house and we verify the ce	licrel requires	a Certificate of	