

Product Change Notification - BCDM000035 - JAON-11SIP 900

Date: 30 Nov 2017
Product Category: Power MOSFET Drivers
Notification subject: CCB 1737.04 Final Notice: Release to production of listed Micrel MOSFET Driver 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 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 .ls).

Description of Change:
 Release to production of listed Micrel MOSFET Driver 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
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:

	September 2015					-	April 2016				-	November 2017					-	January 2018			
Workweek	36	37	38	39	40		14	15	16	17		44	45	46	47	48		01	02	03	04

Initial PCN Issue Date CYER- 31JLEX869	X																		
Qual Report Available JAON- 11SIP 900									X										
Final PCN Issue Date JAON- 11SIP 900- BCDM000035															X				
Estimated First Ship Date																			As listed in the attached parts list.

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-11SIP 900](#). Attached the Qualification Report. Revised the estimated first ship date (EFSD) to inform that the EFSD will be revealed in the final PCN.
November 30, 2017: Issued final notification as PCN number [JAON-11SIP 900-BCDM000035](#) for listed Micrel s MOSFET 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-11SIP 900-BCDM000035 Affected CPN.pdf](#)
[PCN JAON-11SIP 900-BCDM000035 Qual Report.pdf](#)
[PCN JAON-11SIP 900-BCDM000035 Affected CPN. Is](#)

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

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MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: JAON-11SIPZ900-BCDM000035

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 High Temperature Operating Life Test	JESD22, Method 108	1543P	V21618566.000MQB	0/77	0/77	
	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 Human Body Model ATE Test @ Room +25C	R= 1500 Ohms C= 100 pF 1X +/- Voltage	1543P	V21618566.000MQB	+/-500V	0/3	Note: ESD ratings are device specific. All Products qualified on the 8" Micrel process technologies will have the same or better ESD and Latch-up performance as the 6" San Jose Products.
ESD-CDM Charged Device Model ATE Test @ Room +25C	JESD22-C101 1X +/- Voltage	1543P	V21618566.000MQB	+/-1500V	0/3	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78 TA = +25°C	1543P	V21618566.000MQB	I/O LU O/V LU	0/6 0/6	LU Same as 6" process

PACKAGE QUALIFICATION RESULTS						
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 With Level 3 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A102 Ta = +121°C/100%RH 15 PSIG	1543P	V21618566.000MQB	0/45		
		1543P	V21618566.100MQA	0/45		
		1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS	
HAST With Level 3 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A110 (BIASED) Ta= +130°C/85%RH VCC = +26V	1543P	V21618566.000MQB	0/45		
		1543P	V21618566.100MQA	0/45		
		1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 CY Rej/ss	COMMENTS	
TEMP CYCLE With Level 3 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A104 Ta = -65°C / +150°C	1543P	V21618566.000MQB	0/45		
		1543P	V21618566.100MQA	0/45		
		1543P	V21618566.111MQA	0/45		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS	
HTSL High Temperature Storage Life Tpeak + 260°C 3X Reflow	JESD22-A103 Ta = +150°C	1543P	V21618566.000MQB	0/76		
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 HR Rej/ss	1000 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life Tpeak + 260°C 3X Reflow	JESD22-A103 Ta = +175°C	1543P	V21618566.000MQB	0/76	0/76	
FLAMMABILITY	UL-94V-0 Certified	All mold compounds used by Micrel meet this standard. See the UL website on-line list of material flammability certifications. Micrel requires a Certificate of Compliance from the assembly house and we verify the certifications on the web.				

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Affected Catalog Part Numbers (CPN)

PCN_JAON-11SIPZ900-BCDM000035	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
MIC5020YM	January 10, 2018
MIC5020YM-TR	January 10, 2018