# Product Change Notification - BCD2000005 - JAON-22ZKEM744

**Date:** 14 Oct 2016

**Product Category:** Micrel

Notification subject: CCB 1737.02 Final Notice: Release to production of listed Micrel Power Switch product type

manufactured with the BCD2 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.

#### 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 Power Switch product type manufactured with the BCD2 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	Microchip fabrication site
1 ab one	(San Jose, CA, USA)	Wild out in Flag Teach of Street
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:

			oten 201	nbe 5	r	->		Febi 20	ruar )16	y	->		Octo 20	obe 116	r	1		embe )16	er
Workweek	36	37	38	39	40		05	06	07	80		40	41	42	43	44	45	46	47
Initial PCN Issue Date																			
CYER- 31JLEX869	Х																		

Qual Report Available											
JAON- 22ZKEM744					X						
Final PCN Issue Date											
JAON- 22ZKEM744- BCD2000005							X				
Estimated First Ship Date									As lis		

#### 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.

**February 25, 2016:** Issued intermediate notification as PCN number JAON-22ZKEM744. Attached the Qualification Report. Revised the estimated first ship date (EFSD) to inform that the EFSD will be revealed in the final PCN.

October 14, 2016: Issued final notification as PCN number JAON-22ZKEM744-BCD2000005 for listed Micrel's Power Switch products manufactured with the BCD2 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-22ZKEM744\_Qual Report.pdf

PCN\_JAON-22ZKEM744-BCD2000005\_Affected\_CPN.pdf PCN\_JAON-22ZKEM744-

BCD2000005 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

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-22ZKEM744-BCD2000005 - CCB 1737.02 Final Notice: Release to production of listed Micrel Power Switch product type manufactured with the BCD2 process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-22ZKEM744-BCD2000005								
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)							
MIC2026-2YM	November 25, 2016							
MIC2026-2YM-TR	October 28, 2016							
MIC2027-2YM	November 25, 2016							
MIC2027-2YM-TR	November 25, 2016							
MIC2027-2YWM	November 25, 2016							
MIC2027-2YWM-TR	November 25, 2016							
MIC2073-2YM	November 25, 2016							
MIC2073-2YM-TR	November 25, 2016							
MIC2074-2YM	November 25, 2016							
MIC2074-2YM-TR	November 25, 2016							
MIC2076-2YM	November 25, 2016							
MIC2076-2YM-TR	November 25, 2016							
MIC2077-2YM	November 25, 2016							
MIC2077-2YM-TR	November 25, 2016							
MIC2077-2YWM	November 25, 2016							
MIC2077-2YWM-TR	November 25, 2016							



# QUALIFICATION REPORT RELIABILITY LABORATORY

PCN #: JAON-22ZKEM744

Date February 8, 2016

Qualification of Microchip 8 inch Fabrication site for Micrel products manufactured with the BCD2 Process Technology.

PART NUMBER	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC2026-1YM /238A0/1	SOIC-8L	STARS, THAILAND	8"	BCD2

## **DIE QUALIFICATION RESULTS**

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	168 HR Rej/ss	<b>500 HR</b> Rej/ss	1000 HR Rej/ss	COMMENTS
HTOL	JESD22, Method 108	1542	V216.195868.000MQA	0/77	0/77	0/77	
High Temperature Operating Life Test	TA= + 125°C	1543	V216.195868.100MQA	0/77	0/77	0/77	
	VCC = 5.5V	1545	V216.216184.100MQA	0/77	0/77	0/77	

# ELECTROSTATIC DISCHARGE

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
ESD-HBM	R= 1500 Ohms	1542	V216.195868.000MQA	+/-2000V	0/3	
Human Body Model ATE Test @ Room +25C	C= 100 pF					Note: ESD ratings are device specific. All Products qualified on
	1X +/- Voltage					the 8" Micrel process technologies will have the
ESD-CDM	JESD22-C101	1542	V216.195868.000MQA	+/-1500V	0/3	same or better ESD and Latch-up performance as
Charged Device Model ATE Test @ Room +25C	1X +/- Voltage					the 6" San Jose Products.
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78	1542	V216.195868.000MQA	I/O LU	0/6	
	TA = +25°C			O/V LU	0/6	

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	Rej/ss	COMMENTS
Level 1 Pre-conditioning Flow	JESD22-A113	1542	V216.195868.000MQA	0/321	
		1543	V216.195868.100MQA	0/143	
		1545	V216.216184.100MQA	0/145	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
PRESSURE POT	JESD22-A102	1542	V216.195868.000MQA	0/45	
With Level 1 Pre- conditioning	Ta = +121°C/100%RH	1543	V216.195868.100MQA	0/45	
Tpeak + 260°C 3X Reflow	15 PSIG	1545	V216.216184.100MQA	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
HAST	JESD22-A110 (BIASED)	1542	V216.195868.000MQA	0/45	
With Level 1 Pre- conditioning	Ta= +130°C/85%RH	1543	V216.195868.100MQA	0/45	
Tpeak + 260°C 3X Reflow	JESD22-A118 (UNBIASED)	1545	V216.216184.100MQA	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 CY Rej/ss	COMMENTS
TEMP CYCLE	JESD22-A104	1542	V216.195868.000MQA	0/45	
With Level 1 Pre- conditioning	Ta = -65°C / +150°C	1543	V216.195868.100MQA	0/45	
Tpeak + 260°C 3X Reflow		1545	V216.216184.100MQA	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS
HTSL	JESD22-A103	1542	V216.195868.000MQA	0/76	
High Temperature Storage Life With Level 1 Pre- conditioning	Ta = +150°C				
HTSL	JESD22-A103	1542	V216.195868.000MQA	0/76	
High Temperature Storage Life With Level 1 Pre- conditioning	Ta = +175°C				
FLAMMABILITY	UL-94V-0 Certified	material f		icrel requires a	ard. See the UL website on-line list of a Certificate of Compliance from the he web.