



Product Change Notification - BCD1200026 - JAON-13MUGT016

Date:

18 Mar 2020

Product Category:

Backlight LED Drivers

Affected CPNs:**Notification subject:**

CCB 1737.05 Final Notice: Release to production of listed Micrel Display and LED Driver product type manufactured with the BCD12 process technology to Microchip Fab.

Notification text:**PCN Status:**

Final Notification

PCN Type:

Manufacturing Change

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 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 Display and LED Driver product type manufactured with the BCD12 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:

No

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:

Estimated First Ship Date (EFSD) are identified for each catalog part numbers (CPN) listed in the attached parts list. This can be found in the attachments field below labeled as PCN_#_Affected_CPN.

Summary Time Table of notable events to date:



	September 2015					->	March 2016					->	March 2020					April 2020				
Workweek	36	37	38	39	40		09	10	11	12	13		09	10	11	12	13	14	15	16	17	18
Initial PCN Issue Date <u>CYER-31JLEX869</u>	X																					
Qual Report Available <u>JAON-13MUGT016</u>									X													
Final PCN Issue Date JAON-13MUGT016-BCD1200026																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](#).

March 17, 2016: Issued intermediate notification as PCN number [JAON-13MUGT016](#). Attached the Qualification Report. Revised the estimated first ship date (EFSD) to inform that the EFSD will be revealed in the final PCN.

March 18, 2020: Issued final notification as PCN number JAON-13MUGT016-BCD1200026 for listed Micrel's Display and LED Driver products manufactured with the BCD12 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-13MUGT016-BCD1200026 Affected CPN.pdf](#)
- [PCN JAON-13MUGT016-BCD1200026 Qual Report.pdf](#)
- [PCN JAON-13MUGT016-BCD1200026 Affected CPN.xls](#)

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

Terms and Conditions:



If you wish to receive Microchip PCNs via email 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 change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

MIC3223YTSE

MIC3223YTSE-TR

JAON-13MUGT016 - BCD1200026 - CCB 1737.05 Final Notice: Release to production of listed Display and LED Driver product type manufactured with the BCD12 process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-13MUGT016-BCD1200026	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
MIC3223YTSE	April 30, 2020
MIC3223YTSE-TR	April 30, 2020



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: JAON-13MUGT016-BCD1200026

Date

March 10, 2016

**Qualification of Microchip 8 inch Fabrication site for Micrel products
manufactured with the BCD12 Process Technology.**

PART NUMBER	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC69153YME/2A802-004	Epad SOIC-8L	STARS, THAILAND	8"	BCD 1.2

DIE QUALIFICATION RESULTS

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	168 HR Rej/ss	500 HR Rej/ss	1000 HR Rej/ss	COMMENTS
HTOL High Temperature Operating Life Test	JESD22, Method 108	1548H	V216.236459.000MQB	0/77	0/77	0/77	
	TA= + 125°C	1546H	V216.236459.100MQA	0/77	0/77	0/77	
	VCC = +5.5V	1548H	V216.236459.200MQB	0/77	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	1546H	V216.236459.100MQA	+/-2000V	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	1546H	V216.236459.100MQA	+/-1500V	0/3	

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78 TA = +25°C	1546H	V216.236459.100MQA	I/O LU O/V LU	0/6 0/6	

PACKAGE QUALIFICATION RESULTS					
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	Rej/ss	COMMENTS
Level 2 Pre-conditioning Flow	JESD22-A113	1548H	V216.236459.000MQB	0/145	
		1546H	V216.236459.100MQA	0/330	
		1548H	V216.236459.200MQB	0/143	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
PRESSURE POT With Level 2 Pre- conditioning Tpeak + 260°C 3X Reflow	JESD22-A102 Ta = +121°C/100%RH 15 PSIG	1548H	V216.236459.000MQB	0/45	
		1546H	V216.236459.100MQA	0/45	
		1548H	V216.236459.200MQB	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
HAST With Level 2 Pre- conditioning Tpeak + 260°C 3X Reflow	JESD22-A110 (BIASED) Ta = +130°C/85%RH	1548H	V216.236459.000MQB	0/45	
		1546H	V216.236459.100MQA	0/45	
		1548H	V216.236459.200MQB	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 CY Rej/ss	COMMENTS
TEMP CYCLE With Level 2 Pre- conditioning Tpeak + 260°C 3X Reflow	JESD22-A104 Ta = -65°C / +150°C	1548H	V216.236459.000MQB	0/45	
		1546H	V216.236459.100MQA	0/45	
		1548H	V216.236459.200MQB	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life With Level 2 Pre- conditioning	JESD22-A103 Ta = +150°C	1546H	V216.236459.100MQA	0/76	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life	JESD22-A103 Ta = +175°C	1546H	V216.236459.100MQA	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.			