



MICROCHIP

QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-23PXEI807

Date
May 3, 2016

**Qualification of Microchip 8 inch Fabrication site for Micrel products
manufactured with the B2CD2 Process Technology.**

PART NUMBER / MASK	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC2288YD5 / 25802	TSOT-5L	UNISEM, CHENGDU,CHINA	8"	B2CD2
MIC7101YM5 / 25805	SOT-5L	STARS, THAILAND	8"	B2CD2
MIC7300YM5 / 25806	SOT-5L	STARS THAILAND	8"	B2CD2

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 TA= + 125°C	1548	V416222332.120MQB	0/77	0/77			
	VCC = 10v (2288) VCC = 12V (7101) VCC = 12V (7300)	1550	V416262990.100MQB	0/77	0/77			
		1552	V416273158.100MQC	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	1548	V416222332.120MQB	+/-500V +/-1000V +/-1500V +/-2000V	0/3 0/3 0/3 0/3			
	C= 100 pF	1550	V416262990.100MQB	+/-500V +/-1000V +/-1500V +/-2000V	0/3 0/3 0/3 0/3			
	1X +/- Voltage			1552	V416273158.100MQC		+/-500V +/-1000V +/-1500V +/-2000V	0/3 0/3 0/3 0/3
	ESD-CDM Charged Device Model ATE Test @ Room +25C	JESD22-C101	1548	V416222332.120MQB	+/-200V +/-400V +/-1000V +/-1500V		0/3 0/3 0/3 0/3	
		1X +/- Voltage	1550	V416262990.100MQB	+/-200V +/-400V +/-1000V +/-1500V		0/3 0/3 0/3 0/3	
			1552	V416273158.100MQC	+/-200V +/-400V +/-1000V +/-1500V		0/3 0/3 0/3 0/3	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS		
LATCH-UP	JESD-78	1548	V416222332.120MQB	I/O LU O/V LU	0/6 0/6			
	TA = +25°C	1550	V416262990.100MQB	I/O LU O/V LU	0/6 0/6			
		1552	V416273158.100MQC	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 1 Pre-conditioning Flow	JESD22-A113	1548	V416222332.120MQB	0/313	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
PRESSURE POT With Level 1 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A102 Ta = +121°C/100%RH 15 PSIG	1548	V416222332.120MQB	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	96 HR Rej/ss	COMMENTS
HAST With Level 1 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A110 (BIASED) Ta= +130°C/85%RH VCC = 10V	1548	V416222332.120MQB	0/77	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	500 CY Rej/ss	COMMENTS
TEMP CYCLE With Level 1 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A104 Ta = -65°C / +150°C	1548	V416222332.120MQB	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life With Level 1 Pre-conditioning Tpeak + 260°C 3X Reflow	JESD22-A103 Ta = +150°C	1548	V416222332.120MQB	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.			

Note:

For the B2CD2 package qualification, please see the below.

1. Qualification device/vehicle: 2288YD5
2. Fab qual lot #: V416222332.120MQB
3. Package type: TSOT-5L (UNIB)

JAON-23PXEI807 - CCB 1737.09 Intermediate Notice: Qualification of Microchip 8 inch Fabrication site for Micrel products manufactured with the B2CD2 Process Technology.

Affected Catalog Part Numbers (CPN)

PCN_JAON-23PXEI807
CATALOG_PART_NBR
LMC7101AYM5-TR
LMC7101BYM5-TR
LMC7101BYM5-TX
MIC2253-06YML-TR
MIC2287-15YML-TR
MIC2287-24YML-TR
MIC2287-34YML-TR
MIC2287C-15YML-TR
MIC2287C-24YML-TR
MIC2287C-34YML-TR
MIC2287CYD5-TR
MIC2287CYD5-TX
MIC2287YD5-TR
MIC2287YD5-TX
MIC2288YD5-TR
MIC2288YD5-TX
MIC2288YML-TR
MIC2289-15YML-TR
MIC2289-24YD6-TR
MIC2289-24YD6-TX
MIC2289-24YML-TR
MIC2289-34YML-TR
MIC2289C-34YD6-TR
MIC2289C-34YD6-TX
MIC2290YML-TR
MIC2291-15YML-TR
MIC2291-34YML-TR
MIC2291YD5-TR
MIC2292-15YML-TR
MIC2292-34YML-TR
MIC2292C-15YML-TR
MIC2293-15YML-TR
MIC2293-34YML-TR
MIC2293C-34YML-TR
MIC2295YD5-TR
MIC2295YML-TR
MIC2296YD5-TR
MIC2296YD5-TX
MIC2296YML-TR
MIC2297-15YML-TR
MIC2297-38YML-TR
MIC2297-42YML-TR
MIC2298-15YML-TR
MIC2299-15YML-TR

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Affected Catalog Part Numbers (CPN)

PCN_JAON-23PXEI807
CATALOG_PART_NBR
MIC2601YML-TR
MIC2602YML-TR
MIC2605YML-TR
MIC2606YML-TR
MIC2619YD6-TR
MIC2755YMM
MIC2778-1YM5-TR
MIC2778-2YM5-TR
MIC2779H-1YM5-TR
MIC2779H-2YM5-TR
MIC2779L-1YM5-TR
MIC2779L-2YM5-TR
MIC3287-24YD6-TR
MIC3287-24YD6-TX
MIC3287-24YML-TR
MIC3287YD5-TR
MIC3287YD5-TX
MIC4826YMM
MIC4826YMM-TR
MIC4827YMM
MIC4827YMM-TR
MIC5164YMM
MIC5164YMM-TR
MIC5165YMM
MIC5165YMM-TR
MIC5280YME
MIC5280YME-TR
MIC5281-3.3YMM
MIC5281-3.3YMME
MIC5281-3.3YMME-TR
MIC5281-3.3YMM-TR
MIC5281-5.0YMM
MIC5281-5.0YMME
MIC5281-5.0YMME-TR
MIC5281-5.0YMM-TR
MIC5281YMM
MIC5281YMME
MIC5281YMME-TR
MIC5281YMM-TR
MIC5282-3.3YMM
MIC5282-3.3YMME
MIC5282-3.3YMME-TR
MIC5282-3.3YMM-TR
MIC5282-5.0YMM

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Affected Catalog Part Numbers (CPN)

PCN_JAON-23PXEI807
CATALOG_PART_NBR
MIC5282-5.0YMME
MIC5282-5.0YMME-TR
MIC5282-5.0YMM-TR
MIC5282YMM
MIC5282YMME
MIC5282YMME-TR
MIC5282YMM-TR
MIC5283-3.3YME
MIC5283-3.3YME-T5
MIC5283-3.3YME-TR
MIC5283-3.3YML-T5
MIC5283-3.3YML-TR
MIC5283-5.0YME
MIC5283-5.0YME-T5
MIC5283-5.0YME-TR
MIC5283-5.0YML-T5
MIC5283-5.0YML-TR
MIC5283YME
MIC5283YME-T5
MIC5283YME-TR
MIC5283YML-T5
MIC5283YML-TR
MIC7111YM5-TR
MIC7111YM5-TX
MIC7122YMM
MIC7122YMM-TR
MIC7300YM5-TR
MIC7300YM5-TX
MIC7300YMM
MIC7300YMM-TR
MIC833YM5-TR
MIC834YM5-TR
SPN035007G-TR