



MICROCHIP

QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-26TTXD112

Date
April 18, 2016

**Qualification of Microchip 8 inch Fabrication site for Micrel products
manufactured with the BM2 Process Technology.**

PART NUMBER / MASK	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC49150WR /26801	SPAK-5L	GTBF-CHINA	8"	BM2

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	1547P	V216226282.000MQB	0/77	0/77	0/77	
	TA= + 125°C	1547P	V216226282.110MQC	0/77	0/77	0/77	
	VCC = 6.5V	1603P	V216226282.100MQC	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	1547P	V216226282.000MQB	+/-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	1547P	V216226282.000MQB	+/-1500V	0/3	

TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78	1547P	V216226282.000MQB	I/O LU	0/6	
	TA = +25°C			O/V LU	0/6	

--

PACKAGE QUALIFICATION RESULTS					
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	Rej/ss	COMMENTS
Level 3 Pre-conditioning Flow	JESD22-A113	1547P	V216226282.000MQB	0/315	
		1547P	V216226282.110MQC	0/143	
		1603P	V216226282.100MQC	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	1547P	V216226282.000MQB	0/45	
	Ta = +121°C/100%RH	1547P	V216226282.110MQC	0/45	
	15 PSIG	1603P	V216226282.100MQC	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)	1547P	V216226282.000MQB	0/45	
	Ta = +130°C/85%RH	1547P	V216226282.110MQC	0/45	
	VCC = 6.5V	1603P	V216226282.100MQC	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	1547P	V216226282.000MQB	0/45	
	Ta = -65°C / +150°C	1547P	V216226282.110MQC	0/45	
		1603P	V216226282.100MQC	0/45	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life With Level 3 Pre-conditioning	JESD22-A103 Ta = +175°C	1547P	V216226282.000MQB	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.			

JAON-26TTXD112-BM20000001 - CCB 1737.07 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the BM2 process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-26TTXD112-BM20000001	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
MIC49150WR	July 19, 2016
MIC49150WR-TR	July 19, 2016
MIC49150YMM	July 19, 2016
MIC49150YMM-TR	July 19, 2016