



MICROCHIP

QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-26ABPQ300

Date
April 5, 2016

**Qualification of Microchip 8 inch Fabrication site for Micrel products
manufactured with the CSI12 Process Technology.**

PART NUMBER/MASK	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC5249YMM/288A1	MSOP-8L	STARS, THAILAND	8"	CSI 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	1547	V216216098.100MQB	0/77	0/77	0/77	
	TA= + 125°C	1547	V216216098.120MQB	0/77	0/77	0/77	
	VCC = +6.0V	1549	V216266959.000MQF	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	V216216098.100MQB	+/-1500V	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	V216216098.100MQB	+/-1500V	0/3	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78 TA = +25°C	1546H	V216216098.100MQB	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	1547	V216216098.120MQB	0/143	
		1549	V216266959.000MQF	0/223	
		1608	V216266959.100MDQ	0/293	
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	1547	V216216098.120MQB	0/45	
	Ta = +121°C/100%RH	1549	V216266959.000MQF	0/45	
	15 PSIG	1609	V216266959.100MQD	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)	1547	V216216098.120MQB	0/44	
	Ta= +130°C/85%RH	1549	V216266959.000MQF	0/45	
	VCC = +6.0V	1609	V216266959.100MQD	0/45	
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	1547	V216216098.120MQB	0/45	
	Ta = -65°C / +150°C	1549	V216266959.000MQF	0/45	
		1609	V216266959.100MQD	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	JESD22-A103 Ta = +150°C	1547	V216216098.100MQB	0/76	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	1000 HR Rej/ss	COMMENTS
HTSL High Temperature Storage Life With Level 1 Pre-conditioning	JESD22-A103 Ta = +175°C	1547	V216216098.100MQB	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-26ABPQ300-CSI1200001 - CCB 1737.08 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the CSI12 process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN

PCN_JAON-26ABPQ300-CSI1200001	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
MIC5249-1.5YMM	July 19, 2016
MIC5249-1.5YMM-TR	July 19, 2016
MIC5249-2.5YMM	July 19, 2016
MIC5249-2.5YMM-TR	July 19, 2016