



QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN #: JAON-24XLPK873

Date
January 22, 2016

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

PART NUMBER	PACKAGE TYPE	ASSEMBLY LOCATION	WAFER SIZE	PROCESS NAME
MIC5205YM5	SOT23-5L	STARS THAILAND	8"	BCC

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	1541	V216.185667.000MQA	0/77	0/77	
	TA= + 125°C	1542	V216.185667.100MQA	0/77	0/77	
	VCC = +16V	1543	V216.185667.121MQA	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	1541	V216.185667.000MQA	+/-500V	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	1541	V216.185667.000MQA	+/-1000V	0/3	
TEST DESCRIPTION	METHOD/CONDITIONS	DATE CODE	LOT ID.	STRESS	RESULT Rej/ss	COMMENTS
LATCH-UP	JESD-78 TA = +25°C	1541	V216.185667.000MQA	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	1541	V216.185667.000MQA	0/323	
		1542	V216.185667.100MQA	0/145	
		1543	V216.185667.121MQA	0/145	
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	1541	V216.185667.000MQA	0/45	
	Ta = +121°C/100%RH	1542	V216.185667.100MQA	0/45	
	15 PSIG	1543	V216.185667.121MQA	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)	1541	V216.185667.000MQA	0/45	
	Ta = +130°C/85%RH	1542	V216.185667.100MQA	0/45	
	JESD22-A118 (UNBIASED)	1543	V216.185667.121MQA	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	1541	V216.185667.000MQA	0/45	
	Ta = -65°C / +150°C	1542	V216.185667.100MQA	0/45	
		1543	V216.185667.121MQA	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	1541	V216.185667.000MQA	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-24XLPK873-BCC0000002 - CCB 1737.03 Final Notice: Release to production of listed Micrel Regulator product type manufactured with the BCC process technology to Microchip Fab.

Affected Catalog Part Numbers (CPN)

PCN_JAON-24XLPK873-BCC0000002	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
MIC5295-5.0YD	July 29, 2016
MIC5295-3.0YD	July 29, 2016
MIC5295-3.3YD	July 29, 2016
MIC5295YD	July 29, 2016
MIC5233-3.3YS	July 29, 2016
MIC5225-5.0YM5-TX	July 29, 2016
MIC5235-1.5YM5-TX	July 29, 2016
MIC5235-5.0YM5-TX	July 29, 2016
MIC5235-2.5YM5-TX	July 29, 2016
MIC5235-3.3YM5-TX	July 29, 2016
MIC5235YM5-TX	July 29, 2016
MIC5225-1.5YM5-TR	July 29, 2016
MIC5225-5.0YM5-TR	July 29, 2016
MIC5225-2.5YM5-TR	July 29, 2016
MIC5225-2.7YM5-TR	July 29, 2016
MIC5225-3.0YM5-TR	July 29, 2016
MIC5225-1.8YM5-TR	July 29, 2016
MIC5225-3.3YM5-TR	July 29, 2016
MIC5225YM5-TR	July 29, 2016
MIC5233-2.5YM5-TR	July 29, 2016
MIC5233YM5-TR	July 29, 2016
MIC5233-3.3YM5-TR	July 29, 2016
MIC5233-1.8YM5-TR	July 29, 2016
MIC5233-3.0YM5-TR	July 29, 2016
MIC5233-5.0YM5-TR	July 29, 2016
MIC5235-1.5YM5-TR	July 29, 2016
MIC5235-5.0YM5-TR	July 29, 2016
MIC5235-2.5YM5-TR	July 29, 2016
MIC5235-2.7YM5-TR	July 29, 2016
MIC5235-3.0YM5-TR	July 29, 2016
MIC5235-2.8YM5-TR	July 29, 2016
MIC5235-1.8YM5-TR	July 29, 2016
MIC5235-3.3YM5-TR	July 29, 2016
MIC5235YM5-TR	July 29, 2016
SPN020140G-TR	July 29, 2016
SPN020180Y-TR	July 29, 2016
SPN020205-TR	July 29, 2016
SPN020127Y-TR	July 29, 2016
SPN020156G-TR	July 29, 2016
SPN020155G-TR	July 29, 2016
SPN020170G-TR	July 29, 2016
SPN020161G-TR	July 29, 2016

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Affected Catalog Part Numbers (CPN)

PCN_JAON-24XLPK873-BCC0000002	
CATALOG_PART_NBR	Estimated First Ship Date (EFSD)
SPN020203-TR	July 29, 2016
MIC5295-5.0YD-TR	July 29, 2016
MIC5295-3.0YD-TR	July 29, 2016
MIC5295-3.3YD-TR	July 29, 2016
MIC5295YD-TR	July 29, 2016
MIC5233-3.3YS-TR	July 29, 2016