

Product Change Notice

Original Issue Date: 4th Nov 2011
Revision Issue Date: 15th May, 2012

Change Type:

Assembly and Test related: Qualify alternate assembly and test sources.

Part Numbers:

Please refer to Appendix A.

- 1) RF ICs and Transistors.
- 2) Silicon PIN and Schottky Diodes

Description and Extent of Change:

To qualify alternate assembly and test contract manufacturers for the part numbers listed in Appendix A.

Reasons for Change:

This is part of Avago's strategy to secure and strengthen the supply chain and to multi-source its manufacturing sites to prevent shortfall of deliveries due to unforeseen circumstances such as natural disaster. This is in response to customer's request to multi-source Avago supply chain.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

The device specification, fit, form, function and product electrical performance remains the same. Quality and reliability qualification will be performed on products.

Effective Date of Change:

Product shipments using these changes are estimated to start per the dates in the table 1 below.

Table 1: Assembly and Test qualification samples readiness, 1st production shipment and qual result target dates

Product Line	Lead Count	Current Supplier (Assy + Test)	2nd Supplier Source (Assembly)	2nd Supplier Source (Test)	3rd Supplier Source (Test)	Customer samples readiness	1st production Shipment Readiness	Qual Results Readiness
SOT23	3L	CM A	CM C	CM C	CM G	22-Nov-11	30-Nov-11	15-Dec-11
	4L	CM A	CM C	CM C	CM G	22-Nov-11	30-Nov-11	15-Dec-11
	5L	CM A	CM C	CM C	CM G	22-Nov-11	30-Nov-11	15-Dec-11
SC70	3L	CM A	CM C	CM C	CM G	22-Nov-11	30-Nov-11	15-Dec-11
	4L	CM A	CM C	CM C	CM G	22-Nov-11	30-Nov-11	15-Dec-11
	6L	CM A	CM C	CM C	CM G	27-Nov-11	30-Nov-11	15-Dec-11
SOT89	4L	CM A	CM D	CM E	CM G	27-Nov-11	30-Nov-11	15-Dec-11
QFN	N/A	CM A	CM F	CM G		11-Dec-11	15-Dec-11	15-Jan-12

Note: Customer shipment is depending on the package and lead count, as well as the customer production needs and willingness to grant us PCN waiver.

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80, 5957-0258-80 and 971-5507-82

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.



Qualification vehicles used are in the table 2 below.

Table 2

Product Family	Package	Qualification Vehicle
Schottky Diode	SOT23	HSMS-2822
PIN Diode	SOT323	HSMP-389F
RFIC/Transistor	SOT363	MGA-81563
RFIC/Transistor	SOT89	ADA-4789
RFIC/Transistor	QFN	MGA-64606

Note: SOT-89 Package

1. MSL2 in 2nd source.
2. Taping option follows EIA481 standard.

Note: SOT/SC70 Package

1. CM A cover tape packing material is Heat Seal type, CM C cover tape packing material is Pressure seal type (UCT).
2. SC-70 (4L): CM A meet Avago Spec (0.25mm min for small lead width), CM C has drop in Avago soldering layout (0.15mm min for small lead width).

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80, 5957-0258-80 and 971-5507-82

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SC70 Parts By Lead Type
3L

ASML-5822-BLKG	HSMP-381F-BLKG	HSMP-481B-BLKG	HSMS-281B-BLKG	HSMS-285B-TR2G
ASML-5822-TR1G	HSMP-381F-TR1G	HSMP-481B-TR1G	HSMS-281B-TR1G	HSMS-285C-BLKG
ASML-5822-TR2G	HSMP-381F-TR2G	HSMP-481B-TR2G	HSMS-281B-TR2G	HSMS-285C-TR1G
ASML-5829-BLKG	HSMP-386B-BLKG	HSMP-482B-BLKG	HSMS-281C-BLKG	HSMS-285C-TR2G
ASML-5829-TR1G	HSMP-386B-TR1G	HSMP-482B-TR1G	HSMS-281C-TR1G	HSMS-286E-BLKG
ASML-5829-TR2G	HSMP-386B-TR2G	HSMP-482B-TR2G	HSMS-281C-TR2G	HSMS-286E-TR1G
AT-32032-BLKG	HSMP-386C-BLKG	HSMP-489B-BLKG	HSMS-281E-BLKG	HSMS-286E-TR2G
AT-32032-TR1G	HSMP-386C-TR1G	HSMP-489B-TR1G	HSMS-281E-TR1G	HSMS-286F-BLKG
AT-32032-TR2G	HSMP-386C-TR2G	HSMP-489B-TR2G	HSMS-281E-TR2G	HSMS-286F-TR1G
AT-41532-BLKG	HSMP-386E-BLKG	HSMS-270B-BLKG	HSMS-281F-BLKG	HSMS-286F-TR2G
AT-41532-TR1G	HSMP-386E-TR1G	HSMS-270B-TR1G	HSMS-281F-TR1G	QSMP-381F-TR1G
AT-41532-TR2G	HSMP-386E-TR2G	HSMS-270B-TR2G	HSMS-281F-TR2G	QSMP-381F-TR2G
HBAT-540B-BLKG	HSMP-386F-BLKG	HSMS-270C-BLKG	HSMS-282B-BLKG	QSMP-481B-TR1G
HBAT-540B-TR1G	HSMP-386F-TR1G	HSMS-270C-TR1G	HSMS-282B-TR1G	QSMS-286C-TR1G
HBAT-540B-TR2G	HSMP-386F-TR2G	HSMS-270C-TR2G	HSMS-282B-TR2G	QSMS-294C-BLKG
HBAT-540C-BLKG	HSMP-389B-BLKG	HSMS-280B-BLKG	HSMS-282C-BLKG	QSMS-294C-TR1G
HBAT-540C-TR1G	HSMP-389B-TR1G	HSMS-280B-TR1G	HSMS-282C-SG1G	QSMS-294C-TR2G
HBAT-540C-TR2G	HSMP-389B-TR2G	HSMS-280B-TR2G	HSMS-282C-TR1G	QSMS-295C-BLKG
HSMP-381B-BLKG	HSMP-389C-BLKG	HSMS-280C-BLKG	HSMS-282C-TR2G	QSMS-295C-TR1G
HSMP-381B-TR1G	HSMP-389C-TR1G	HSMS-280C-TR1G	HSMS-282E-BLKG	QSMS-295C-TR2G
HSMP-381B-TR2G	HSMP-389C-TR2G	HSMS-280C-TR2G	HSMS-282E-TR1G	HSMS-286B-BLKG
HSMP-381C-BLKG	HSMP-389E-BLKG	HSMS-280E-BLKG	HSMS-282E-TR2G	HSMS-286B-TR1G
HSMP-381C-TR1G	HSMP-389E-TR1G	HSMS-280E-TR1G	HSMS-282F-BLKG	HSMS-286B-TR2G
HSMP-381C-TR2G	HSMP-389E-TR2G	HSMS-280E-TR2G	HSMS-282F-TR1G	HSMS-286C-BLKG
HSMP-381E-BLKG	HSMP-389F-BLKG	HSMS-280F-BLKG	HSMS-282F-TR2G	HSMS-286C-TR1G
HSMP-381E-TR1G	HSMP-389F-TR1G	HSMS-280F-TR1G	HSMS-285B-BLKG	HSMS-286C-TR2G
HSMP-381E-TR2G	HSMP-389F-TR2G	HSMS-280F-TR2G	HSMS-285B-TR1G	

4L

ADA-4543-BLKG	ATF-34143-BLKG	ATF-55143-BLKG	MGA-71543-BLKG	QFET-3003-TR1G
ADA-4543-TR1G	ATF-34143-TR1G	ATF-55143-TR1G	MGA-71543-SG1G	QFET-3003-TR2G
ADA-4543-TR2G	ATF-34143-TR2G	ATF-55143-TR2G	MGA-71543-TR1G	QFET-3006-BLKG
ADA-4643-BLKG	ATF-35143-BLKG	ATF-58143-BLKG	MGA-71543-TR2G	QFET-3006-TR1G
ADA-4643-TR1G	ATF-35143-TR1G	ATF-58143-TR1G	MGA-72543-BLKG	QFET-3006-TR2G
ADA-4643-TR2G	ATF-35143-TR2G	ATF-58143-TR2G	MGA-72543-TR1G	QFET-3008-BLKG
ADA-4743-BLKG	ATF-38143-BLKG	MGA-52543-BLKG	MGA-72543-TR2G	QFET-3008-TR1G
ADA-4743-TR1G	ATF-38143-TR1G	MGA-52543-TR1G	QADA-4743-TR1G	QFET-3008-TR2G
ADA-4743-TR2G	ATF-38143-TR2G	MGA-52543-TR2G	QADA-4770-FJ1G	QFET-30143-TREG
ATF-33143-BLKG	ATF-54143-BLKG	MGA-53543-BLKG	QFET-3000-BLKG	
ATF-33143-TR1G	ATF-54143-TR1G	MGA-53543-TR1G	QFET-3000-TR1G	
ATF-33143-TR2G	ATF-54143-TR2G	MGA-53543-TR2G	QFET-3003-BLKG	

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ABA-31563-BLKG	AVT-52663-BLKG	HSMS-280L-BLKG	HSMS-282P-TR1G	MGA-62563-TR2G
ABA-31563-TR1G	AVT-52663-TR1G	HSMS-280L-TR1G	HSMS-282P-TR2G	MGA-68563-BLKG
ABA-31563-TR2G	AVT-53663-BLKG	HSMS-280L-TR2G	HSMS-282R-BLKG	MGA-68563-TR1G
ABA-32563-BLKG	AVT-53663-TR1G	HSMS-280M-BLKG	HSMS-282R-TR1G	MGA-68563-TR2G
ABA-32563-TR1G	HSMP-381L-BLKG	HSMS-280M-TR1G	HSMS-282R-TR2G	MGA-81563-BLKG
ABA-32563-TR2G	HSMP-381L-TR1G	HSMS-280M-TR2G	HSMS-285L-BLKG	MGA-81563-TR1G
ABA-51563-BLKG	HSMP-381L-TR2G	HSMS-280N-BLKG	HSMS-285L-TR1G	MGA-81563-TR2G
ABA-51563-TR1G	HSMP-386L-BLKG	HSMS-280N-TR1G	HSMS-285L-TR2G	MGA-82563-1HAG
ABA-51563-TR2G	HSMP-386L-TR1G	HSMS-280N-TR2G	HSMS-285P-BLKG	MGA-82563-BLKG
ABA-52563-BLKG	HSMP-386L-TR2G	HSMS-281K-BLKG	HSMS-285P-TR1G	MGA-82563-TR1G
ABA-52563-TR1G	HSMP-389L-BLKG	HSMS-281K-TR1G	HSMS-285P-TR2G	MGA-82563-TR2G
ABA-52563-TR2G	HSMP-389L-TR1G	HSMS-281K-TR2G	HSMS-286K-BLKG	MGA-83563-BLKG
ABA-53563-BLKG	HSMP-389L-TR2G	HSMS-281L-BLKG	HSMS-286K-TR1G	MGA-83563-TR1G
ABA-53563-TR1G	HSMP-389R-BLKG	HSMS-281L-TR1G	HSMS-286K-TR2G	MGA-83563-TR2G
ABA-53563-TR2G	HSMP-389R-TR1G	HSMS-281L-TR2G	HSMS-286L-BLKG	MGA-85563-BLKG
ABA-54563-BLKG	HSMP-389R-TR2G	HSMS-282K-BLKG	HSMS-286L-TR1G	MGA-85563-TR1G
ABA-54563-TR1G	HSMP-389T-BLKG	HSMS-282K-TR1G	HSMS-286L-TR2G	MGA-85563-TR2G
ABA-54563-TR2G	HSMP-389T-TR1G	HSMS-282K-TR2G	HSMS-286P-BLKG	MGA-86563-BLKG
AT-32063-BLKG	HSMP-389T-TR2G	HSMS-282L-BLKG	HSMS-286P-TR1G	MGA-86563-TR1G
AT-32063-TR1G	HSMP-389U-BLKG	HSMS-282L-TR1G	HSMS-286P-TR2G	MGA-86563-TR2G
AT-32063-TR2G	HSMP-389U-TR1G	HSMS-282L-TR2G	HSMS-286R-BLKG	MGA-87563-1HAG
ATF-36163-BLKG	HSMP-389U-TR2G	HSMS-282M-BLKG	HSMS-286R-TR1G	MGA-87563-BLKG
ATF-36163-TR1G	HSMP-389V-BLKG	HSMS-282M-TR1G	HSMS-286R-TR2G	MGA-87563-TR1G
ATF-36163-TR2G	HSMP-389V-TR1G	HSMS-282M-TR2G	MGA-61563-BLKG	MGA-87563-TR2G
AVT-50663-BLKG	HSMP-389V-TR2G	HSMS-282N-BLKG	MGA-61563-TR1G	QMGA-0019-TR1G
AVT-50663-TR1G	HSMS-280K-BLKG	HSMS-282N-TR1G	MGA-61563-TR2G	QMGA-0025-TR1G
AVT-51663-BLKG	HSMS-280K-TR1G	HSMS-282N-TR2G	MGA-62563-BLKG	QSBT-0056-BLKG
AVT-51663-TR1G	HSMS-280K-TR2G	HSMS-282P-BLKG	MGA-62563-TR1G	QSBT-0056-TR1G
				QSBT-0056-TR2G

QFN

MGA-64606-BLKG	MGA-65606-BLKG
MGA-64606-TR1G	MGA-65606-TR1G
MGA-64606-TR2G	MGA-65606-TR2G

SOT89

ADA-4789-BLKG	AVT-54689-BLKG	MGA-30789-BLKG	MGA-31289-BLKG	MGA-31689-BLKG
ADA-4789-TR1G	AVT-54689-TR1G	MGA-30789-TR1G	MGA-31289-TR1G	MGA-31689-TR1G
ATF-50189-BLK	AVT-55689-BLKG	MGA-30889-BLKG	MGA-31389-BLKG	MGA-53589-BLKG
ATF-50189-TR1	AVT-55689-TR1G	MGA-30889-TR1G	MGA-31389-TR1G	MGA-53589-TR1G
ATF-52189-BLK	MGA-30489-BLKG	MGA-30989-BLKG	MGA-31489-BLKG	QFET-3014-BLKG
ATF-52189-TR1	MGA-30489-TR1G	MGA-30989-TR1G	MGA-31489-TR1G	QFET-3014-TR1G
ATF-53189-BLK	MGA-30689-BLKG	MGA-31189-BLKG	MGA-31589-BLKG	QFET-3017-BLKG
ATF-53189-TR1	MGA-30689-TR1G	MGA-31189-TR1G	MGA-31589-TR1G	QFET-3017-TR1G
				QMGA-0020-TR1G

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AVAGO
TECHNOLOGIES
SOT Parts By Lead Type
3L

AT-30533-BLKG	HSMP-3822-2HAG	HSMP-3892-2HAG	HSMS-2804-BLKG	HSMS-2864-BLKG
AT-30533-TR1G	HSMP-3822-BLKG	HSMP-3892-BLKG	HSMS-2804-TR1G	HSMS-2864-TR1G
AT-30533-TR2G	HSMP-3822-TR1G	HSMP-3892-TR1G	HSMS-2804-TR2G	HSMS-2864-TR2G
AT-31033-BLKG	HSMP-3822-TR2G	HSMP-3892-TR2G	HSMS-2810-BLKG	HSMS-2852-BLKG
AT-31033-TR1G	HSMP-3823-BLKG	HSMP-3893-BLKG	HSMS-2810-TR1G	HSMS-2852-TR1G
AT-31033-TR2G	HSMP-3823-TR1G	HSMP-3893-TR1G	HSMS-2810-TR2G	HSMS-2852-TR2G
AT-32033-1HAG	HSMP-3823-TR2G	HSMP-3893-TR2G	HSMS-2812-BLKG	HSMS-2860-BLKG
AT-32033-2HAG	HSMP-3824-BLKG	HSMP-3894-BLKG	HSMS-2812-TR1G	HSMS-2860-TR1G
AT-32033-BLKG	HSMP-3824-TR1G	HSMP-3894-TR1G	HSMS-2812-TR2G	HSMS-2860-TR2G
AT-32033-TR1G	HSMP-3824-TR2G	HSMP-3894-TR2G	HSMS-2813-BLKG	HSMS-8101-BLKG
AT-32033-TR2G	HSMP-3830-BLKG	HSMP-4810-BLKG	HSMS-2813-TR1G	HSMS-8101-TR1G
AT-41533-BLKG	HSMP-3830-TR1G	HSMP-4810-TR1G	HSMS-2813-TR2G	HSMS-8101-TR2G
AT-41533-TR1G	HSMP-3830-TR2G	HSMP-4810-TR2G	HSMS-2814-BLKG	HSMS-8202-BLKG
AT-41533-TR2G	HSMP-3832-BLKG	HSMP-4820-BLKG	HSMS-2814-TR1G	HSMS-8202-TR1G
HBAT-5400-BLKG	HSMP-3832-TR1G	HSMP-4820-TR1G	HSMS-2814-TR2G	HSMS-8202-TR2G
HBAT-5400-TR1G	HSMP-3832-TR2G	HSMP-4820-TR2G	HSMS-2820-BLKG	QSBT-0038-TR1G
HBAT-5400-TR2G	HSMP-3833-BLKG	HSMP-4890-BLKG	HSMS-2820-TR1G	QSMP-3810-TR1G
HBAT-5402-BLKG	HSMP-3833-TR1G	HSMP-4890-TR1G	HSMS-2820-TR2G	QSMP-3814-TR1G
HBAT-5402-TR1G	HSMP-3833-TR2G	HSMP-4890-TR2G	HSMS-2822-1HAG	QSMP-4810-BLKG
HBAT-5402-TR2G	HSMP-3834-BLKG	HSMS-2700-BLKG	HSMS-2822-2HAG	QSMP-4810-TR1G
HSMP-3810-BLKG	HSMP-3834-TR1G	HSMS-2700-TR1G	HSMS-2822-BLKG	QSMP-4890-TR1G
HSMP-3810-TR1G	HSMP-3834-TR2G	HSMS-2700-TR2G	HSMS-2822-TR1G	QSMP-4891-TR1G
HSMP-3810-TR2G	HSMP-3860-BLKG	HSMS-2702-BLKG	HSMS-2822-TR2G	QSMS-2890-BLKG
HSMP-3812-BLKG	HSMP-3860-TR1G	HSMS-2702-TR1G	HSMS-2823-BLKG	QSMS-2890-TR1G
HSMP-3812-TR1G	HSMP-3860-TR2G	HSMS-2702-TR2G	HSMS-2823-TR1G	QSMS-2890-TR2G
HSMP-3812-TR2G	HSMP-3862-BLKG	HSMS-2800-1HAG	HSMS-2823-TR2G	QSMS-2913-TR2G
HSMP-3813-BLKG	HSMP-3862-TR1G	HSMS-2800-2HAG	HSMS-2824-BLKG	QSMS-2914-TR1G
HSMP-3813-TR1G	HSMP-3862-TR2G	HSMS-2800-BLKG	HSMS-2824-TR1G	QSMS-2915-TR1G
HSMP-3813-TR2G	HSMP-3863-BLKG	HSMS-2800-TR1G	HSMS-2824-TR2G	QSMS-2915-TR2G
HSMP-3814-BLKG	HSMP-3863-TR1G	HSMS-2800-TR2G	HSMS-2850-BLKG	QSMS-2920-BLKG
HSMP-3814-TR1G	HSMP-3863-TR2G	HSMS-2802-1HAG	HSMS-2850-TR1G	QSMS-2920-TR1G
HSMP-3814-TR2G	HSMP-3864-BLKG	HSMS-2802-2HAG	HSMS-2850-TR2G	QSMS-2920-TR2G
HSMP-3815-BLKG	HSMP-3864-TR1G	HSMS-2802-BLKG	HSMS-2862-BLKG	QSMS-2926-BLKG
HSMP-3815-TR1G	HSMP-3864-TR2G	HSMS-2802-TR1G	HSMS-2862-TR1G	QSMS-2926-TR1G
HSMP-3820-BLKG	HSMP-3890-BLKG	HSMS-2802-TR2G	HSMS-2862-TR2G	QSMS-8202-BLKG
HSMP-3820-TR1G	HSMP-3890-TR1G	HSMS-2803-BLKG	HSMS-2863-BLKG	QSMS-8202-TR1G
HSMP-3820-TR2G	HSMP-3890-TR2G	HSMS-2803-TR1G	HSMS-2863-TR1G	
HSMP-3822-1HAG	HSMP-3892-1HAG	HSMS-2803-TR2G	HSMS-2863-TR2G	

5L

HSMP-3816-BLKG	HSMP-3866-BLKG
HSMP-3816-TR1G	HSMP-3866-TR1G
HSMP-3816-TR2G	HSMP-3866-TR2G

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AT-30511-BLKG	HSMP-389D-BLKG	HSMS-2825-TR1G	MSA-0311-BLKG
AT-30511-TR1G	HSMP-389D-TR1G	HSMS-2825-TR2G	MSA-0311-TR1G
AT-30511-TR2G	HSMP-389D-TR2G	HSMS-2827-BLKG	MSA-0311-TR1MCG
AT-31011-BLKG	HSMS-2805-1HAG	HSMS-2827-TR1G	MSA-0311-TR2G
AT-31011-TR1G	HSMS-2805-2HAG	HSMS-2827-TR2G	MSA-0611-BLKG
AT-31011-TR2G	HSMS-2805-BLKG	HSMS-2828-BLKG	MSA-0611-TR1G
AT-32011-1HAG	HSMS-2805-TR1G	HSMS-2828-TR1G	MSA-0611-TR1MCG
AT-32011-2HAG	HSMS-2805-TR2G	HSMS-2828-TR2G	MSA-0611-TR2G
AT-32011-BLKG	HSMS-2808-BLKG	HSMS-2829-BLKG	MSA-0711-BLKG
AT-32011-TR1G	HSMS-2808-TR1G	HSMS-2829-TR1G	MSA-0711-TR1G
AT-32011-TR2G	HSMS-2808-TR2G	HSMS-2829-TR2G	MSA-0711-TR1MCG
AT-41511-1HAG	HSMS-2815-BLKG	HSMS-2855-BLKG	MSA-0711-TR2G
AT-41511-BLKG	HSMS-2815-TR1G	HSMS-2855-TR1G	MSA-2011-BLKG
AT-41511-H50	HSMS-2815-TR2G	HSMS-2855-TR2G	MSA-2011-TR1G
AT-41511-H90	HSMS-2817-BLKG	HSMS-2865-BLKG	MSA-2011-TR2G
AT-41511-TR1G	HSMS-2817-TR1G	HSMS-2865-TR1G	MSA-2111-BLKG
AT-41511-TR2G	HSMS-2817-TR2G	HSMS-2865-TR2G	MSA-2111-TR1G
HSMP-386D-BLKG	HSMS-2818-BLKG	HSMS-8207-BLKG	MSA-2111-TR2G
HSMP-386D-TR1G	HSMS-2818-TR1G	HSMS-8207-TR1G	MSA-3111-BLKG
HSMP-386D-TR2G	HSMS-2818-TR2G	HSMS-8207-TR2G	MSA-3111-TR1G
HSMP-3895-BLKG	HSMS-2825-1HAG	HSMS-8209-BLKG	MSA-3111-TR2G
HSMP-3895-TR1G	HSMS-2825-2HAG	HSMS-8209-TR1G	QSMS-2913-TR2G
HSMP-3895-TR2G	HSMS-2825-BLKG	HSMS-8209-TR2G	

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Qualification Report for Alternative Assembly & Test Sources
(PCN: V11-024-480035-0A)

Qualification Results:

MSL preconditioning (JESD22-A113) was performed on all devices prior to all reliability tests, except solderability test and ESD.

Preconditioning Level 1 (all devices except SOT89): 168hrs 85°C/85%RH + 3X IR Jedec PbFree Reflow, 260°C max

Preconditioning Level 2 (SOT89 only): 24hrs 125°C HTS + 168hrs 85°C/60%RH + 3X IR Jedec PbFree Reflow, 260°C max

Stress Test	Stress Condition	Duration	Number of Lots	Sample Size per Lot	SOT23 ¹	SOT323 ²	SOT363 ³	SOT89 ⁴
Wet High Temperature Reverse Bias (WHTRB)	HSMS-2822: 85°C/85%RH, Vr=12V HSMP-389F: 85°C/85%RH, Vr=80V	500 hrs	3	60 pcs	Passed	Passed	N/A	N/A
Air-to-Air Thermal Shock (ATMSK)	-65°C/+150°C, 10 mins dwell, <10 sec transfer	500 X	3	25 pcs	Passed	Passed	Passed	Passed
Liquid-to-Liquid Thermal Shock (LTMSK)	-65°C/+150°C, 5 mins dwell, <10 sec transfer	500 X	3	25 pcs	Passed	Passed	Passed	Passed
Solderability	Pb Free 245°C, 5 sec	2 X	3	22 pcs	Passed	Passed	Passed	Passed
ESD	HSMS-2822: MM 50V, HBM 600V HSMP-389F: MM 150V, HBM 350V MGA-81563: HBM 100V ADA-4789: MM 110V, HBM 600V	N/A	3	12 pcs 8 pcs 4 pcs 6 pcs	Passed	Passed	Passed	Passed
Wet High Temperature Operating Life (WHTOL)	85°C/85%RH, 3V, 42mA	500 hrs	3	24 pcs	N/A	N/A	Passed	N/A

Qual Vehicle

- 1) SOT-23: HSMS-2822
- 2) SOT-323: HSMP-389F
- 3) SOT-363: MGA-81563
- 4) SOT-89: ADA-4789

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80, 5957-0258-80 and 971-5507-82

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.