

# **PRODUCT CHANGE NOTICE**

**Product Improvement –  
Design Change for  
Intersil Product ISL7884xASRH /  
DSCC SMD 5962-07249**

**Refer to:  
PCN11004**

**Date: February 2, 2011**

February 2, 2011

To: Our Valued Intersil Customers

Subject: **Product Improvement – Design Change for Intersil Product ISL7884xARH / DSCC SMD 5962-07249**

This notice is to inform you that Intersil has made minor revisions to multiple mask levels for the ISL7884xARH / DSCC SMD 5962-07249 products. The minor mask modifications are limited to the ESD (Electrostatic Discharge) circuitry on the RTCT pin, which further improves ESD (Electrostatic Discharge) and EOS (Electrical Overstress) performance. Product incorporating the improved masks is completely compatible in any existing designs using the previous version of the product. The product qualification activity is complete.

ESD Summary:

Test	Old Silicon Design	New Silicon Design
Human Body Model (HBM)	250V - RTCT Pin	2000V - All Pins
	2000V - Other Pins	
Charged Device Model (CDM)	1000V	1000V
Machine Model (MM)	200V	200V

Products affected:

Intersil Part Number	SMD Part Number	Intersil Part Number	SMD Part Number
ISL78840ASRHD/PROTO	NA	ISL78843ASRHQD	5962R0724903QPC
ISL78840ASRHF/PROTO	NA	ISL78843ASRHQF	5962R0724903QXC
ISL78840ASRHQD	5962R0724901QPC	ISL78843ASRHVD	5962R0724903VPC
ISL78840ASRHQF	5962R0724901QXC	ISL78843ASRHVDS9000	5962R0724903VPC
ISL78840ASRHVD	5962R0724901VPC	ISL78843ASRHVF	5962R0724903VXC
ISL78840ASRHVF	5962R0724901VXC	ISL78843ASRHVFS9000	5962R0724903VXC
ISL78840ASRHVX	5962R0724901V9A	ISL78843ASRHVX	5962R0724903V9A
ISL78840ASRHX/SAMPLE	NA	ISL78843ASRHX/SAMPLE	NA
ISL78841ASRHD/PROTO	NA	ISL78845ASRHD/PROTO	NA
ISL78841ASRHF/PROTO	NA	ISL78845ASRHF/PROTO	NA
ISL78841ASRHQD	5962R0724902QPC	ISL78845ASRHQD	5962R0724904QPC
ISL78841ASRHQF	5962R0724902QXC	ISL78845ASRHQF	5962R0724904QXC
ISL78841ASRHVD	5962R0724902VPC	ISL78845ASRHVD	5962R0724904VPC
ISL78841ASRHVF	5962R0724902VXC	ISL78845ASRHVF	5962R0724904VXC
ISL78841ASRHVX	5962R0724902V9A	ISL78845ASRHVFS9000	5962R0724904VXC
ISL78841ASRHX/SAMPLE	NA	ISL78845ASRHVX	5962R0724904V9A
ISL78843ASRHD/PROTO	NA	ISL78845ASRHX/SAMPLE	NA
ISL78843ASRHF/PROTO	NA		

Qualification plans for a change in design are based on MIL-PRF-38535, JEDEC, and other applicable industry standards to confirm there is no impact to form, fit, function, or interchangeability of the product. The qualification summary is included for reference. The remainder of the manufacturing operations (wafer fabrication, assembly, package level electrical testing, Q/TCI testing, shipment, etc.) will continue to be processed to previously established conditions and systems.

There will be no change in external marking of the packaged parts. Parts affected by this change are identifiable via Intersil's internal traceability system and the date code marking. Product manufactured with the improved design will begin with date code **1037**.

Intersil will take all necessary actions to conform to customer requirements and to ensure the continued high quality and reliability of Intersil products being supplied. Upon approval from the qualifying activity (Defense Supply Center Columbus), customers may expect to receive product incorporating the improved design.

If you have concerns with this notice, Intersil must hear from you promptly. Please contact the nearest Intersil Sales Office or call the Intersil Corporate line at 1-888-468-3774, in the United States, or 1-321-724-7143 outside of the United States.

Regards,



Jon Brewster  
Intersil Corporation

PCN11004

CC: J. Touvell R. Hood P. Chesley

# PCN11004 – Qualification Summary

## Assembly Attributes:

CUSTOMER: STANDARD PRODUCT				CUSTOMER P/N: 5962R0724903VXC						
LOT NUMBER: 53905A05-E0X5HA				DATE/TRACE CODE: X1037AD						
OPER NO.	OPERATION	METHOD	CONDITIONS	SAMPLE PLAN	QTY IN	QTY OUT	NO OF REJ(S)	START DATE	FINISH DATE	COMMENTS
1	TEMP CYCLE	1010	C	100%	230	230	0	20SEP10	20SEP10	
2	CENTRIFUGE	2001	E	100%	230	230	0	20SEP10	20SEP10	
3	PIND TEST	2020	A	100%	230	230	0	20SEP10	20SEP10	PDA=0.00%
4	FINE LEAK	1014	A/B	100%	230	230	0	20SEP10	20SEP10	
5	GROSS LEAK	1014	C	100%	230	230	0	21SEP10	21SEP10	
6	FRAME REMOVAL	N/A	N/A	100%	230	230	0	21SEP10	21SEP10	
7	LOAD/VISUAL INSP	2009	N/A	100%	230	230	0	21SEP10	21SEP10	
8	FINAL ASSY	N/A	N/A	100%	230	230	0	22SEP10	22SEP10	

## Screening Attributes:

CUSTOMER: STD PRODUCT				CUSTOMER P/N: 5962R0724903VXC						
LOT NUMBER: 53905A05-E0X5HA				DATE/TRACE CODE: X1037AD						
OPER NO.	OPERATION	METHOD	CONDITIONS	SAMPLE PLAN	QTY IN	QTY OUT	NO OF REJ(S)	START DATE	FINISH DATE	COMMENTS
1000	LOT FORMATION	N/A	N/A	100%	230	230	0	22SEP10	22SEP10	
1610	SERIALIZE	N/A	N/A	100%	230	230	0	23SEP10	23SEP10	
1716	X-RAY	N/A	N/A	100%	230	229	1	27SEP10	27SEP10	
1140	INIT ELEC TEST	5004	+25C AC/DC	100%	229	229	0	05OCT10	06OCT10	
SPLIT LOT#E0X5HA = 160 UNITS / LOT#E0X5H = 69 UNITS										
2540	BURN-IN #1	1015	180HRS @ +135C	100%	160	160	0	06OCT10	14OCT10	
2640	INTER ELEC TEST	5004	+25C AC/DC	100%	160	160	0	14OCT10	14OCT10	
2690	DELTA	N/A	N/A	100%	160	160	0	14OCT10	14OCT10	COMBINED PDA=0.00%
2840	BURN-IN #2	1015	72HRS @ +135C	100%	160	160	0	15OCT10	18OCT10	
4140	INTER ELEC TEST	5004	+25C AC/DC	100%	160	160	0	18OCT10	18OCT10	
4810	GROUP A TEST	5005	+25C AC/DC	116(0)	116	116	0	18OCT10	18OCT10	PDA=0.00%
4360	DELTA	N/A	N/A	100%	160	160	0	18OCT10	18OCT10	COMBINED PDA=0.00%
4310	LOW TEMP TEST	5004	-58C AC/DC	100%	160	159	1	19OCT10	19OCT10	
4850	GROUP A TEST	5005	-55C AC/DC	116(0)	116	116	0	19OCT10	19OCT10	PDA=0.00%
4210	HIGH TEMP TEST	5004	+128C AC/DC	100%	159	158	1	19OCT10	19OCT10	
4830	GROUP A TEST	5005	+125C AC/DC	116(0)	116	116	0	19OCT10	19OCT10	PDA=0.00%
4500	LOT FORMATION	N/A	N/A	100%	158	158	0	19OCT10	19OCT10	
4620	BRAND	N/A	N/A	100%	158	158	0	19OCT10	19OCT10	
6000	VISUAL/MECH INSP	2009	N/A	100%	158	154	*4	20OCT10	20OCT10	*1 MISSING UNIT
6010	VISUAL AUDIT	2009	N/A	LTPD=5	45	45	0	21OCT10	21OCT10	
6100	LOT ACCEPTANCE	N/A	N/A	100%	154	154	0	22OCT10	22OCT10	

### TCI Group B Attributes:

Group B  
Attributes Data  
In Accordance with MIL-PRF-38535

Lot ID: 53905A05-E0X5HA	Assembly Site: HSS
Lot ID'S Combined:	Package Code: KBW
Date Code(s): X1037AD	Die Attach: AG GLASS
INTERSIL Part #: ISL78843ASRHVF	Lead Finish: C
Marketing Part #: 5962R0724903VXC	Fab Quarter: 10B

Subgroup	Description	Method	SSSS	SS/C	Rejects	Test Date	Comments
VB1	RESISTANCE TO SOLVENTS	2015	N/A	003/0	0	25 OCTOBER 10	
VB2	DIE SHEAR	2019	N/A	003/0	0	25 OCTOBER 10	
VB3	SOLDERABILITY	2003	N/A	022/0	0	25 OCTOBER 10	

### TCI Group C Attributes:

Group C  
Attributes Data  
In Accordance with MIL-PRF-38535

Lot ID: 53905A05-E0X5HA	Assembly Site: HSS
Lot ID'S Combined:	Package Code: KBW
Date Code(s): X1037AD	Die Attach: AG GLASS
INTERSIL Part #: ISL78843ASRHVF	Lead Finish: C
Marketing Part #: 5962R0724903VXC	Fab Quarter: 10B

Subgroup	Description	Method	SSSS	SS/C	Rejects	Test Date	Comments
VC2	+25C INITIAL ELECTRICALS	5005	N/A	047/0	0	25 OCTOBER 10	INCLUDES 2 SPARES
VC2	-55C INITIAL ELECTRICALS	5005	N/A	047/0	0	25 OCTOBER 10	
VC2	+125C INITIAL ELECTRICALS	5005	N/A	047/0	0	25 OCTOBER 10	
VC2	STEADY STATE LIFE	1005	N/A	047/0	0	29 NOVEMBER 10	800 HRS @ +135C
VC2	+25C FINAL ELECTRICAL	5005	N/A	047/0	0	01 DECEMBER 10	
VC2	DELTA	5005	N/A	047/0	0	01 DECEMBER 10	
VC2	-55C FINAL ELECTRICAL	5005	N/A	047/0	0	01 DECEMBER 10	
VC2	+125C FINAL ELECTRICAL	5005	N/A	047/0	0	01 DECEMBER 10	