# PRODUCT CHANGE NOTICE

## Alternate Bond Wire Material for Assembly of the Listed Intersil DFN/QFN Packaged Products

Refer to: PCN12032B

Date: August 20, 2012

**intersil** SIMPLY SMARTER<sup>®</sup>

#### August 20, 2012

#### To: Our Valued Intersil Customer

#### Subject: Alternate Bond Wire Material for Assembly of the Listed Intersil DFN/QFN Packaged Products –Carsem (CAS) Ipoh, Malaysia

PCN12032B is being issued to inform customers that Intersil has updated the list of affected products contained in notice PCN12032 that was issued on May 9, 2012. The ISL62882CHRTZ, ISL62882CHRTZ-T, ISL62883CHRTZ, ISL62883CHRTZ-T, ISL89163FRTAZ, ISL89163FRTAZ-T, ISL89163FRTAZ-TR5523, ISL9492ERZ, ISL9492ERZ-T, ISL95870BHRZ, ISL95870BHRZ-T, ISL95870BIRZ and ISL95870BIRZ-T products have been removed from the notice. As such, the changes outlined in PCN12032 will not be implemented for those products. The content of the original notice, PCN12032, with the updated product list is included below for reference.

This notice is to inform you that Intersil has qualified copper bond wire as an alternate to the gold bond wire currently used for assembly of the listed DFN/QFN (Dual/Quad Flat No-lead) packaged products at the Carsem (CAS) facility located in Ipoh, Malaysia. The advantages of copper bond wire include improved electrical conductivity of the wire, slower intermetallic growth, reduced wire sweep and equivalent reliability performance. This action will expand current capabilities and capacities to optimize Intersil's ability to meet customer's delivery requirements. As of this notice, all product and package specific qualification activities are complete.

Products affected:

ISL62882CIRTZ	ISL80101IR33Z	ISL80102IR25Z	ISL80103IRAJZ-TK
ISL62882CIRTZ-T	ISL80101IR33Z-T	ISL80102IR25Z-T	ISL80121IR50Z
ISL62883CIRTZ	ISL80101IR33Z-TK	ISL80102IR25Z-TK	ISL80121IR50Z-T
ISL62883CIRTZ-T	ISL80101IR50Z	ISL80102IRAJZ	ISL89163FRTBZ
ISL80101AIRAJZ	ISL80101IR50Z-T	ISL80102IRAJZ-T	ISL89163FRTBZ-T
ISL80101AIRAJZ-T	ISL80101IR50Z-TK	ISL80102IRAJZ-TK	ISL89163FRTCZ
ISL80101IR15Z	ISL80101IRAJZ	ISL80103IR18Z	ISL89163FRTCZ-T
ISL80101IR15Z-T	ISL80101IRAJZ-T	ISL80103IR18Z-T	ISL95870BHRZ-TS2490
ISL80101IR18Z	ISL80101IRAJZ-T7A	ISL80103IR18Z-TK	ISL95870BHRZ-TS2568
ISL80101IR18Z-T	ISL80101IRAJZ-TK	ISL80103IR25Z	ISL95870BHRZ-TS2705
ISL80101IR18Z-TK	ISL80101IRAJZ-TS2568	ISL80103IR25Z-T	ISL95870BIRZ-TS2568
ISL80101IR25Z	ISL80102IR18Z	ISL80103IR25Z-TK	ISL95871BHRZ
ISL80101IR25Z-T	ISL80102IR18Z-T	ISL80103IRAJZ	ISL95871BHRZ-T
ISL80101IR25Z-TK	ISL80102IR18Z-TK	ISL80103IRAJZ-T	

The Carsem (CAS) facility is ISO 9001:2008 and ISO/TS 16949:2009 certified and currently qualified as a primary supplier to Intersil for assembly of DFN/QFN packaged products. There will be no change in the mold compound, die attach, lead frame, or package outline drawing (POD). The qualified material set combinations for assembly and other key items are as follows:



Key Items	CAS Current	CAS New (Alternate)
Mold Compound	Sumitomo EME-G770	Sumitomo EME-G770
Die Attach	QMI 519	QMI 519
Bond Wire	1.0 and 1.3 mil Gold (Au)	1.0 and 1.2 mil Copper/Palladium (CuPd)
Moisture Sensitivity Level	1 or 2	3
Device Marking - Site Code	F	X

The qualification plan for copper bond wire assembly is designed using JEDEC and other applicable industry standards to confirm there is no impact to form, fit, function, or interchangeability of the product. A summary of the copper bond wire assembly qualification results is included for reference. The remainder of the manufacturing operations (wafer fabrication, package level electrical testing, shipment, etc.) will continue to be processed to previously established conditions and systems.

Products affected by this change that are assembled using either gold or copper bond wire material are identifiable via Intersil's internal traceability system and by the assembly site code (country of assembly) when marked on the devices. The site code for product assembled at CAS with copper bond wire is "X". The site code for product assembled at CAS with gold bond wire is "F".

Intersil will take all necessary actions to conform to agreed upon customer requirements and to ensure the continued high quality and reliability of products being supplied. Customers may expect to receive the listed products assembled using either gold or copper bond wire beginning *ninety* days from the date of the original notice, May 9, 2012, or earlier with approval.

If you have concerns with this change 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 <u>Brewster</u>

Jon Brewster Intersil Corporation

PCN12032B

CC: J. Touvell D. Decrosta D. Foster G. Liang J. Oh



### PCN12032B - CAS Reliability Qualification Summary

Device: ISL62883CHRTZ-T ( 40L 5x5 TQFN )						
Stress / Conditions	Duration	Test lots			Control	Result
		Lot #1	Lot #2	Lot #3	Lot	Rooun
MSL classification	L3 PBFree	0/22	0/22	0/22	0/22	PASS
uHAST 130C / 85% RH L3 PBFree	96 Hrs	0/26	0/26	0/26	0/78	PASS
Temp Cycle -65C to +150C L3 PBFree	500 cyc	0/80	0/80	0/80	0/80	PASS

Device: ISL95870BHRZ-TS2705 (20L 3X4 QFN)							
Stress / Conditions	Duration	Test lots			Control	Result	
		Lot #1	Lot #2	Lot #3	Lot	Rooun	
MSL classification	L3 PBFree	0/22	0/22	0/22	0/22	PASS	
uHAST 130C / 85% RH L3 PBFree	96 Hrs	0/26	0/26	0/26	0/78	PASS	
Temp Cycle -65C to +150C L3 PBFree	500 cyc	0/80	0/80	0/80	0/80	PASS	



## PCN12032B – CAS Reliability Qualification Summary – cont.

Device: ISL80121IR50Z-T (10L 3X3 DFN)						
Stress / Conditions	Duration	Test lots			Control	Result
		Lot #1	Lot #2	Lot #3	Lot	Rooun
MSL classification	L3 PBFree	0/22	0/22	0/22	0/22	PASS
uHAST 130C / 85% RH L3 PBFree	96 Hrs	0/26	0/26	0/26	0/78	PASS
Temp Cycle -65C to +150C L3 PBFree	500 cyc	0/80	0/80	0/80	0/80	PASS

Device: ISL9492ERZ (28L 4X4 DFN)							
Stress / Conditions	Duration	Test lots			Control	Result	
		Lot #1	Lot #2	Lot #3	Lot	Rooune	
MSL classification	L3 PBFree	0/22	0/22	0/22	0/22	PASS	
uHAST 130C / 85% RH L3 PBFree	96 Hrs	0/26	0/26	0/26	0/78	PASS	
Temp Cycle -65C to +150C L3 PBFree	500 сус	0/80	0/80	0/80	0/80	PASS	

