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# **PRODUCT CHANGE NOTICE**

## **Manufacturing Site Change for Assembly of the Listed Intersil LQFP Packaged Products**

**Refer to:  
PCN11135**

**Date: December 20, 2011**

December 20, 2011

To: Our Valued Intersil Customer

**Subject: Manufacturing Site Change for Assembly of the Listed Intersil LQFP Packaged Products – Amkor Philippines (ATP)**

This notice is to inform you that Intersil is changing the manufacturing site used for assembly of the listed LQFP (Low-profile Quad Flat Pack) packaged products. The assembly subcontractor, Amkor, is consolidating LQFP assembly operations from the Amkor Korea (ATK) facility to the Amkor Philippines (ATP) facility. This action will expand current capabilities and capacities to optimize Intersil's ability to meet customer's delivery requirements. The product and site-specific qualification activities are complete.

Product affected:

MERCURY-104N	PLUTO2-301N	SATURN-109N
MERCURY-204N	PLUTO2-301NR5460	TRITON-107N

The Amkor Philippines (ATP) facility is ISO 9001:2008 and ISO/TS 16949:2009 certified and has been a primary supplier of assembly packaging operations to Intersil for more than ten years. The ATP facility is currently Intersil qualified for assembly of various package styles, including LQFP packaged products. There will be no change to the moisture sensitivity level (MSL), mold compound, die attach, lead frame, bond wire size/material, or package outline drawing (POD). The qualified material set combinations are as follows:

Material Set	Current (ATK Site)	New (ATP Site)
Mold Compound	Sumitomo EME-G700L	
Die Attach	Ablebond 3230	
Bond Wire	1.0 mil Gold (Au)	

The assembly qualification plan was 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 qualification results are 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.

Product affected by this change is identifiable via Intersil's internal traceability system. In addition, product assembled at ATP may also be identified by the assembly site code (country of assembly) when marked on the devices. The assembly site code for the ATP facility is "L".

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Intersil will take all necessary actions to conform to agreed upon customer requirements and to ensure the continued high quality and reliability of Intersil products being supplied. Customers may expect to receive product assembled at ATP beginning *ninety* days from the date of this notification or upon depletion of existing material.

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 Brewster*

Jon Brewster  
Intersil Corporation

PCN11135

CC: J. Touvell F. Tsng B. Rehm D. Foster U. Mehta P. Graves C. Hartshorn M. Cheong

# PCN11135 – Reliability Qualification Summary

Legend					
Fail	Warning	Pass	QBE	Waived	NA

Reliability Test	ISL55169CNEZ (MERCURY) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-25	ISL55188CNEZ (SATURN) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-25	ISL55180CNEZ (EUROPA) fab'ed using BCD35 128 LEAD MQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-10-19	ISL55185CNEZ (TRITON) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-19	ISL551XXCNEZ (PLUTO2) fab'ed using BCD35 128 LEAD TQFP using SG700, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-19	Comments
Biased HAST	SRN110387 Rev 0 0/78 130C, 85%RH PRECOND L3 PBFREE 64hr completed 2011-11-02 disposition=R SRN110387 Rev 1 0/78 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-11-30 disposition=R	SRN110387 Rev 0 0/78 130C, 85%RH PRECOND L3 PBFREE 64hr completed 2011-11-02 disposition=R SRN110387 Rev 1 0/78 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-11-30 disposition=R	SRN110387 Rev 0 0/78 130C, 85%RH PRECOND L3 PBFREE 64hr completed 2011-11-02 disposition=R SRN110387 Rev 1 0/78 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-11-30 disposition=R	SRN110387 Rev 0 0/78 130C, 85%RH PRECOND L3 PBFREE 64hr completed 2011-11-02 disposition=R SRN110387 Rev 1 0/78 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-11-30 disposition=R	SRN110387 Rev 0 0/78 130C, 85%RH PRECOND L3 PBFREE 64hr completed 2011-11-02 disposition=R SRN110387 Rev 1 0/78 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-11-30 disposition=R	ISL55185: Rev. 0 – stress stopped after chamber malfunction. ISL55185: Rev. 1 – units damaged by reuse of board used during chamber malfunction.  ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL551XXCNEZ:  <b>Qualified by extension per ISL55185.</b>
Storage Life	SRN110305 Rev 0 0/78 150C BAKE AND REFLOW 2000hr completed 2011-12-19 disposition=A	SRN110305 Rev 0 0/78 150C BAKE AND REFLOW 2000hr completed 2011-12-19 disposition=A	SRN110305 Rev 0 0/78 150C BAKE AND REFLOW 2000hr completed 2011-12-19 disposition=A	SRN110305 Rev 0 0/78 150C BAKE AND REFLOW 2000hr completed 2011-12-19 disposition=A	SRN110305 Rev 0 0/78 150C BAKE AND REFLOW 2000hr completed 2011-12-19 disposition=A	ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL55185CNEZ:  <b>Qualified by extension per PLUTO2-301N.</b>
Destructive Wire Pull after Storage	SRN110305 Rev 0 0/3 completed 2011-12-15 disposition=A	SRN110305 Rev 0 0/3 completed 2011-12-15 disposition=A	SRN110305 Rev 0 0/3 completed 2011-12-15 disposition=A	SRN110305 Rev 0 0/3 completed 2011-12-15 disposition=A	SRN110305 Rev 0 0/3 completed 2011-12-15 disposition=A	ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL55185CNEZ:  <b>Qualified by extension per PLUTO2-301N.</b>
Moisture Sensitivity Classification	MRT11133 incomplete SRN110305 Rev 0 completed 2011-08-19 disposition=C	MRT11133 incomplete SRN110305 Rev 0 completed 2011-08-19 disposition=C	MRT11133 incomplete SRN110305 Rev 0 completed 2011-08-19 disposition=C	MRT11133 incomplete SRN110305 Rev 0 completed 2011-08-19 disposition=C	MRT11133 incomplete SRN110305 Rev 0 completed 2011-08-19 disposition=C	ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL55185CNEZ:  <b>Qualified by extension per PLUTO2-301N.</b>
Unbiased HAST	SRN110305 Rev 0 0/45 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-09-07 disposition=A	SRN110305 Rev 0 0/45 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-09-07 disposition=A	SRN110305 Rev 0 0/45 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-09-07 disposition=A	SRN110305 Rev 0 0/45 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-09-07 disposition=A	SRN110305 Rev 0 0/45 130C, 85%RH PRECOND L3 PBFREE 96hr completed 2011-09-07 disposition=A	ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL55185CNEZ:  <b>Qualified by extension per PLUTO2-301N.</b>

Reliability Test	ISL55169CNEZ (MERCURY) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-25	ISL55188CNEZ (SATURN) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-25	ISL55180CNEZ (EUROPA) fab'ed using BCD35 128 LEAD MQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-10-19	ISL55185CNEZ (TRITON) fab'ed using BCD35 128 LEAD TQFP using SG700L, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-19	ISL551XXCNEZ (PLUTO2) fab'ed using BCD35 128 LEAD TQFP using SG700, ABLEBOND 3230, 1.0MIL AU wire at ATP Plan Rel: 2011-12-19	Comments
Temperature Cycle	SRN110305 Rev 0 0/45 -40C TO 125C PRECOND L3 PBFREE 1000cy completed 2011-10-10 disposition=A	SRN110305 Rev 0 0/45 -40C TO 125C PRECOND L3 PBFREE 1000cy completed 2011-10-10 disposition=A	SRN110305 Rev 0 0/45 -40C TO 125C PRECOND L3 PBFREE 1000cy completed 2011-10-10 disposition=A	SRN110305 Rev 0 0/45 -40C TO 125C PRECOND L3 PBFREE 1000cy completed 2011-10-10 disposition=A	SRN110305 Rev 0 0/45 -40C TO 125C PRECOND L3 PBFREE 1000cy completed 2011-10-10 disposition=A	ISL55188CNEZ, ISL55169CNEZ, ISL55180CNEZ, ISL55185CNEZ: Qualified by extension per PLUTO2-301N.