
PRODUCT CHANGE NOTICE

**Alternate Manufacturing Site
for the Listed Intersil
QFN/TQFN Packaged
Products**

**Refer to:
PCN11005**

Date: January 17, 2011

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To: Our Valued Intersil Customer

Subject: **Alternate Manufacturing Site for the Listed Intersil QFN/TQFN Packaged Products**
– *STATS ChipPAC Malaysia*

This notice is to inform you that Intersil is using the STATS ChipPAC Malaysia (SCM) facility as an alternate site for performing assembly, final electrical test, tape and reel, packing, and shipping of the listed QFN/TQFN (Quad Flat No Lead / Thin Quad Flat No Lead) packaged products. Products manufactured at the SCM facility will be assembled using copper bond wire as an alternate to the gold bond wire currently used today. 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. The product and site-specific verification activities are complete.

The STATS ChipPAC Malaysia (SCM) facility is ISO 9001:2008 and ISO/TS 16949:2009 certified and currently qualified as a primary supplier to Intersil for testing and assembly of QFN/TQFN packaged products with both copper and gold bond wire material. The following summarizes the activities that were conducted prior to production release to confirm there is no impact to form, fit, function, or interchangeability of the product.

- Intersil supplied test software and product specific hardware is used at SCM.
- The test equipment correlation plan involves the testing of golden (control) units and a correlation lot of select products at SCM and the current site.
 - Correlation units were tested, their performance recorded, and the results analyzed to validate the set-up.
 - A correlation lot of approximately 1000 units were tested at the current site and retested at SCM. The test results from each site were compared.
 - Continuous monitoring and comparison of the data from lots processed at multiple sites are an ongoing function of the responsible product engineers.
- The visual/mechanical inspection and tape and reel operations are compliant to JEDEC industry standards used by all Intersil subcontractors.
- The assembly qualification activity is considered QBE (Qualified by Extension) as the existing processes, materials, and equipment used to assemble the current QFN/TQFN products at SCM will be used for these products going forward. The reliability QBE summary is included for reference. There will be no change in the package outline drawing (POD). Products assembled at SCM with copper bond wire are classified as moisture sensitivity level three (MSL 3 at 260°C per J-STD-020). The qualified material set combinations for the current facilities and SCM are as follows:

Material	Carsem-S (QFN)	Unisem (TQFN)	SCM (QFN/TQFN)
Mold Compound	Sumitomo EME-G770H	Sumitomo EME-G770HCD	Sumitomo EME-G770
Die Attach	Hysol QMI 519	CRM-1076NS	Ablebond A8290
Bond Wire	1.2 mil / 1.3 mil Gold (Au)	1.0 mil Gold (Au)	1.2 mil Copper (Cu)

Product affected by this change is identifiable via Intersil's internal traceability system. In addition, product assembled at SCM using copper bond wire material may also be identified by the assembly site code (country of assembly) when marked on the devices. The site code for product assembled at SCM with copper bond wire is "M".

Products affected:

ISL62881HRTZ	ISL6333AIRZ-T	ISL6334ACRZ-T
ISL62881HRTZ-T	ISL6333AIRZ-TS2705	ISL6334ACRZ-TS2568
ISL6314CRZ	ISL6333BCRZ	ISL6334AIRZ
ISL6314CRZS2704	ISL6333BCRZ-T	ISL6334AIRZ-T
ISL6314CRZ-T	ISL6333BIRZ	ISL6334AIRZ-TS2705
ISL6314CRZ-TS2568	ISL6333BIRZ-T	ISL6334CRZ
ISL6314CRZ-TS2701	ISL6333CCRZ	ISL6334CRZ-T
ISL6314CRZ-TS2704	ISL6333CCRZ-T	ISL6334CRZ-TS2568
ISL6314CRZ-TS2705	ISL6333CIRZ	ISL6334CRZ-TS2701
ISL6314IRZ	ISL6333CIRZ-T	ISL6334DCRZ
ISL6314IRZ-T	ISL6333CRZ	ISL6334DCRZ-T
ISL6314IRZ-TS2705	ISL6333CRZ-T	ISL6334DIRZ
ISL6333ACRZ	ISL6333CRZ-TS2568 **	ISL6334DIRZ-T
ISL6333ACRZ-T	ISL6333IRZ	ISL6334IRZ
ISL6333ACRZ-TS2568	ISL6333IRZ-T	ISL6334IRZ-T
ISL6333AIRZ	ISL6334ACRZ	ISL6334IRZ-TS2705

** SCM is an existing site approved for package test activities.

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. Customers may expect to receive product manufactured at either the current or the newly qualified sites beginning *ninety* days from the date of this notification 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 Brewster
Intersil Corporation

PCN11005

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PCN11005 – Reliability Summary

Stress / Conditions	Duration	ISL9214 3X3 QFN	ISL6236 5X5 QFN	ISL6312 7X7 QFN
HTOL Ta = 125C	1000 Hours	0/78	N/A	0/78
Biased HAST 130C / 85%	96 Hours	0/78	N/A	0/78
High Temp Storage Ta = 150C	1000 Hours	0/78	0/78	0/78
Acc. Bond Integrity (ABI) / Wire Pull Ta = 175C	96 Hours	0/15	0/15	0/15
ubHAST 130C / 85% RH	96 Hours	0/78	0/75	0/78
Temp Cycle IND +125C / -40C	1000 Cycles	0/234	0/234	0/234
Temp Cycle MIL +150C / -65C	500 Cycles	0/234	0/234	0/234