

Advance Product Change Notification

Issue Date: 08-Feb-2016

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201506013A



Management Summary

Dual sourcing of the LPC175X/6X products in the LQFP100, LQFP80 and TFBGA100 packages. Add Powerchip as a new FAB. Add SPIL as an additional assembly site for the LQFP100 and LQFP80 packages.

Change Category

[] Wafer Fab process[X] Assembly [X] Product Marking [X] Design **Process** [X] Assembly [] Wafer Fab [] Electrical spec./Test [] Mechanical Specification coverage materials Materials [X] Wafer Fab [X] Assembly [] Test Location [] Packing/Shipping/Labeling Location location

Dual sourcing of the LPC175X/6X products in the LQFP100, LQFP80, TFBGA100 packages

Details of this Planned Change

Dual sourcing of the LPC175X/6X products in the LQFP100, LQFP80 and TFBGA100 packages.

- No change in data sheet
- No change in ordering part number / 12NC
- Final test location remains unchanged at NXP Assembly and Test Kaohsiung (ATKH)

The silicon wafers are currently produced in SSMC. This qualification will enable producing the silicon wafers at the Powerchip FAB (PTCF12).

The die revision will be changed from Rev 6 to Rev 11 which includes design changes. The die pad has been optimized to allow for Cu wire bonding.

ATKH will be qualified for the LQFP100, LQFP80 and TFBGA100 packages with the following changes:

- 1. LQFP80/100 packages the mold compound will change from EME-G620A to CEL9240HF10AN
- 2. TFBGA100 package the wirebond will change from a 20um AuPd wire to 20um Pd coated Cu wire All other material will be the same as the existing BOM.

SPIL will be introduced as a second source for the LQFP80/100 packages using the following BOM:

- 1. 20um AuPd coated Cu wire
- 2. EME-G631H as the mold compound
- 3. CRM-1033BF as the die-attach material

Please see the attached Self Qualification Plan for FAB, Assembly and Test locations as well as detailed BOM information for each of the options.

Why do we Plan this Change

- Capacity increase, to support increased customer demand
- To support future growth
- Order Lead-Time improvement
- Reduce risk of supply by releasing in geographically dispersed production locations
- Improve flexibility

Identification of Affected Products

Top side marking

The products can be identified by the date code and lot code markings.

"H"=Powerchip and "a"=SPIL or "S"=ATKH is marked on the first two characters of line "C" of the product marking.

Product Availability

Sample Information

Samples are available from 03-Oct-2016

Production

Planned first shipment 02-Jan-2017

Impact

no impact to the product's functionality anticipated.

- No impact on form, fit, function, quality or reliability
- Electrical, mechanical parameters will remain unchanged with same distribution
- No change in external dimensions

Data Sheet Revision

No impact to existing datasheet

Disposition of Old Products

Existing inventory will be shipped until depleted

NXP will reserve the right to ship from any location based on market demand situation.

Timing and Logistics

The Self Qualification Report will be ready on 05-Sep-2016.

The Final PCN is planned to be issued on: 05-Sep-2016.

Your acknowledgement of this change, conform JEDEC JESD46 D, is expected till 09-Mar-2016. For issues related to operations please contact the Microcontroller Operations Manager Swaminathan

Ramesh at swaminathan.ramesh@nxp.com

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

NameAliasgar MandviwalaPositionSenior Quality Engineere-mail addressaliasgar.mandviwala@nxp.com

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NXP Quality Management Team.

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