Final Product Change Notification

201409013F01

Issue Date: 09-Jan-2015
Effective Date: 24-Apr-2015

Here's your personalized quality information concerning products Digi-Key purchased from NXP.
For detailed information we invite you to view this notification online

Management Summary

- Introduction (additional) Cu-wire bonding various packages in APB, APK and APM (Phase IV).
- Replace Au (gold) wire with Cu (copper) wire in bonding process.

Change Category

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

Introduction of Cu-wire bonding for TSSOP5 and DHVQFN20 packages (Phase IV)

Details of this Change

- Introduction of Cu-wire bonding for TSSOP5 and DHVQFN20 packages. (Phase IV).
- Replace Au (gold) wire with Cu (copper) wire in bonding process of TSSOP5 and DHVQFN20 packages at APB, APK and APM.

- DHVQFN20 / SOT764 at APB (NXP Semiconductors Assembly Plant Bangkok Thailand).
- DHVQFN20 / SOT764 at APK (NXP Semiconductors Assembly Plant Kaohsiung Taiwan).
- TSSOP5 / SOT353 at APM (NXP Semiconductors Assembly Plant Seremban Malaysia).

Why do we Implement this Change

- Superior electrical resistivity and better thermal conductivity.
- Improved wire-sweep resistance based on mechanical strength.
- A stronger interconnect, which gives improved wire pull and ball shear performance.
- Slower intermetallic growth, due to the lower diffusion rate of copper to aluminium, which gives a more reliable interconnect at high temperature.
- Better electrical performance due to the higher conductivity of copper wire in comparison to gold wire.
- Aligning with world technology trends, NXP starts to introduce copper wire for plastic SMD packages. Copper wire shows enhanced mechanical properties.
- Increased environmental friendliness (eco-friendly).

Identification of Affected Products

- The changed products can be identified by backward traceability of their marking date code.
- No change in product top side marking.

Product Availability

Sample Information

Samples are available upon request
Samples request for limited quantities can be made via sample store Hong Kong (eSample Center).

Production

Planned first shipment 24-Apr-2015

Impact

no impact to the product's functionality anticipated.

Data Sheet Revision

No impact to existing datasheet

Disposition of Old Products

Existing inventory will be shipped until depleted

Related Notifications

Notification	Issue Date	Effective Date	Title
201202018F01	05-Dec-2012	05-Mar-2013	Cu-wire bonding in APB and ASEN for SO14-16 packages
201208012F01	05-Dec-2012	05-Mar-2013	Cu-wire bonding in APB and ASEN for TSSOP14-16-20 packages
201304005F01	17-Apr-2013	16-Jul-2013	Cu-wire bonding in APB and ASEN for SO14-16 packages (Phase II)
201304006F01	17-Apr-2013	16-Jul-2013	Cu-wire bonding in APB and ASEN for TSSOP14-16-20 packages (Phase II)
201401003F01	15-Jun-2014	13-Sep-2014	Cu-wire bonding in APB and ASEN for TSSOP48-56 packages (Phase III)

Timing and Logistics

Your acknowledgement of this change, conform JEDEC JESD46 D, is expected till 08-Feb-2015.

Remarks

- No change to form, fit or function anticipated.
- No influence on quality or reliability anticipated.
- No change to datasheet anticipated.
- No change in ordering part number / 12NC.
- No change in product top side marking.

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:

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Position QA engineering Logic Products
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At NXP Semiconductors we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards.
Customer Focus, Passion to Win.

NXP Quality Management Team.

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ: NXPI) provides High Performance Mixed Signal and Standard Product solutions that leverage its leading RF, Analog, Power Management, Interface, Security and Digital Processing expertise. These innovations are used in a wide range of automotive, identification, wireless infrastructure, lighting, industrial, mobile, consumer and computing applications.

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Changed Orderable Part#	Changed Part 12NC	Changed Part Description	Package Outline	Package Name	Status
74HC1G00GW,125	935245610125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G04GW,125	935245650125	PICO GATE	SOT353-1	UMT5	RFS
74HCT1G08GW,125	935245660125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G08GW,125	935245670125	PICO GATE	SOT353-1	UMT5	RFS
74HCT1G125GW,125	935245680125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G125GW,125	935245690125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G126GW,125	935245710125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G14GW,125	935245730125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G32GW,125	935245750125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G66GW,125	935245770125	PICO GATE	SOT353-1	UMT5	RFS
74HC1G86GW,125	935245790125	PICO GATE	SOT353-1	UMT5	RFS
74HC1GU04GW,125	935261178125	PICO GATE	SOT353-1	UMT5	RFS
74AHCT1G00GW,125	935262749125	74AHCT1G00	SOT353-1	UMT5	RFS
74AHCT1G04GW,125	935262752125	74AHCT1G04	SOT353-1	UMT5	RFS
74AHC1G32GW,125	935262756125	74AHC1G32	SOT353-1	UMT5	RFS
74AHCT1G32GW,125	935262757125	74AHCT1G32	SOT353-1	UMT5	RFS
74AHCT1G32GW,125	935262757125	74AHCT1G32	SOT353-1	UMT5	RFS
74AHC1G00GW,125	935262777125	74AHC1G00	SOT353-1	UMT5	RFS
74AHC1G126GW,125	935263003125	74AHC1G126	SOT353-1	UMT5	RFS
74AHC1G86GW,125	935263006125	74AHC1G86	SOT353-1	UMT5	RFS
74AHC1G86GW,125	935263006125	74AHC1G86	SOT353-1	UMT5	RFS
74AHCT1G14GW,125	935263008125	74AHCT1G14	SOT353-1	UMT5	RFS
74AHC1G14GW,125	935263009125	74AHC1G14	SOT353-1	UMT5	RFS
74AHC1GU04GW,125	935263016125	74AHC1GU04	SOT353-1	UMT5	RFS
74AHC1G79GW,125	935263094125	74AHC1G79	SOT353-1	UMT5	RFS
74AHC1G79GW,125	935263094125	74AHC1G79	SOT353-1	UMT5	RFS
74LVC1G06GW,125	935266680125	LV OPEN DRAIN INVERTER	SOT353-1	UMT5	RFS
74LVC1G07GW,125	935266681125	LV OPEN DRAIN BUFFER	SOT353-1	UMT5	RFS
74AHC1G07GW,125	935267470125	OPEN DRAIN BUFFER	SOT353-1	UMT5	RFS
74LVC1G02GW,125	935268379125	LV SINGLE 2-INPUT NOR GATE	SOT353-1	UMT5	RFS
74LVC1G08GW,125	935268380125	LV SINGLE 2-INPUT AND GATE	SOT353-1	UMT5	RFS
74LVC1G32GW,125	935268381125	LV SINGLE 2-INPUT OR GATE	SOT353-1	UMT5	RFS
74LVC1G04GW,125	935268456125	LV SINGLE INVERTER	SOT353-1	UMT5	RFS
74LVC1G04GW,125	935268456125	LV SINGLE INVERTER	SOT353-1	UMT5	RFS
74AHC1G66GW,125	935268459125	ANALOG SWITCH	SOT353-1	UMT5	RFS
74LVC1G14GW,125	935268595125	LV SINGLE INVERTER SCHMITT TRIGGER	SOT353-1	UMT5	RFS
74LVC1G14GW,125	935268595125	LV SINGLE INVERTER SCHMITT TRIGGER	SOT353-1	UMT5	RFS
74LVC1GU04GW,125	935268596125	LV SINGLE INVERTER UNBUFFERED	SOT353-1	UMT5	RFS
74LVC1GU04GW,125	935268596125	LV SINGLE INVERTER UNBUFFERED	SOT353-1	UMT5	RFS
74LVC1G79GW,125	935268675125	LV SINGLE D-TYPE FLIP FLOP	SOT353-1	UMT5	RFS
74LVC1G80GW,125	935268676125	74LVC1G80	SOT353-1	UMT5	RFS
74LVC1G125GW,125	935268720125	LV SINGLE 3-STATE BUFFER	SOT353-1	UMT5	RFS
74LVC1G125GW,125	935268720125	LV SINGLE 3-STATE BUFFER	SOT353-1	UMT5	RFS
74LVC1G126GW,125	935268721125	LV SINGLE 3-STATE BUFFER	SOT353-1	UMT5	RFS
74LVC1G86GW,125	935268824125	LV SINGLE EXCLUSIVE OR GATE	SOT353-1	UMT5	RFS
74LVC1G66GW,125	935269058125	LV ANALOG SWITCH	SOT353-1	UMT5	RFS
74LVC1G17GW,125	935270079125	74LVC1G17	SOT353-1	UMT5	RFS
74LVC244ABQ,115	935272505115	74LVC244BQ	SOT764-1	DHVQFN20	RFS
74LVC2244ABQ,115	935273000115	74LVC2244A	SOT764-1	DHVQFN20	RFS
74LVC573ABQ,115	935273507115	74LVC573A	SOT764-1	DHVQFN20	RFS
74LVC574ABQ,115	935273517115	74LVC574A	SOT764-1	DHVQFN20	RFS
74LVC245ABQ,115	935273595115	74LVC245A	SOT764-1	DHVQFN20	RFS
74LVC541ABQ,115	935274977115	74LVC541A	SOT764-1	DHVQFN20	RFS
74LVC373ABQ,115	935275055115	74LVC373A	SOT764-1	DHVQFN20	RFS
74LVC1G38GW,125	935276661125	74LVC1G38GW	SOT353-1	UMT5	RFS
74AUP1G00GW,125	935278998125	74AUP1G00GW	SOT353-1	UMT5	RFS
74AUP1G04GW,125	935279003125	74AUP1G04GW	SOT353-1	UMT5	RFS
74AUP1G06GW,125	935279004125	74AUP1G06GW	SOT353-1	UMT5	RFS
74AUP1G07GW,125	935279017125	74AUP1G07GW	SOT353-1	UMT5	RFS
74AUP1G07GW,125	935279017125	74AUP1G07GW	SOT353-1	UMT5	RFS
74AUP1G08GW,125	935279019125	74AUP1G08GW	SOT353-1	UMT5	RFS
74AUP1G14GW,125	935279022125	74AUP1G14GW	SOT353-1	UMT5	RFS
74AUP1G14GW,125	935279022125	74AUP1G14GW	SOT353-1	UMT5	RFS
74AUP1G17GW,125	935279024125	74AUP1G17GW	SOT353-1	UMT5	RFS
74AUP1G32GW,125	935279026125	74AUP1G32GW	SOT353-1	UMT5	RFS
74AUP1G34GW,125	935279028125	74AUP1G34GW	SOT353-1	UMT5	RFS

74AUP1G80GW,125	935279049125	74AUP1G80GW	SOT353-1	UMT5	RFS
74AUP1G125GW,125	935279054125	74AUP1G125GW	SOT353-1	UMT5	RFS
74AUP1G126GW,125	935279056125	74AUP1G126GW	SOT353-1	UMT5	RFS
74AUP1G132GW,125	935279058125	74AUP1G132GW	SOT353-1	UMT5	RFS
74AUP1G240GW,125	935279061125	74AUP1G240GW	SOT353-1	UMT5	RFS
74AUP1GU04GW,125	935279065125	74AUP1GU04GW	SOT353-1	UMT5	RFS
74AHC1G09GW,125	935279914125	74AHC1G09GW	SOT353-1	UMT5	RFS
74AUP1T34GW,125	935280516125	74AUP1T34GW	SOT353-1	UMT5	RFS
74LVC1G34GW,125	935280576125	74LVC1G34GW	SOT353-1	UMT5	RFS
74AUP1G09GW,125	935288302125	2-input AND gate with open-drain	SOT353-1	UMT5	RFS