

Final Product Change Notification

201708004F01

Issue Date: 01-Sep-2017
Effective Date: 01-Dec-2017

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Management Summary

- Replace Au (gold) wire with Cu (copper) wire in bonding process
- Expansion of second source ASEN assembly

Change Category

<input type="checkbox"/> Wafer Fab Process	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Product Marking	<input type="checkbox"/> Test Location	<input type="checkbox"/> Design
<input type="checkbox"/> Wafer Fab Materials	<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Process	<input type="checkbox"/> Errata
<input type="checkbox"/> Wafer Fab Location	<input checked="" type="checkbox"/> Assembly Location	<input type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Equipment	<input type="checkbox"/> Electrical spec./Test coverage

Release of Cu-wire bonding for the DHVQFN packages in ASEN and ATBK (phase 8)

Details of this Change

Release of additional types with Cu-wire bonding for the DHVQFN packages in ASEN and ATBK (phase 8)

- Release Cu (copper) wire in bonding process
- Assembly locations: ASEN (NXP-ASE JV Suzhou, China) and ATBK (NXP Semiconductors Assembly & Test Plant Bangkok, Thailand)
- No change in datasheet, form, fit, function, quality or reliability anticipated
- No change in ordering code 12NC's and product type number

Remark: DHVQFN20 types assembled in ATBK were already released with Cu-wire bonding since 2015 and therefore only ASEN capacity expansion is applicable for this PCN

Why do we Implement this Change

- Capacity expansion to support increased demand and reduce lead time as announced in DHVQFN

allocation letter

- Next phase in Cu wire release after maturation in commodity Logic products since 2012
- Continued alignment with world technology trends on state of the art production tools
- Copper wire shows enhanced mechanical properties
- Increased environmental friendliness (eco-friendly)

Identification of Affected Products

- Assembly changes can be identified by backward traceability of the product marking date code
- Applied assembly location (ASEN or ATBK) is indicated on the reel and box label

Product Availability

Sample Information

Samples are available upon request

Samples for selective types are available upon request from the Logic sample store Nijmegen The Netherlands

Production

Planned first shipment 01-Dec-2017

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
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201409013F0109-Jan-2015	24-Apr-2015		Introduction of Cu-wire bonding for TSSOP5 and DHVQFN20 packages (Phase IV)
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201706001F0114-Jul-2017	12-Oct-2017		Release of Cu-wire bonding for product type 74AVC8T245BQ in ASEN and ATBK
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201706004F0114-Jul-2017	12-Oct-2017		Release of Cu-wire bonding for the DHVQFN packages in ASEN and ATBK
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Timing and Logistics

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 01-Oct-2017.

Remarks

Assembly location indicator suffix on reel label and product topside marking:

"X"= ASEN (NXP-ASE JV Suzhou, China)

"n"= ATBK (NXP Semiconductors Assembly & Test Plant Bangkok, Thailand)

Contact and Support

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

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

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

Name Logic Customer Support

e-mail address logic.helpdesk@nexperia.com

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Changed Orderable Part#	Changed Part 12NC	Changed Part Number	Changed Part Description	Package Outline	Package Name	Status	Product Line
74LVC08ABQ,115	935273545115	74LVC08ABQ	74LVC08A	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC08BQ,115	935273683115	74HC08BQ	74HC08	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC573BQ,115	935273694115	74HC573BQ	74HC573	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AHC74BQ,115	935278807115	74AHC74BQ	74AHC74BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC573BQ,115	935280555115	74AHC573BQ	74AHC573BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74LVC594ABQ,115	935282466115	74LVC594ABQ	74LVC594BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AHC125BQ,115	935285543115	74AHC125BQ	74AHC125BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC138BQ,115	935285572115	74AHC138BQ	74AHC138BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC4245ABQ,118	935285619118	74LVC4245ABQ	74LVC4245ABQ	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74CBTLV3126BQ,115	935289342115	74CBTLV3126BQ	3.3V Quadruple FET Bus Switch	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74VHC595BQ,115	935289511115	74VHC595BQ	8-bit serial shift register;3-state	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AHC730BQ,115	935289765115	74AHC730BQ	8-input NAND Gate	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74CBTLV3861BQ,118	935294091118	74CBTLV3861BQ	10-bit bus switch	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74HC4053BQ,115	935273668115	74HC4053BQ	74HC4053	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC595BQ,115	935273679115	74HC595BQ	74HC595	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC4066BQ,115	935273684115	74HC4066BQ	74HC4066	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC8T245BQ,118	935284592118	74AHC8T245BQ	74AHC8T245BQ	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74HC4067BQ,118	935284681118	74HC4067BQ	74HC4067BQ	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74AHC541BQ,115	935285545115	74AHC541BQ	74AHC541BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74LV4053BQ,115	935285574115	74LV4053BQ	74LV4053BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVT245BQ,115	935285604115	74LVT245BQ	74LVT245BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74HCT165BQ,115	935286074115	74HCT165BQ	74HCT165BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74CBTLV3245BQ,115	935293822115	74CBTLV3245BQ	8-bit switch	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AVC4TD245BQ,115	935294167115	74AVC4TD245BQ	Dual supply xlator w/3-state	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC118Q,115	935275339115	74LVC118Q	74LVC118Q	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC132BQ,115	935278794115	74AHC132BQ	74AHC132BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74ALVC541BQ,115	935282081115	74ALVC541BQ	74ALVC541	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74HC240BQ,115	935283683115	74HC240BQ	74HC240BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
CBT3257ABQ,115	935285609115	CBT3257ABQ	CBT3257ABQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC259BQ,115	935288455115	74HC259BQ	8-Bit addressable latch	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74VHC125BQ,115	935289504115	74VHC125BQ	Quad buffer/line driver; 3-state	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74CBTLV3257BQ,115	935290004115	74CBTLV3257BQ	3.3V Dual 1-of-4 FET mux/demux	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
NPIC6C596BQ,115	935297272115	NPIC6C596BQ	Power logic 8-bit shift register	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC2244ABQ,115	935273000115	74LVC2244ABQ	74LVC2244A	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74HCT595BQ,115	935273733115	74HCT595BQ	74HCT595	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC257ABQ,115	935275174115	74LVC257ABQ	74LVC257ABQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AHC594BQ,115	935282017115	74AHC594BQ	74AHC594BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC238BQ,115	935283681115	74HC238BQ	74HC238BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LV4051BQ,115	935285575115	74LV4051BQ	74LV4051BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC04BQ,115	935273651115	74HC04BQ	74HC04	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC154BQ,118	935275416118	74HC154BQ	74HC154BQ	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74AHC594BQ,115	935282022115	74AHC594BQ	74AHC594BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AVC4T245BQ,115	935284586115	74AVC4T245BQ	74AVC4T245BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AVC4T245BQ,115	935284587115	74AVC4T245BQ	74AVC4T245BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74AHC123ABQ,115	935285425115	74AHC123ABQ	74AHC123ABQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74VHC7541BQ,115	935289518115	74VHC7541BQ	Octal buffer/line driver; 3-state	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74VHC14BQ,115	935289529115	74VHC14BQ	Hex inverting Schmitt trigger	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74CBTLV3384BQ,118	935294083118	74CBTLV3384BQ	10-bit bus sw w/output enables	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74HCT04BQ,115	935273594115	74HCT04BQ	74HCT04	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HCT573BQ,115	935273732115	74HCT573BQ	74HCT573	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AHC14BQ,115	935273734115	74AHC14BQ	74AHC14	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC273BQ,115	935274587115	74HC273BQ	74HC273BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74LVC373ABQ,115	935275055115	74LVC373ABQ	74LVC373A	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74HC393BQ,115	935278648115	74HC393BQ	74HC393BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC708BQ,115	935285533115	74AHC708BQ	74AHC708BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC574BQ,115	935285546115	74AHC574BQ	74AHC574BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AHC86BQ,115	935285547115	74AHC86BQ	74AHC86BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74VHC328BQ,115	935289543115	74VHC328BQ	Quad 2-input OR gate	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC126BQ,115	935289621115	74AHC126BQ	Quad buffer/line driver; 3-state	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74CBTLV3253BQ,115	935289997115	74CBTLV3253BQ	3.3V Dual 1-of-4 FET mux/demux	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC30ABQ	935304015115	74LVC30ABQ	Triple 8-input NAND gate	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC14BQ,115	935273486115	74HC14BQ	74HC14	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74LVC74ABQ,115	935273502115	74LVC74ABQ	74LVC74A	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HCT14BQ,115	935273541115	74HCT14BQ	74HCT14	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74ALVC244BQ,115	935273548115	74ALVC244BQ	74ALVC244	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74ALVC02BQ,115	935273695115	74ALVC02BQ	74ALVC02	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC704BQ,115	935278824115	74AHC704BQ	74AHC704BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HCT238BQ,115	935283682115	74HCT238BQ	74HCT238BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LV123BQ,115	935284317115	74LV123BQ	74LV123BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LV132BQ,115	935285561115	74LV132BQ	74LV132BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74LVT245BQ,115	935285605115	74LVT245BQ	74LVT245BQ	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74HC4060BQ,115	935286402115	74HC4060BQ	74HC4060BQ	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74HC02BQ,115	935287795115	74HC02BQ	2-input NOR gate	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74VHC08BQ,115	935289498115	74VHC08BQ	Quad 2-input AND Gate	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74VHC125BQ,115	935289507115	74VHC125BQ	Quad buffer/line driver; 3-state	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74VHC541BQ,115	935289517115	74VHC541BQ	Octal buffer/line driver; 3-state	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AHC7595BQ,115	935289563115	74AHC7595BQ	8-bit serial shift register;3-state	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74VHC245BQ,115	935289581115	74VHC245BQ	Octal bus transceiver; 3-state	SOT764-1	DHVQFN20	RFS	BL Logic and Protection
74AHC126BQ,115	935289622115	74AHC126BQ	Quad buffer/line driver; 3-state	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC05BQ,115	935289747115	74HC05BQ	HEX Inverter Open drain	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74LVC8T245BQ,118	935290148118	74LVC8T245BQ	8-bit Dual-supply translator 3State	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
NPIC6C596ABQ	935302407115	NPIC6C596ABQ	8-bit shift register LED driver	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC00ABQ,115	935273496115	74LVC00ABQ	74LVC00A	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC4052BQ,115	935273689115	74HC4052BQ	74HC4052	SOT763-1	DHVQFN16	RFS	BL Logic and Protection
74LVC4066BQ,115	935273744115	74LVC4066BQ	74LVC4066	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HCT164BQ,115	935279166115	74HCT164BQ	74HCT164BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC164BQ,115	935283393115	74AHC164BQ	74AHC164BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74HC27BQ,115	935283678115	74HC27BQ	74HC27BQ	SOT762-1	DHVQFN14	RFS	BL Logic and Protection
74AHC8T245BQ,118	935284591118	74AHC8T245BQ	74AHC8T245BQ	SOT815-1	DHVQFN24	RFS	BL Logic and Protection
74HC4020BQ,115	935290784115	74HC4020BQ	14-stage binary ripple counter	SOT763-1	DHVQFN16	RFS	BL Logic and Protection