

# **Final Product Change Notification**

Issue Date: 28-Jun-2019 Effective Date: 26-Sep-2019

Here's your personalized quality information concerning products Digi-Key purchased from Nexperia.

For detailed information we invite you to view this

notification online



# **Management Summary**

- Replace Au wire BOM to Cu wire BOM

Change Category				
[] Wafer Fab Process	[X] Assembly	[] Product Marking	[] Test Location	[] Design
	Process			
[] Wafer Fab Materials	[X]	[] Mechanical	[]Test	[] Errata
	Assembly	Specification	Process	
	Materials			
[] Wafer Fab Location	[] Assembly	/[]	[] Test	[] Electrical
	Location	Packing/Shipping/Labeling	Equipment	spec./Test
				coverage

Introduction of Cu-wire bonding TSSOP8 (SOT505-2) package in ASEN (Phase 9)

# **Details of this Change**

Introduction of Cu-wire in TSSOP8 (SOT505-2) package in ASEN (ASE Group Assembly & Test Plant Suzhou China) Phase 9

- Wire and BOM change to facilitate Au-wire to Cu-wire conversion
- Front end (diffusion fab) and location will not change
- Qualified compliant to AEC-Q100 (including AEC-Q006)

# Why do we Implement this Change

- Next phase in Cu wire expansion after maturation in commodity Logic products since 2012
- 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 aluminum, 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, Nexperia 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 the product marking date code

# **Product Availability**

### **Sample Information**

Samples are available upon request

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

#### **Production**

Planned first shipment 26-Sep-2019

### **Impact**

- No change in form, fit, function, quality or reliability anticipated
- No change in die (same electrical distribution)
- No change in data sheet and test limits
- No change in ordering code 12NC's

# **Data Sheet Revision**

No impact to existing datasheet

### **Disposition of Old Products**

Existing inventory will be shipped until depleted

# **Timing and Logistics**

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 28-Jul-2019. Lack of acknowledgement of the PCN constitutes acceptance of the change.

# **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.

At Nexperia B.V. we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards.

# **About Nexperia B.V.**

We at Nexperia are the efficiency semiconductor company. We deliver over 90 billion products a year and as such service thousands of global customers, both directly and through our extensive network of channel partners. We are at the heart of billions of electronic devices in the Automotive, Mobile, Industrial, Consumer, Computing, and Communication Infrastructure segments.

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Nexperia B.V.

Jonkerbosplein 52 6534 AB Nijmegen, The Netherlands

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# **Affected Part Numbers**

7/HC2G02DD 125	74LVC2G32DP,125
74HC2G02DP,125	•
74HC2G00DP,125	74LVC2G86DP,125
74HC2G125DP,125	74LVC2G66DP,125
74HCT2G125DP,125	74LVC2G38DP,125
74HCT2G32DP,125	74AHC2G32DP,125
74HC2G32DP,125	74AHCT2G32DP,125
74HCT2G08DP,125	74AHC2G126DP,125
74HC2G08DP,125	74AHCT2G125DP,125
74HCT2G02DP,125	74AHC2G08DP,125
74HCT3G04DP,125	74AHCT2G08DP,125
74HC2G86DP,125	74AHC2G00DP,125
74LVC2G241DP,125	74AHC3G04DP,125
74HCT3G14DP,125	74AHC3G14DP,125
74HC3G14DP,125	74AHC3GU04DP,125
74HC3G34DP,125	74LVC1G74DP,125
74HCT3G34DP,125	74LVC3G07DP,125
74LVC2G125DP,125	74LVC3G14DP,125
74LVC2G126DP,125	74LVC3G04DP,125
74LVC2G240DP,125	74LVC3G17DP,125
74HC3GU04DP,125	74LVC3G34DP,125
74HCT2G66DP,125	74LVC3GU04DP,125
74HC2G66DP,125	74LVC1G53DP,125
74LVC2G02DP,125	74LVC2G74DP,125
74LVC2G00DP,125	74AVC2T45DP,125
74LVC2G08DP,125	74LVC1G123DP,125