

## Final Product/Process Change Notification

Document #:FPCN23586X1 Issue Date:29 Oct 2021

| Title of Change:                          | '  | ( - Adding detail about new wire type. Conversion from Au to Cu wire in T-223 packages in Seremban, Malaysia.  |
|---|--|--|
| Proposed First Ship date:                 | 29 Oct 2021  |  |
| Contact Information:                      | Contact your local onse                            | emi Sales Office or Marty.Paul@onsemi.com  |
| PCN Samples Contact:                      | Sample requests are to<br>Initial PCN or Final PCN | g will be subject to request date, sample quantity and special customer  |
| Additional Reliability Data:              | Contact your local onse                            | emi Sales Office or Phine.Guevarra@onsemi.com  |
| Type of Notification:                     | days prior to implement<br>onsemi will consider th | Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 station of the change. is change accepted, unless an inquiry is made in writing within 30 days of To do so, contact PCN.Support@onsemi.com |
| Marking of Parts/ Traceability of Change: | ,  | g on Line 2 is of the form ALYW where A = Assembly Location, L = Wafer Lot ate code. Product marked with "RS" or later as the date code may contain  |
| Change Category:                          | Assembly Change                                    |  |
| Change Sub-Category(s):                   | Material Change                                    |  |
| Sites Affected:                           |  |  |
| onsemi Sites                              |  | External Foundry/Subcon Sites  |
| onsemi Seremban, Malaysia                 |  | None   |

### **Description and Purpose:**

This update notification is to add detail about new wire type since original FPCN did not specify if change was to pure copper or PCC. onsemi would like to inform its customers of our qualification of Palladium coated Cu wire (PCC) for TSOP6, SOT-23-3, and SOT-223 packages assembled at the Seremban, Malaysia assembly location for the products listed in this announcement. onsemi has completed qualification on:

QV DEVICE NAME: NCP1072STBT3G

|           | Before Change Description | After Change Description |
|-----------|---------------------------|--------------------------|
| Bond Wire | 0.8mil GMG Au wire        | 0.8mil PCC wire          |

QV DEVICE NAME: NCP432BVSNT1G, NCP1251BSN65T1G

|           | Before Change Description | After Change Description |
|-----------|---------------------------|--------------------------|
| Bond Wire | 0.8mil Au wire            | 0.8mil PCC wire          |

There is no product marking change as a result of this change.

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**Reliability Data Summary:** 

QV DEVICE NAME: NCP432BVSNT1G

RMS: S69404 PACKAGE: SOT-23

| Test  | Specification       | Condition                            | Interval | Results |
|-------|---------------------|--------------------------------------|----------|---------|
| HTSL  | JESD22-A103         | Ta = 150°C                           | 2016 hrs | 0/231   |
| TC    | JESD22-A104         | Ta = -65°C to +150°C, mount on board | 500 cyc  | 0/231   |
| HAST  | JESD22-A110         | 110°C, 85% RH, 18.8psig, bias        | 528 hrs  | 0/231   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased    | 96 hrs   | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260°C                        |          | 0/693   |
| RSH   | JESD22- B106        | Ta = 265C, 10 sec                    |          | 0/90    |
| SD    | JSTD002             | Ta = 245C, 10 sec                    |          | 0/45    |

QV DEVICE NAME: NCP1072STBT3G

RMS: S69403 PACKAGE: SOT-223

| Test  | Specification       | Condition                            | Interval | Results |
|-------|---------------------|--------------------------------------|----------|---------|
| HTSL  | JESD22-A103         | Ta = 150°C                           | 2016 hrs | 0/231   |
| TC    | JESD22-A104         | Ta = -65°C to +150°C, mount on board | 500 cyc  | 0/231   |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias        | 192 hrs  | 0/231   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased    | 96 hrs   | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260°C                        |          | 0/693   |
| RSH   | JESD22- B106        | Ta = 265C, 10 sec                    |          | 0/90    |
| SD    | JSTD002             | Ta = 245C, 10 sec                    |          | 0/45    |

**QV DEVICE NAME: NCP1251ASN65T1G** 

RMS: S72672 PACKAGE: TSOP-6

| Test  | Specification       | Condition                            | Interval | Results |
|-------|---------------------|--------------------------------------|----------|---------|
| HTSL  | JESD22-A103         | Ta = 150°C                           | 2016 hrs | 0/231   |
| TC    | JESD22-A104         | Ta = -65°C to +150°C, mount on board | 500 cyc  | 0/231   |
| HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias        | 192 hrs  | 0/231   |
| uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased    | 96 hrs   | 0/231   |
| PC    | J-STD-020 JESD-A113 | MSL 1 @ 260°C                        |          | 0/693   |
| RSH   | JESD22- B106        | Ta = 265C, 10 sec                    |          | 0/90    |
| SD    | JSTD002             | Ta = 245C, 10 sec                    |          | 0/45    |

### **Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

#### **List of Affected Parts:**

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the <u>PCN Customized Portal</u>.

| Part Number   | Qualification Vehicle |
|---------------|-----------------------|
| NCP1072STAT3G | NCP1072STBT3G         |

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| NCP1072STBT3G       | NCP1072STBT3G   |
|---------------------|-----------------|
| NCP1075STAT3G       | NCP1072STBT3G   |
| NCP432BVSNT1G       | NCP432BVSNT1G   |
| NCP431AVSNT1G       | NCP432BVSNT1G   |
| NCP431BVSNT1G       | NCP432BVSNT1G   |
| NCP431AISNT1G       | NCP432BVSNT1G   |
| NCP431BISNT1G       | NCP432BVSNT1G   |
| NCP431ACSNT1G       | NCP432BVSNT1G   |
| NCP432BISNT1G       | NCP432BVSNT1G   |
| NCP432BCSNT1G       | NCP432BVSNT1G   |
| NCP431BCSNT1G       | NCP432BVSNT1G   |
| NCL30288BSNT1G      | NCP1251BSN65T1G |
| NCP1250BSN65T1G     | NCP1251BSN65T1G |
| NCP1251ASN65T1G     | NCP1251BSN65T1G |
| NCP1251BSN65T1G     | NCP1251BSN65T1G |
| NCP1251BSN100T1G    | NCP1251BSN65T1G |
| NCP1251CSN65T1G     | NCP1251BSN65T1G |
| NCP1253BSN100T1G    | NCP1251BSN65T1G |
| NCP1253BSN65T1G     | NCP1251BSN65T1G |
| NCP4353BSNT1G       | NCP1251BSN65T1G |
| NCP1256ASN100T1G    | NCP1251BSN65T1G |
| NCP1256ASN65T1G     | NCP1251BSN65T1G |
| NCP1256BSN65T1G     | NCP1251BSN65T1G |
| NCP1256ESN65T1G     | NCP1251BSN65T1G |
| NCP12510ASN100T1G   | NCP1251BSN65T1G |
| NCP12510ASN65T1G    | NCP1251BSN65T1G |
| NCP12510BSN100T1G   | NCP1251BSN65T1G |
| NCP12510BSN65T1G    | NCP1251BSN65T1G |
| NCP12510CSN65T1G    | NCP1251BSN65T1G |
| NCP12510DSN65T1G    | NCP1251BSN65T1G |
| NCP4306DADZZBASNT1G | NCP1251BSN65T1G |
| NCP4306DAHZZAASNT1G | NCP1251BSN65T1G |
| NCP4306DADZZDASNT1G | NCP1251BSN65T1G |
| NCP4328BSNT1G       | NCP1251BSN65T1G |
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| NCP1077STAT3G | NCP1072STBT3G |
|---------------|---------------|
| NCP1075STCT3G | NCP1072STBT3G |
| NCP1075STBT3G | NCP1072STBT3G |

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## **Appendix A: Changed Products**

PCN#: FPCN23586X1 Issue Date: Oct 28, 2021

| Product             | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|---------------------|----------------------|-----------------------|-----------------|----------------------|
| NCP1072STBT3G       |                      | NCP1072STBT3G         | NA              |                      |
| NCP432BVSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431AVSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431BVSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431AISNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431BISNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431ACSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP432BISNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP432BCSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCP431BCSNT1G       |                      | NCP432BVSNT1G         | NA              |                      |
| NCL30288BSNT1G      |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1250BSN65T1G     |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1251ASN65T1G     |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1251BSN65T1G     |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1251BSN100T1G    |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1253BSN100T1G    |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP4353BSNT1G       |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP12510ASN65T1G    |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP4306DAHZZAASNT1G |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP4306DADZZDASNT1G |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP4328BSNT1G       |                      | NCP1251BSN65T1G       | NA              |                      |
| NCP1077STAT3G       |                      | NCP1072STBT3G         | NA              |                      |
| NCP1075STCT3G       |                      | NCP1072STBT3G         | NA              |                      |
| NCP1075STBT3G       |                      | NCP1072STBT3G         | NA              |                      |
| NCP1075STAT3G       |                      | NCP1072STBT3G         | NA              |                      |