PRODUCT / PROCESS CHANGE NOTIFICATION

| 1. PCN basic data | | |
|---|--|--|
| 1.1 Company STMicroelectronics International N.V | | STMicroelectronics International N.V |
| 1.2 PCN No. | | AMS/20/12117 |
| 1.3 Title of PCN | | New material set in ST Bouskoura for General Purpose Analog products in TSSOP14 packages |
| 1.4 Product Category | | See product list |
| 1.5 Issue date | | 2020-04-22 |

| 2. PCN Team | | |
|---------------------------|--------------------------|--|
| 2.1 Contact supplier | | |
| 2.1.1 Name | ROBERTSON HEATHER | |
| 2.1.2 Phone | +1 8475853058 | |
| 2.1.3 Email | heather.robertson@st.com | |
| 2.2 Change responsibility | | |
| 2.2.1 Product Manager | Marcello SAN BIAGIO | |
| 2.1.2 Marketing Manager | Salvatore DI VINCENZO | |
| 2.1.3 Quality Manager | Jean-Marc BUGNARD | |

| 3. Change | | | |
|--------------|--|---|--|
| 3.1 Category | 3.2 Type of change | 3.3 Manufacturing Location | |
| Materials | New direct material part number (same supplier, different supplier or new supplier), Mold compound | Back end plant = ST Bouskoura (Morocco) | |

| 4. Description of change | | | |
|---|---|---|--|
| | Old | New | |
| 4.1 Description | - Molding compound = Sumitomo G630AY - Leadframe = Copper preplated NiPdAgAu standard density - Equipment = 20 years old equipments (DA ASM AD889, WB ASM Eaggle 60) - Traceability = Assy lot | - Molding compound = Sumitomo G700KC - Leadframe = Copper preplated NiPdAu standard density - Equipment = Latest generation of equipment (DA ASM 832i, WB KnS Connex ELA) - Traceability = 2D code allowing single die traceability | |
| 4.2 Anticipated Impact on form,fit, function, quality, reliability or processability? | No impact | | |

| 5. Reason / motivation for change | | | |
|-----------------------------------|---|--|--|
| 5.1 Motivation | Progressing on the activities related to quality continuous improvement, ST is glad to announce a new material set for General Purpose Analog products in TSSOP14 package produced in ST Bouskoura. The goal of this PCN is to qualify new material set as described below and to move to brand new equipments replacing obsolete machines. This new set of material was developed to improve our product robustness. | | |
| 5.2 Customer Benefit | QUALITY IMPROVEMENT | | |

| 6. Marking of parts / traceability of change | |
|--|-------------------------|
| 6.1 Description | New Finished good codes |

| 7. Timing / schedule | | |
|-------------------------------------|--------------|--|
| 7.1 Date of qualification results | 2020-04-16 | |
| 7.2 Intended start of delivery | 2020-07-30 | |
| 7.3 Qualification sample available? | Upon Request | |

| 8. Qualification / Validation | | | |
|--|---|---------------|------------|
| 8.1 Description | 12117 standard-TSSOP14SHDQual Report_New material set.pdf | | |
| 8.2 Qualification report and qualification results | Available (see attachment) | Issue Date | 2020-04-22 |

9. Attachments (additional documentations)

12117 Public product.pdf 12117 standard-TSSOP14SHDQual Report_New material set.pdf

| 10. Affected parts | | | |
|-------------------------|-------------------------|--------------------------|--|
| 10. 1 Current | | 10.2 New (if applicable) | |
| 10.1.1 Customer Part No | 10.1.2 Supplier Part No | 10.1.2 Supplier Part No | |
| LM224APT | LM224APT | | |
| LM224PT | LM224PT | | |
| LM239APT | LM239APT | | |
| LM239PT | LM239PT | | |
| LM2901PT | LM2901PT | | |
| LM2902PT | LM2902PT | | |
| LM324APT | LM324APT | | |
| | LM324AWPT | | |
| LM324PT | LM324PT | | |
| LM339APT | LM339APT | | |
| LM339PT | LM339PT | | |
| LMV324IPT | LMV324IPT | | |
| | LMV324LIPT | | |
| | LMV339IPT | | |
| | LMV824AIPT | | |
| | LMV824IPT | | |
| | LMX324IPT | | |
| MC3303PT | MC3303PT | | |
| | TL084CPT | | |
| | TL084IPT | | |
| | TS1854IPT | | |
| | TS1874IPT | | |
| | TS274AIPT | | |
| | TS274IPT | | |
| | TS27L4IPT | | |
| | TS334IPT | | |
| | TS339IPT | | |
| | TS3704IPT | | |
| | TS464CPT | | |
| | TS864IPT | | |
| | TS884IPT | | |
| | TS9224IPT | | |
| | TS924AIPT | | |
| | TS924IPT | | |
| | TS954IPT | | |
| | TS974IPT | | |
| | TSV324IPT | | |
| | TSV624IPT | | |
| | TSV634IPT | | |
| | TSV6394AIPT | | |

| TSV6394IPT | |
|------------|--|
| TSV854AIPT | |
| TSV854IPT | |
| TSV914AIPT | |
| TSV914IPT | |
| TSV994AIPT | |
| TSV994IPT | |
| TSX339IPT | |
| TSX3704IPT | |
| TSX564AIPT | |
| TSX564IPT | |
| TSX634AIPT | |
| TSX634IPT | |



Public Products List

Publict Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

PCN Title: New material set in ST Bouskoura for General Purpose Analog products in TSSOP14 packages

PCN Reference: AMS/20/12117

Subject: Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

| TS924IPT | LMX324IPT | TS334IPT |
|-------------|-------------|------------|
| TS27L4CPT | TSV324IPT | TS3704IPT |
| TSV914IPT | LMV824IPT | TSV914AIPT |
| TSV6394AIPT | TSV6394IPT | LM2902WPT |
| LM239APT | TSV634AIPT | TS464CPT |
| TSV634IPT | TSV994IPT | TSV994AIPT |
| LM2902PT | TS27L4AIPT | LM324AWPT |
| TSV6294IPT | LMV339IPT | LM339APT |
| LM324APT | TSV624AIPT | LM339PT |
| TS1854IPT | LM224PT | TS1874IPT |
| TSV854IPT | TS274AIPT | LMV324IPT |
| TL084IPT | TS974IPT | TS339CPT |
| TSX564AIPT | TSV6294AIPT | TSV854AIPT |
| LM324WPT | TS27L4ACPT | TS27L4IPT |
| LMV824AIPT | TS27M4CPT | TL084CPT |
| TS9224IPT | TSX634AIPT | MC3303PT |
| TS864IPT | TS884IPT | TS954IPT |
| TSV624IPT | TSX3704IPT | TSX634IPT |
| LMV324LIPT | TS924AIPT | LM224APT |
| TSX564IPT | LM239PT | TS339IPT |
| LM324PT | TS274IPT | LM2901PT |
| TSX339IPT | | |
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