



## Materials Declaration Form

|                        |                                     |                        |     |
|------------------------|-------------------------------------|------------------------|-----|
| <b>IPC Form Type *</b> | 1752<br>Distribute                  | <b>Version</b>         | 2   |
| <b>Sectionals *</b>    | Material Info<br>Manufacturing Info | <b>Subsectionals *</b> | A-D |

*\* : Required Field*


| Supplier Information               |  |                               |  |
|------------------------------------|--|-------------------------------|--|
| <b>Company Name *</b>              | STMicroelectronics   | <b>Response Date *</b>        | 2017-03-13   |
| <b>Contact Name *</b>              | Refer to Supplier Comment section  |                               | Refer to Supplier Comment section                            |
| <b>Authorized Representative *</b> | LAURENT TOSI   | <b>Representative Title</b>   | MDG MD CHAMPION  |
| <b>Representative Phone *</b>      | 33 442 685 795   | <b>Representative Email *</b> | <a href="mailto:laurent.tosi@st.com">laurent.tosi@st.com</a> |
| <b>Supplier Comment</b>            | Online Technical Support - STMicroelectronics :<br><a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a> |                               |  |

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| Legal Statement              |   |                            |          |
|------------------------------|---|----------------------------|----------|
| <b>Supplier Acceptance *</b> | true  | <b>Legal Declaration *</b> | Standard |
| <b>Legal Statement</b>       | <p>Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as omprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.</p> |                            |          |

| Product         |               |         |           |                  |
|-----------------|---------------|---------|-----------|------------------|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site  | Date             |
| M95128-RDW6TP   | PT6P*95281KA  | A       | 3068      | 2017-03-13       |
|                 | Amount        | UoM     | Unit type | ST ECOPACK Grade |
|                 | 34.00         | mg      | Each      | ECOPACK® 2       |

| Manufacturing information |                                  |                      |         |   |
|---------------------------|----------------------------------|----------------------|---------|---|
| J-STD-020 MSL Rating      | Classification Temp              | Nbr of Reflow Cycles |         | <br>life.augmented |
| 1                         | 260                              | 3                    |         |   |
| bulk Solder Termination   | Terminal Plating                 | Terminal Base Alloy  | Comment |   |
| NAC                       | Nickel/Palladium/Gold (Ni/Pd/Au) | Copper Alloy         |         |   |

| Package Designator | Size                        | Nbr of instances | Shape  |  |
|--------------------|-----------------------------|------------------|--------|--|
| TSSOP              | NAC                         | 8                | L bend |  |
| Comment            | TSSOP 8 BODY 4.4 PITCH 0.65 |                  |        |  |

| QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015  |             |
|--|-------------|
| Query  | Response    |
| 1 - Product(s) meets EU RoHS requirement without any exemptions  | true        |
| 2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply) | false       |
| 3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)  | false       |
| 4 - Product(s) does not meet EU RoHS requirements and is not under exemptions  | false       |
| 5 - Product(s) is obsolete, no information is available  | false       |
| 6 - Product(s) is unknown, no information is available   | false       |
| Exemption Id.  | Description |
|  |             |

| Query : California Prop65 list, dated 14 August 2015   |                        |                    |                |
|--|------------------------|--------------------|----------------|
| Query  |                        |                    | Response       |
| 1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen |                        |                    | FALSE          |
| 2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen      |                        |                    | TRUE           |
| Substance  | amount in product (mg) | Application        | ppm in product |
| Nickel (Ni)  | 0.059                  | Plating underlayer | 1725           |
|  |                        |                    |                |

| QueryList : REACH-12th January 2017  |                         |                        |             |                |
|--|-------------------------|------------------------|-------------|----------------|
| Query  |                         |                        |             | Response       |
| 1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH |                         |                        |             | true           |
| CategoryLevel_Name   | CategoryLevel_Threshold | amount in product (mg) | Application | ppm in product |
|  |                         |                        |             |                |

| Material Composition Declaration |                           |        |     |          |                     | Mfr Item Name                   | PT6P*95281KA |        |        |     |   |                                |
|----------------------------------|---------------------------|--------|-----|----------|---------------------|---------------------------------|--------------|--------|--------|-----|---|--------------------------------|
| Homogeneous Material             | Material Group            | Mass   | UoM | Level    | Substance Category  | Substance                       | CAS          | Exempt | Mass   | UoM | Concentration in homogeneous material (ppm) | Concentration in product (ppm) |
| die (s)                          | Other inorganic materials | 0.991  | mg  | supplier | die                 | Silicon (Si)                    | 7440-21-3    |        | 0.951  | mg  | 959637                                      | 27971                          |
|                                  |                           |        |     | supplier | metallization       | Aluminium (Al)                  | 7429-90-5    |        | 0.004  | mg  | 4036  | 118                            |
|                                  |                           |        |     | supplier | metallization       | Copper (Cu)                     | 7440-50-8    |        | 0.004  | mg  | 4036  | 118                            |
|                                  |                           |        |     | supplier | passivation         | Silicon Oxide(SiO2)             | 7631-86-9    |        | 0.002  | mg  | 2018  | 59                             |
|                                  |                           |        |     | supplier | passivation         | Indium Tin oxide ( In2O3:SnO2 ) | 50926-11-9   |        | 0.030  | mg  | 30272                                       | 882                            |
| Lead-frame                       | Other inorganic materials | 14.517 | mg  | supplier | alloy               | Copper (Cu)                     | 7440-50-8    |        | 14.147 | mg  | 974500                                      | 416079                         |
|                                  |                           |        |     | supplier | alloy               | Iron (Fe)                       | 7439-89-6    |        | 0.341  | mg  | 23460                                       | 10017                          |
|                                  |                           |        |     | supplier | alloy               | Zinc (Zn)                       | 7440-66-6    |        | 0.017  | mg  | 1200  | 512                            |
|                                  |                           |        |     | supplier | alloy               | Iron Phosphide (FeP)            | 26508-33-8   |        | 0.012  | mg  | 840   | 359                            |
| Lead-frame Coating               | Other inorganic materials | 0.062  | mg  | supplier | coating             | Nickel (Ni)                     | 7440-02-0    |        | 0.058  | mg  | 942580                                      | 1708                           |
|                                  |                           |        |     | supplier | coating             | Palladium (Pd)                  | 7440-05-3    |        | 0.002  | mg  | 29665                                       | 54                             |
|                                  |                           |        |     | supplier | coating             | Gold (Au)                       | 7440-57-5    |        | 0.002  | mg  | 27755                                       | 50                             |
| Die Attach                       | Other inorganic materials | 0.049  | mg  | supplier | glue or soft solder | Poly(tetrafluoroethylene)       | 9002-84-0    |        | 0.025  | mg  | 510000                                      | 735                            |
|                                  |                           |        |     | supplier | glue or soft solder | Synthetic resin                 | Proprietary  |        | 0.010  | mg  | 200000                                      | 288                            |
|                                  |                           |        |     | supplier | glue or soft solder | Bismaleimide resin              | Proprietary  |        | 0.010  | mg  | 200000                                      | 288                            |
|                                  |                           |        |     | supplier | glue or soft solder | Titanium dioxide                | 13463-67-7   |        | 0.002  | mg  | 40000                                       | 58                             |
|                                  |                           |        |     | supplier | glue or soft solder | Silica, amorphous               | 7631-86-9    |        | 0.002  | mg  | 50000                                       | 72                             |
| Wires                            | Other inorganic materials | 0.019  | mg  | supplier | Bonding wire        | Gold (Au)                       | 7440-57-5    |        | 0.019  | mg  | 1000000                                     | 546                            |
| Encapsulation                    | Other inorganic materials | 18.362 | mg  | supplier | Moulding Compound   | Epoxy Resin                     | Proprietary  |        | 1.434  | mg  | 78107                                       | 42183                          |
|                                  |                           |        |     | supplier | Moulding Compound   | Phenol Resin                    | Proprietary  |        | 0.956  | mg  | 52071                                       | 28122                          |
|                                  |                           |        |     | supplier | Moulding Compound   | Silica, vitreous                | 60676-86-0   |        | 15.800 | mg  | 860449                                      | 464703                         |
|                                  |                           |        |     | supplier | Moulding Compound   | Carbon black                    | 1333-86-4    |        | 0.096  | mg  | 5207  | 2812                           |
| Finishing                        | Other inorganic materials | 0.001  | mg  | supplier | Moulding Compound   | Bismuth (Bi)                    | 7440-69-9    |        | 0.076  | mg  | 4166  | 2250                           |
|                                  |                           |        |     | supplier | connections coating | Nickel (Ni)                     | 7440-02-0    |        | 0.001  | mg  | 940951                                      | 17                             |
|                                  |                           |        |     | supplier | connections coating | Palladium (Pd)                  | 7440-05-3    |        | 0.000  | mg  | 30507                                       | 1                              |
|                                  |                           |        |     | supplier | connections coating | Gold (Au)                       | 7440-57-5    |        | 0.000  | mg  | 28542                                       | 1                              |