

## **Materials Declaration Form**

| IPC          | 1752               | Version         | 2                  |  |  |
|--------------|--------------------|-----------------|--------------------|--|--|
| Form Type *  | Distribute         | version         | Z                  |  |  |
| Sectionals * | Material Info      | Subsectionals * | A-D                |  |  |
|              | Manufacturing Info |                 | * : Required Field |  |  |

| Supplier Information   |                                   |                        |                                   |  |  |  |  |  |
|--|-----------------------------------|------------------------|-----------------------------------|--|--|--|--|--|
| Company Name *   | STMicroelectronics                | Response Date *        | 2017-01-23                        |  |  |  |  |  |
| Contact Name *   | Refer to Supplier Comment section |                        | Refer to Supplier Comment section |  |  |  |  |  |
| Authorized Representative *  | Rossana Bonaccorso                | Representative Title   | ADG MD Champion                   |  |  |  |  |  |
| Representative Phone *   | Refer to Supplier Comment section | Representative Email * | Refer to Supplier Comment section |  |  |  |  |  |
| Supplier Comment  Online Technical Support - STMicroele http://www.st.com/web/en/support/s |                                   |                        |                                   |  |  |  |  |  |

## **Uncertainty Statement**

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## Legal Statement

Supplier Acceptance \* true Legal Declaration \* Standard

## Legal Statement

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| Product         |               |          |           |                  |  |  |  |  |  |
|-----------------|---------------|----------|-----------|------------------|--|--|--|--|--|
| Mfr Item Number | Mfr Item Name | Mfr Site | Date      |                  |  |  |  |  |  |
| STTH30RQ06GY-TR | DSD2*U65Q2AI  | А        | 3068      | 2017-01-23       |  |  |  |  |  |
|                 | Amount        | UoM      | Unit type | ST ECOPACK Grade |  |  |  |  |  |
|                 | 1380.00       | mg       | Each      | ECOPACK2         |  |  |  |  |  |

| Manufacturing information |                     |                      |         |                |  |  |  |  |
|---------------------------|---------------------|----------------------|---------|----------------|--|--|--|--|
| J-STD-020 MSL Rating      | Classification Temp | Nbr of Reflow Cycles |         |                |  |  |  |  |
| 1                         | 245                 | 3                    |         |                |  |  |  |  |
| bulk Solder Termination   | Terminal Plating    | Terminal Base Alloy  | Comment | life.augmented |  |  |  |  |
| NA                        | Tin (Sn), matte     | Copper Alloy         |         | moradgmomed    |  |  |  |  |

| Package Designator | Size  | Nbr of instances | Shape     |  |
|--------------------|-------|------------------|-----------|--|
| SIP 10.2-9.15-4.5  |       | 2                | gull wing |  |
| Comment            | D2PAK |                  |           |  |

| 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  | at without any exemptions   | FALSE |  |  |  |  |  |  |
| 2 - Product(s) meets EU RoHS requirement apply)   | 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 FALSE |       |  |  |  |  |  |  |
| 3 - Product(s) meets EU RoHS requiremen   | 3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)  TRUE   |       |  |  |  |  |  |  |
| 4 - Product(s) does not meet EU RoHS requirements and is not under exemptions                                     |   |       |  |  |  |  |  |  |
| Exemption Id. Description   |   |       |  |  |  |  |  |  |
| 7a Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) |   |       |  |  |  |  |  |  |

| QueryList: REACH-20th June 2016  |                |  |  |  |  |  |  |
|--|----------------|--|--|--|--|--|--|
| Query  |                |  |  |  |  |  |  |
| 1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH |                |  |  |  |  |  |  |
| CategoryLevel_Name   | ppm in product |  |  |  |  |  |  |
|  |                |  |  |  |  |  |  |

| Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document |                           | Mfr Item Name | DSD2* | J65Q2AI  |                         |   |                |                    |         |     |   |                                |
|---|---------------------------|---------------|-------|----------|-------------------------|---|----------------|--------------------|---------|-----|---|--------------------------------|
| Homogeneous Material  | Material Group            | Mass          | UoM   | Level    | Substance Category      | Substance                                   | CAS            | Exempt             | Mass    | UoM | Concentration in<br>homogeneous<br>material (ppm) | Concentration in product (ppm) |
| Die   | Other inorganic materials | 7.860         | mg    | supplier | die                     | Silicon (Si)                                | 7440-21-3      |                    | 7.540   | mg  | 959288  | 5464                           |
|   |                           |               |       | supplier | metallization           | Aluminium (Al)                              | 7429-90-5      |                    | 0.112   | mg  | 14249   | 81                             |
|   |                           |               |       | supplier | Passivation             | Silicon Oxide                               | 7631-86-9      |                    | 0.037   | mg  | 4707  | 27                             |
|   |                           |               |       | supplier | back side metallization | Titanium (Ti)                               | 7440-32-6      |                    | 0.004   | mg  | 509   | 3                              |
|   |                           |               |       | supplier | back side metallization | Gold (Au)                                   | 7440-57-5      |                    | 0.013   | mg  | 1654  | 9                              |
|   |                           |               |       | supplier | back side metallization | Nickel (Ni)                                 | 7440-02-0      |                    | 0.061   | mg  | 7761  | 44                             |
|   |                           |               |       | supplier | polymer die coating     | Probimide                                   | proprietary    |                    | 0.093   | mg  | 11832   | 67                             |
| Leadframe   | Copper & its alloys       | 778.632       | mg    | supplier | alloy                   | Copper (Cu)                                 | 7440-50-8      |                    | 777.537 | mg  | 998594  | 563433                         |
|   |                           |               |       | supplier | alloy                   | Iron (Fe)                                   | 7439-89-6      |                    | 0.358   | mg  | 460   | 259                            |
|   |                           |               |       | supplier | alloy                   | Iron Phosphide (FeP)                        | 26508-33-8     |                    | 0.654   | mg  | 840   | 474                            |
|   |                           |               |       | supplier | metallization           | Nickel (Ni)                                 | 7440-02-0      |                    | 0.077   | mg  | 98  | 56                             |
|   |                           |               |       | supplier | metallization           | Phosphorus (P)                              | 12185-10-3     |                    | 0.006   | mg  | 8   | 4                              |
| Soft solder   | Solder                    | 8.420         | mg    | JIG - R  | solder                  | Lead (Pb)                                   | 7439-92-1      | 7a-Lead in high me | 8.041   | mg  | 954988  | 5827                           |
|   |                           |               |       | supplier | solder                  | Silver (Ag)                                 | 7440-22-4      |                    | 0.211   | mg  | 25059   | 152                            |
|   |                           |               |       | supplier | solder                  | Tin (Sn)                                    | 7440-31-5      |                    | 0.168   | mg  | 19953   | 122                            |
| Bonding wires   | Other inorganic materials | 2.894         | mg    | supplier | wire                    | Aluminium (AI)                              | 7429-90-5      |                    | 2.894   | mg  | 1000000   | 2097                           |
| Encapsulation   | Other Organic Materials   | 579.705       | mg    | supplier | mold compound           | Silica, vitreous                            | 60676-86-0     |                    | 507.242 | mg  | 875000  | 367567                         |
|   |                           |               |       | supplier | mold compound           | Tetramethyl-biphenyl-diyl-bis oxymethylene- | b EC 413-900-7 |                    | 23.188  | mg  | 40000   | 16803                          |
|   |                           |               |       | supplier | mold compound           | Epoxy Resin                                 | 25068-38-6     |                    | 17.391  | mg  | 30000   | 12602                          |
|   |                           |               |       | supplier | mold compound           | phenol resin                                | 29690-82-2     |                    | 28.985  | mg  | 50000   | 21004                          |
|   |                           |               |       | supplier | mold compound           | Carbon black                                | 1333-86-4      |                    | 2.899   | mg  | 5000  | 2101                           |
| Connections coating   | Solder                    | 2.489         | mg    | supplier | solder alloy            | Tin (Sn)                                    | 7440-31-5      |                    | 2.489   | mg  | 1000000   | 1804                           |