

Materials Declaration Form

| IPC | 1752 | | |
|---|--|--|--|
| Form Type * | Distribute | Version | 2 |
| Sectionals * | Material Info | Subsectionals * | A-D |
| | Manufacturing Info | | * : Required Field |
| | | | |
| Supplier Information | | | |
| Company Name * | STMicroelectronics | Response Date * | 2018-11-09 |
| Company Unique ID | NL 008751171B01 | | |
| Contact Name * | Refer to Supplier Comment section | | Refer to Supplier Comment section |
| Contact Phone * | Refer to Supplier Comment section | Contact Email * | Refer to Supplier Comment section |
| Authorized Representative * | Giovanni Giacopello | Representative Title | ADG MD Champion |
| Representative Phone * | Refer to Supplier Comment section | Representative Email * | Refer to Supplier Comment section |
| Supplier Comment | Online Technical Support - STMicroe http://www.st.com/web/en/suppor | lectronics : t/support.html | |
| Uncertainty Statement While STMicroelectronics has ender STMicroelectronics disclaims all war merchantability, fitness for a particu directly or indirectly, from the use o | avored to provide information which is rranties, express or implied related to f ular purpose and non-infringement. ST r inability to use this document and/or | s accurate and up to date, this o this document and its contents, shall have no responsibility and its contents. | document and its contents are provided on a strict 'as is' and 'as available' basis. , including but not limited to implied warranties of completeness, truth, accuracy, nd assumes no liability for any cost, loss or damage of any kind which could arise, |
| Legal Statement | | | |
| Supplier Acceptance * | true | Legal Dec | claration * Standard |
| Legal Statement | Supplier certifies that it gathered the date that Supplier completes th products. Company acknowledges t may not have independently veri provided by others, Supplier agree: | the provided information and is form. Supplier acknowledges that Supplier may have relied o ified such information. Howev s that, at a minimum, its suppli | such information is true and correct to the best of its knowledge and belief, as of s that Company will rely on this certification in determining the compliance of its on information provided by others in completing this form, and that Supplier <i>rer</i> , in situations where Supplier has not independently verified information liers have provided certifications regarding their contributions to the part(s), and |

| Product | | | | | | | | |
|-----------------|---------------|---|------------------|------------|--|--|--|--|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site | Date | | | | |
| T1235H-6G-TR | 7BD1*126SBM1 | А | 3068 | 2018-11-09 | | | | |
| | Amount | UoM | ST ECOPACK Grade | | | | | |
| | 1380.00 | mg | mg Each | | | | | |
| , | Comment | ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material) | | | | | | |

| 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 gugmented | | | | | |
| NA | Tin (Sn), matte | Copper Alloy | | morodginofiled | | | | | |

| Package Designator | Size | Nbr of instances | Shape | |
|--------------------|----------------|------------------|-----------|---|
| SIP | 10.2-10.5-1.27 | 3 | gull wing | |
| Comment | D2PAK CLIP | | | · |

| 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 | FALSE | | | | | | |
| 2 - Product(s) meets EU RoHS requiremen apply) | FALSE | | | | | | |
| 3 - Product(s) meets EU RoHS requirement | - 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 FALSE | | | | | | | |
| Exemption Id. | Exemption Id. Description | | | | | | |
| 7a | Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) | | | | | | |

| QueryList : California Prop65 list, dated 25th May 2018 | | | | | | | |
|--|----------------|-----------------|-------|--|--|--|--|
| Qu | Response | | | | | | |
| 1 - The product does not contain identified substance from California Prop 65 List, no | FALSE | | | | | | |
| 2 - The product is containing below substance(s) from California Prop 65 List, no expr | TRUE | | | | | | |
| Substance | ppm in product | | | | | | |
| Nickel | 0.32 | Die - Leadframe | 234 | | | | |
| Lead | 29.81 | Soft solder | 21598 | | | | |
| Lead-Borate Glass | 1.50 | Die | 1088 | | | | |
| | | | | | | | |

| QueryList : REACH-27th June 2018 | | | | | | | |
|--|--|--|--|--|--|--|--|
| | Response | | | | | | |
| 1 - Product(s) does not contain REACH Sul | FALSE | | | | | | |
| CategoryLevel_Name | ppm in product | | | | | | |
| Lead | ad 1000 ppm 28.30 Die - Soft solder | | | | | | |
| 2 - Product(s) does not contain REACH definition within REACH | FALSE | | | | | | |
| CategoryLevel_Name | ategoryLevel_Name CategoryLevel_Threshold Amount in Embedded Article / Application - Article / Homoger Homogeneous Material (mg) Material | | | | | | |
| Lead | 1000 ppm 23.31 Die | | | | | | |
| Lead | 920351 | | | | | | |

| Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document | | | Mfr Item Name | 7BD1*1 | 26SBM1 | | | | | | | |
|--|---------------------------------|---------|---------------|-------------------------|-------------------------|----------------------|-------------|-----------------------|---------|-----|---|-----------------------------------|
| Homogeneous Material | Material Group | Mass | UoM | Level | Substance Category | Substance | CAS | Exempt | Mass | UoM | Concentration in homogeneous material (ppm) | Concentration in product (ppm) |
| Die | M-011 Other inorganic materials | 30.558 | mg | supplier | die | Silicon (Si) | 7440-21-3 | | 6.850 | mg | 224164 | 4964 |
| | | | | supplier | metallization | Gold (Au) | 7440-57-5 | | 0.026 | mg | 851 | 19 |
| | | | | supplier | metallization | Nickel (Ni) | 7440-02-0 | | 0.137 | mg | 4483 | 99 |
| | | | | JIG - R | Passivation | Lead (Pb) | 7439-92-1 | 7c-I-Electrical and e | 21.810 | mg | 713725 | 15804 |
| | | | | supplier | Passivation | Silicon Oxide | 7631-86-9 | | 0.039 | mg | 1275 | 28 |
| | | | | supplier | back side metallization | Gold (Au) | 7440-57-5 | | 0.009 | mg | 295 | 7 |
| | | | | supplier | back side metallization | Nickel (Ni) | 7440-02-0 | | 0.186 | mg | 6087 | 135 |
| | | | | JIG - R & California 65 | glass coating | Lead-Borate Glass | 65997-18-4 | 7c-I-Electrical and e | 1.501 | mg | 49120 | 1088 |
| Leadframe | M-004 Copper and its alloys | 700.748 | mg | supplier | alloy | Copper (Cu) | 7440-50-8 | | 699.837 | mg | 998700 | 507128 |
| | | | | supplier | alloy | Iron (Fe) | 7439-89-6 | | 0.701 | mg | 1000 | 508 |
| | | | | supplier | alloy | Iron Phosphide (FeP) | 26508-33-8 | | 0.210 | mg | 300 | 152 |
| Soft solder | Solder | 7.056 | mg | JIG - R | solder | Lead (Pb) | 7439-92-1 | 7a-Lead in high mel | 6.494 | mg | 920351 | 4706 |
| | | | | supplier | solder | Silver (Ag) | 7440-22-4 | | 0.176 | mg | 24943 | 128 |
| | | | | supplier | solder | Tin (Sn) | 7440-31-5 | | 0.351 | mg | 49745 | 254 |
| | | | | supplier | solder | flux residue | Proprietary | | 0.035 | mg | 4961 | 25 |
| Encapsulation | M-011 Other inorganic materials | 603.699 | mg | supplier | mold compound | Silica, vitreous | 60676-86-0 | | 458.811 | mg | 760000 | 332472 |
| | | | | supplier | mold compound | Epoxy Cresol Novolak | 29690-82-2 | | 61.577 | mg | 102000 | 44621 |
| | | | | supplier | mold compound | Phenol resin | 9003-35-4 | | 36.222 | mg | 60000 | 26248 |
| | | | | supplier | mold compound | Others | Proprietary | | 30.185 | mg | 50000 | 21873 |
| | | | | supplier | mold compound | Metal hydroxide | Proprietary | | 12.074 | mg | 20000 | 8749 |
| | | | | supplier | mold compound | Carbon black | 1333-86-4 | | 4.830 | mg | 8000 | 3500 |
| connections coating | Solder | 6.314 | mg | supplier | solder alloy | Tin (Sn) | 7440-31-5 | | 6.314 | mg | 1000000 | 4575 |
| clip | M-004 Copper and its alloys | 31.625 | mg | supplier | alloy | Copper (Cu) | 7440-50-8 | | 31.625 | mg | 1000000 | 22917 |