




| Product                          |               |   |           |                  |
|----------------------------------|---------------|---|-----------|------------------|
| Mfr Item Number                  | Mfr Item Name | Version   | Mfr Site  | Date             |
| STM8S207M8T6B<br>STM8S207M8T6BTR | U31S*765XXXV  | A   | 959       | 2017-05-12       |
|                                  | Amount        | UoM   | Unit type | ST ECOPACK Grade |
|                                  | 645.00        | mg  | Each      | ECOPACK® 2       |
|                                  | 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 |         | <br>life.augmented |
| 3                         | 260                 | 3                    |         |   |
| bulk Solder Termination   | Terminal Plating    | Terminal Base Alloy  | Comment |   |
| NiPdAu                    | NAC                 | Copper               |         |   |

| Package Designator | Size                                     | Nbr of instances | Shape  |  |
|--------------------|--|------------------|--------|--|
| QFP                | 14x14x1.4                                | 80               | L Bend |  |
| Comment            | Package : 1S LQFP 80 14x14x1.4 1 0062342 |                  |        |  |

| 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       |
| Exemption Id.  | Description |
|  |             |

| 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              | U31S*765XXXV |        |         |     | 7000000.0                                   | 1000000.0                      |
|--|---------------------------------|---------|-----|----------|---------------------------|----------------------------|--------------|--------|---------|-----|---|--------------------------------|
| note : Substance present with less 0.001mg will not be declared in this document |                                 |         |     |          |                           |                            |              |        |         |     |   |                                |
| Homogeneous Material   | Material Group                  | Mass    | UoM | Level    | Substance Category        | Substance                  | CAS          | Exempt | Mass    | UoM | Concentration in homogeneous material (ppm) | Concentration in product (ppm) |
| Die or dies  | M-011 Other inorganic materials | 6.688   | mg  | supplier | die                       | Silicon (Si)               | 7440-21-3    |        | 6.482   | mg  | 969199                                      | 10050                          |
|  |                                 |         |     | supplier | metallization             | Aluminium (Al)             | 7429-90-5    |        | 0.018   | mg  | 2691  | 28                             |
|  |                                 |         |     | supplier | metallization             | Copper (Cu)                | 7440-50-8    |        | 0.060   | mg  | 8971  | 93                             |
|  |                                 |         |     | supplier | metallization             | Tantalum (Ta)              | 7440-25-7    |        | 0.007   | mg  | 1047  | 11                             |
|  |                                 |         |     | supplier | metallization             | Titanium (Ti)              | 7440-32-6    |        | 0.009   | mg  | 1346  | 14                             |
|  |                                 |         |     | supplier | Passivation               | Silicon Nitride            | 12033-89-5   |        | 0.016   | mg  | 2392  | 25                             |
| Lead-frame   | M-011 Other inorganic materials | 130.716 | mg  | supplier | alloy                     | Copper (Cu)                | 7440-50-8    |        | 125.749 | mg  | 962000                                      | 194960                         |
|  |                                 |         |     | supplier | alloy                     | Nickel (Ni)                | 7440-02-0    |        | 3.921   | mg  | 30000                                       | 6080                           |
|  |                                 |         |     | supplier | alloy                     | Silicium (Si)              | 7440-21-3    |        | 0.850   | mg  | 6500  | 1317                           |
|  |                                 |         |     | supplier | alloy                     | Magnesium (Mg)             | 7439-95-4    |        | 0.196   | mg  | 1500  | 304                            |
| Lead-frame Coating   | M-011 Other inorganic materials | 0.925   | mg  | supplier | coating                   | Nickel (Ni)                | 7440-02-0    |        | 0.848   | mg  | 916800                                      | 1315                           |
|  |                                 |         |     | supplier | coating                   | Palladium (Pd)             | 7440-05-3    |        | 0.054   | mg  | 58700                                       | 84                             |
|  |                                 |         |     | supplier | coating                   | Gold (Au)                  | 7440-57-5    |        | 0.023   | mg  | 24500                                       | 35                             |
| Die Attach   | M-011 Other inorganic materials | 3.617   | mg  | supplier | glue or soft solder       | Silver (Ag)                | 7440-22-4    |        | 2.848   | mg  | 787500                                      | 4416                           |
|  |                                 |         |     | supplier | glue or soft solder       | Urethane acrylate oligomer | Proprietary  |        | 0.253   | mg  | 70000                                       | 392                            |
|  |                                 |         |     | supplier | glue or soft solder       | Méthacrylate               | Proprietary  |        | 0.253   | mg  | 70000                                       | 392                            |
|  |                                 |         |     | supplier | glue or soft solder       | Acrylate                   | Proprietary  |        | 0.253   | mg  | 70000                                       | 392                            |
| Wires  | M-011 Other inorganic materials | 2.018   | mg  | supplier | glue or soft solder       | NMP                        | 872-50-4     |        | 0.009   | mg  | 2500  | 14                             |
|  |                                 |         |     | supplier | Bonding wire              | Gold (Au)                  | 7440-57-5    |        | 2.018   | mg  | 1000000                                     | 3129                           |
| Encapsulation  | M-011 Other inorganic materials | 501.028 | mg  | supplier | Moulding Compound         | Solid Epoxy Resin          | Proprietary  |        | 34.333  | mg  | 68525                                       | 53229                          |
|  |                                 |         |     | supplier | Moulding Compound         | Phenol Resin               | Proprietary  |        | 24.524  | mg  | 48947                                       | 38021                          |
|  |                                 |         |     | supplier | Moulding Compound         | Silica, vitreous           | 60676-86-0   |        | 434.814 | mg  | 867844                                      | 674130                         |
|  |                                 |         |     | supplier | Moulding Compound         | Carbon-black               | 1333-86-4    |        | 2.452   | mg  | 4895  | 3802                           |
|  |                                 |         |     | supplier | Bismuth/Bismuth Compounds | Bismuth                    | 7440-69-9    |        | 4.905   | mg  | 9789  | 7604                           |
| Finishing  | M-011 Other inorganic materials | 0.009   | mg  | supplier | connections coating       | Nickel (Ni)                | 7440-02-0    |        | 0.008   | mg  | 916800                                      | 13                             |
|  |                                 |         |     | supplier | connections coating       | Palladium (Pd)             | 7440-05-3    |        | 0.001   | mg  | 58700                                       | 1                              |
|  |                                 |         |     | supplier | connections coating       | Gold (Au)                  | 7440-57-5    |        | 0.000   | mg  | 24500                                       | 0                              |