

| Product | | | | |
|-----------------|---------------|---|-----------|------------------|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site | Date |
| STM32MP133AAE3 | 244R*501XXXY | A | 9991 | 28-10-2023 |
| | Amount | UoM | Unit type | ST ECOPACK Grade |
| | 500.00 | 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 | |  life.augmented |
| 3 | 260 | 3 | | |
| bulk Solder Termination | Terminal Plating | Terminal Base Alloy | Comment | |
| Not Applicable ; if coating is used or other bulk termination : add in comments | NAC | Copper Alloy | SACN305 | |

| Package Designator | Size | Nbr of instances | Shape | |
|--------------------|---|------------------|-------------|--|
| BGA | 14x14 | 289 | bulk solder | |
| Comment | Package : B0ED LFBGA 14X14 289L PITCH 0.8 MM DM00699792 | | | |

| 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-14th June 2023 | | | | |
|--|-------------------------|------------------------|-------------|----------------|
| 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 : note : Substance present with less 0.001mg will not be declared in this document | | | | | | Mfr Item Name | 244R*501XXXY | | | | 6000002.0 | 1000000.0 | | | | | | | | |
|--|---------------------------------|--|-------------|--------------------|---------------------------------|---|--------------|-----------------------------|---------------------------------|--|---|--------------------------------|------------------|---------------|----------------------|-------|---------|----|--------|--------|
| 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 | 7.220 | mg | supplier | die | Silicon (Si) | 7440-21-3 | | 6.700 | mg | 927978 | 13400 | | | | | | | | |
| | | | | supplier | metallization | Aluminium (Al) | 7429-90-5 | | 0.058 | mg | 8033 | 116 | | | | | | | | |
| | | | | supplier | metallization | Copper (Cu) | 7440-50-8 | | 0.171 | mg | 23684 | 342 | | | | | | | | |
| | | | | supplier | metallization | Nickel (Ni) | 7440-02-0 | | 0.001 | mg | 139 | 2 | | | | | | | | |
| | | | | supplier | metallization | Tantalum (Ta) | 7440-25-7 | | 0.029 | mg | 4017 | 58 | | | | | | | | |
| | | | | supplier | metallization | Titanium (Ti) | 7440-32-6 | | 0.007 | mg | 970 | 14 | | | | | | | | |
| | | | | supplier | metallization | Tungsten (W) | 7440-33-7 | | 0.001 | mg | 139 | 2 | | | | | | | | |
| | | | | supplier | Passivation | Silicon Nitride | 12033-89-5 | | 0.041 | mg | 5679 | 82 | | | | | | | | |
| | | | | supplier | Passivation | Silicon Oxide | 7631-86-9 | | 0.212 | mg | 29363 | 424 | | | | | | | | |
| | | | | Substrate (A29368) | M-011 Other inorganic materials | 180.145 | mg | supplier | BT-substrate | Thermosetting resin (Inorganic filler) | Proprietary | | 24.590 | mg | 136500 | 49180 | | | | |
| supplier | BT-substrate | Glass cloth | 65997-17-3 | | | | | | 56.926 | mg | 316000 | 113852 | | | | | | | | |
| supplier | BT-substrate | Copper foil | 7440-50-8 | | | | | | 75.120 | mg | 417000 | 150241 | | | | | | | | |
| supplier | Solder mask | 2-benzyl-2-dimethylamino-4-morpholinobutyr | 119313-12-1 | | | | | | 8.197 | mg | 45500 | 16393 | | | | | | | | |
| supplier | Solder mask | Naphtha (petroleum), heavy aromatic | 64742-94-5 | | | | | | 8.107 | mg | 45000 | 16213 | | | | | | | | |
| supplier | Solder mask | TALC (CONTAINING NO ASBESTOS FIBRES) | 14807-96-6 | | | | | | 6.035 | mg | 33500 | 12070 | | | | | | | | |
| supplier | Solder mask | 1,3,5-Triazine-2,4,6-triamine | 108-78-1 | | | | | | 1.171 | mg | 6500 | 2342 | | | | | | | | |
| supplier | film | Copper (Cu) | 7440-50-8 | | | | | | 3.059 | mg | 786250 | 6117 | | | | | | | | |
| supplier | film | Silver (Ag) | 7440-22-4 | | | | | | 0.204 | mg | 52500 | 408 | | | | | | | | |
| supplier | film | 2,2-dimethyl-1,3-propanediyl bismethacrylate | 1985-51-9 | | | | | | 0.165 | mg | 42500 | 331 | | | | | | | | |
| DAF (2100AC) | M-011 Other inorganic materials | 3.890 | mg | supplier | film | A mixture of: 4-allyl-2,6-bis (2,3-epoxypropyl)ep | Proprietary | | 0.219 | mg | 56205 | 437 | | | | | | | | |
| | | | | supplier | film | 2-[[[2,2-bis[[[1-oxoallyloxy)methyl]butoxy]met | 94108-97-1 | | 0.152 | mg | 39195 | 305 | | | | | | | | |
| | | | | supplier | film | tert-butyl peroxyneodecanoate | 26748-41-4 | | 0.088 | mg | 22500 | 175 | | | | | | | | |
| | | | | supplier | film | Hydroquinone | 123-31-9 | | 0.003 | mg | 850 | 7 | | | | | | | | |
| | | | | Bonding wire (Cu) | Precious metals | 4.606 | mg | supplier | Bonding wire | Copper (Cu) | 7440-50-8 | | 4.447 | mg | 965500 | 8894 | | | | |
| | | | | | | | | supplier | Bonding wire | Palladium (Pd) | 7440-05-3 | | 0.143 | mg | 31000 | 286 | | | | |
| | | | | | | | | supplier | Bonding wire | Gold (Au) | 7440-57-5 | | 0.016 | mg | 3500 | 32 | | | | |
| | | | | | | | | Encapsulation (KE-G1250AAS) | M-011 Other inorganic materials | 280.420 | mg | supplier | Molding Compound | Silica(Fused) | 60676-86-0,7631-86-9 | | 252.378 | mg | 900000 | 504756 |
| | | | | | | | | | | | | supplier | Molding Compound | Epoxy resin | Proprietary | | 11.217 | mg | 40000 | 22434 |
| | | | | | | | | | | | | supplier | Molding Compound | Phenol resin | Proprietary | | 15.704 | mg | 56000 | 31407 |
| supplier | Molding Compound | Carbon Black | 1333-86-4 | | 1.122 | mg | 4000 | | | | | 2243 | | | | | | | | |
| Solder balls (SACN305) | M-011 Other inorganic materials | 23.719 | mg | supplier | Matte Sn | Tin (Sn) | 7440-31-5 | | 22.877 | mg | 964500 | 45754 | | | | | | | | |
| | | | | supplier | Matte Sn | Silver(Ag) | 7440-22-4 | | 0.712 | mg | 30000 | 1423 | | | | | | | | |
| | | | | supplier | Matte Sn | Copper (Cu) | 7440-50-8 | | 0.119 | mg | 5000 | 237 | | | | | | | | |
| | | | | supplier | Matte Sn | Nickel (Ni) | 7440-02-0 | | 0.012 | mg | 500 | 24 | | | | | | | | |