


| Product | | | | |
|-----------------|---------------|---|-----------|------------------|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site | Date |
| STM32F042T6Y6TR | H03P*445CCCA | A | 9989 | 2018-06-07 |
| | Amount | UoM | Unit type | ST ECOPACK Grade |
| | 6.32 | 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 |
| 1 | 260 | 3 | | |
| bulk Solder Termination | Terminal Plating | Terminal Base Alloy | Comment | |
| Solder ball SACN125 0.23mm | NAC | Copper Alloy | | |

| Package Designator | Size | Nbr of instances | Shape | |
|--------------------|--|------------------|---------|--|
| WL CSP | Not Applicable | Nbr of instances | No lead | |
| Comment | Package : A01N WL CSP 25L P 0.4 MM DIE 444 8539860 | | | |

| 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 | H03P*445CCCA | | | | 8000000.0 | 999865.5 |
|--|---------------------------------|-------|-----|----------|--------------------|-----------------|--------------|--------|-------|-----|---|--------------------------------|
| 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 | 4.966 | mg | supplier | die | Silicon (Si) | 7440-21-3 | | 4.747 | mg | 955900 | 750528 |
| | | | | supplier | metallization | Aluminium (Al) | 7429-90-5 | | 0.015 | mg | 3021 | 2372 |
| | | | | supplier | metallization | Copper (Cu) | 7440-50-8 | | 0.074 | mg | 14901 | 11700 |
| | | | | supplier | metallization | Cobalt (Co) | 7440-48-4 | | 0.014 | mg | 2819 | 2213 |
| | | | | supplier | metallization | Titanium (Ti) | 7440-32-6 | | 0.004 | mg | 805 | 632 |
| | | | | supplier | metallization | Tungsten (W) | 7440-33-7 | | 0.008 | mg | 1611 | 1265 |
| | | | | supplier | Passivation | Silicon Nitride | 12033-89-5 | | 0.010 | mg | 2014 | 1581 |
| | | | | supplier | Passivation | Silicon Oxide | 7631-86-9 | | 0.094 | mg | 18929 | 14862 |
| RDL-Ti Target | M-011 Other inorganic materials | 0.001 | mg | Supplier | Metals | Titanium | 7440-32-6 | | 0.001 | mg | 1000000 | 182 |
| RDL-Cu Target | M-011 Other inorganic materials | 0.005 | mg | Supplier | Metals | Copper | 7440-50-8 | | 0.005 | mg | 1000000 | 721 |
| RDL-Cu Anode | M-011 Other inorganic materials | 0.091 | mg | Supplier | Metals | Copper | 7440-50-8 | | 0.091 | mg | 1000000 | 14448 |
| UBM-Ti Target | M-011 Other inorganic materials | 0.000 | mg | Supplier | Metals | Titanium | 7440-32-6 | | 0.000 | mg | 1000000 | 74 |
| UBM-Cu Target | M-011 Other inorganic materials | 0.002 | mg | Supplier | Metals | Copper | 7440-50-8 | | 0.002 | mg | 1000000 | 294 |
| UBM-Cu Anode | M-011 Other inorganic materials | 0.080 | mg | Supplier | Metals | Copper | 7440-50-8 | | 0.080 | mg | 1000000 | 12656 |
| SOLDER BALLS SACN125 0.23mm | Solder | 1.179 | mg | Supplier | Metals | Tin | 7440-31-5 | | 1.146 | mg | 972569 | 181226 |
| | | | | Supplier | Metals | Silver | 7440-22-4 | | 0.014 | mg | 11970 | 2230 |
| | | | | Supplier | Metals | Copper | 7440-50-8 | | 0.018 | mg | 15461 | 2881 |