


| Product | | | | |
|------------------|---------------|---|-----------|------------------|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site | Date |
| ST25DV64K-JFR6D3 | CGC5*DV6P1UA | A | P1C7 | 19-10-2017 |
| | Amount | UoM | Unit type | ST ECOPACK Grade |
| | 24.00 | 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 |
| 1 | 260 | 3 | | |
| bulk Solder Termination | Terminal Plating | Terminal Base Alloy | Comment | |
| NAC | Nickel/Palladium/Gold (Ni/Pd/Au) | Copper Alloy | | |

| Package Designator | Size | Nbr of instances | Shape | |
|--------------------|---|------------------|---------|--|
| QFN | 3x3x0.6 | 12 | No lead | |
| Comment | Package : A06P UDFPN 12L 3X3X0.55 Pitch 0.50 DM00180694 | | | |

| 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- 7th July 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 : note : Substance present with less 0.001mg will not be declared in this document | | | | | | Mfr Item Name | CGCS*DV6P1UA | | | | 7000000.0 | 999959.0 |
|--|---------------------------------|--------|-----|----------|---------------------|-------------------------------------|--------------|--------|--------|-----|---|--------------------------------|
| 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 | 1.228 | mg | supplier | die | Silicon (Si) | 7440-21-3 | | 1.164 | mg | 947883 | 48500 |
| | | | | supplier | metallization | Aluminium (Al) | 7429-90-5 | | 0.006 | mg | 4886 | 250 |
| | | | | supplier | metallization | Titanium (Ti) | 7440-32-6 | | 0.001 | mg | 814 | 42 |
| | | | | supplier | metallization | Tungsten (W) | 7440-33-7 | | 0.001 | mg | 814 | 42 |
| | | | | supplier | Passivation | Silicon Nitride | 12033-89-5 | | 0.004 | mg | 3257 | 167 |
| Lead-frame | M-011 Other inorganic materials | 4.491 | mg | supplier | Passivation | Silicon Oxide | 7631-86-9 | | 0.052 | mg | 42345 | 2167 |
| | | | | supplier | alloy | Copper (Cu) | 7440-50-8 | | 4.376 | mg | 974500 | 182353 |
| | | | | supplier | alloy | Iron (Fe) | 7439-89-6 | | 0.105 | mg | 23460 | 4390 |
| | | | | supplier | alloy | Zinc (Zn) | 7440-66-6 | | 0.005 | mg | 1200 | 225 |
| Lead-frame Coating | M-011 Other inorganic materials | 0.020 | mg | supplier | alloy | Iron Phosphide (FeP) | 26508-33-8 | | 0.004 | mg | 840 | 157 |
| | | | | supplier | coating | Nickel (Ni) | 7440-02-0 | | 0.018 | mg | 916800 | 748 |
| | | | | supplier | coating | Palladium (Pd) | 7440-05-3 | | 0.001 | mg | 58700 | 48 |
| Die Attach | M-011 Other inorganic materials | 1.899 | mg | supplier | coating | Gold (Au) | 7440-57-5 | | 0.000 | mg | 24500 | 20 |
| | | | | supplier | glue or soft solder | Silver (Ag) | 7440-22-4 | | 1.662 | mg | 875000 | 69248 |
| | | | | supplier | glue or soft solder | polymer | 28630-26-4 | | 0.152 | mg | 80000 | 6331 |
| | | | | supplier | glue or soft solder | aniline | 67784-74-1 | | 0.019 | mg | 10000 | 791 |
| Wires | M-011 Other inorganic materials | 0.027 | mg | supplier | glue or soft solder | epoxy resin | Proprietary | | 0.057 | mg | 30000 | 2374 |
| | | | | supplier | glue or soft solder | Epoxy resin molecular weight <= 700 | Proprietary | | 0.009 | mg | 5000 | 396 |
| | | | | supplier | Bonding wire | Copper (Cu) | 7440-50-8 | | 0.027 | mg | 1000000 | 1129 |
| Encapsulation | M-011 Other inorganic materials | 16.334 | mg | supplier | Moulding Compound | silica vitreous | 60676-86-0 | | 14.457 | mg | 885111 | 602383 |
| | | | | supplier | Moulding Compound | Biphenyl epoxy resin | 85954-11-6 | | 0.782 | mg | 47871 | 32580 |
| | | | | supplier | Moulding Compound | Phenolic resin | 205830-20-2 | | 0.610 | mg | 37339 | 25412 |
| | | | | supplier | Moulding Compound | Epoxy resin | Proprietary | | 0.313 | mg | 19148 | 13032 |
| | | | | supplier | Moulding Compound | carbon black | 1333-86-4 | | 0.031 | mg | 1915 | 1303 |
| Finishing | M-011 Other inorganic materials | 0.000 | mg | supplier | Moulding Compound | other | Proprietary | | 0.141 | mg | 8617 | 5864 |
| | | | | supplier | connections coating | Nickel (Ni) | 7440-02-0 | | 0.000 | mg | 916800 | 7 |
| | | | | supplier | connections coating | Palladium (Pd) | 7440-05-3 | | 0.000 | mg | 58700 | 0 |
| | | | | supplier | connections coating | Gold (Au) | 7440-57-5 | | 0.000 | mg | 24500 | 0 |