


| Product | | | | |
|------------------|---------------|---|-----------|------------------|
| Mfr Item Number | Mfr Item Name | Version | Mfr Site | Date |
| ST25DV02K-W2R8S3 | PGO7*DVA21UB | A | 3068 | 13-06-2018 |
| | Amount | UoM | Unit type | ST ECOPACK Grade |
| | 80.00 | 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 | |
|--------------------|--------------------------------------|------------------|-----------|--|
| SON | STDJEDEC | 8 | Gull Wing | |
| Comment | Package : 07 SO 08 .15 JEDEC 0016023 | | | |

| 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 : note : Substance present with less 0.001mg will not be declared in this document | | | | | | Mfr Item Name | PGO7*DVA21UB | | | | 7000000.0 | 1000001.0 |
|--|---------------------------------|--------|-----|----------|---------------------------|----------------------|--------------|--------|--------|-----|---|--------------------------------|
| 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 | 1.700 | mg | supplier | die | Silicon (Si) | 7440-21-3 | | 1.657 | mg | 974706 | 20713 |
| | | | | supplier | metallization | Aluminium (Al) | 7429-90-5 | | 0.004 | mg | 2353 | 50 |
| | | | | supplier | metallization | Titanium (Ti) | 7440-32-6 | | 0.001 | mg | 588 | 13 |
| | | | | supplier | metallization | Tungsten (W) | 7440-33-7 | | 0.001 | mg | 588 | 13 |
| | | | | supplier | Passivation | Silicon Nitride | 12033-89-5 | | 0.003 | mg | 1765 | 38 |
| Lead-frame | M-011 Other inorganic materials | 24.984 | mg | supplier | Passivation | Silicon Oxide | 7631-86-9 | | 0.034 | mg | 20000 | 425 |
| | | | | supplier | alloy | Copper (Cu) | 7440-50-8 | | 24.347 | mg | 974500 | 304339 |
| | | | | supplier | alloy | Iron (Fe) | 7439-89-6 | | 0.586 | mg | 23460 | 7327 |
| | | | | supplier | alloy | Zinc (Zn) | 7440-66-6 | | 0.030 | mg | 1200 | 375 |
| Lead-frame Coating | M-011 Other inorganic materials | 0.124 | mg | supplier | alloy | Iron Phosphide (FeP) | 26508-33-8 | | 0.021 | mg | 840 | 262 |
| | | | | supplier | coating | Nickel (Ni) | 7440-02-0 | | 0.114 | mg | 916800 | 1425 |
| | | | | supplier | coating | Palladium (Pd) | 7440-05-3 | | 0.007 | mg | 58700 | 91 |
| Die Attach | M-011 Other inorganic materials | 1.027 | mg | supplier | coating | Gold (Au) | 7440-57-5 | | 0.003 | mg | 24500 | 38 |
| | | | | supplier | glue or soft solder | Silver (Ag) | 7440-22-4 | | 0.925 | mg | 900000 | 11557 |
| | | | | supplier | glue or soft solder | acrylate | Proprietary | | 0.062 | mg | 60000 | 770 |
| | | | | supplier | glue or soft solder | Methacrylate | Proprietary | | 0.039 | mg | 38000 | 488 |
| Wires | M-011 Other inorganic materials | 0.062 | mg | supplier | glue or soft solder | acrylate | Proprietary | | 0.002 | mg | 2000 | 26 |
| | | | | supplier | Bonding wire | Gold (Au) | 7440-57-5 | | 0.062 | mg | 1000000 | 776 |
| | | | | supplier | Moulding Compound | Epoxy Resin | Proprietary | | 3.938 | mg | 75586 | 49226 |
| Encapsulation | M-011 Other inorganic materials | 52.101 | mg | supplier | Moulding Compound | Phenol Resin | Proprietary | | 2.625 | mg | 50391 | 32818 |
| | | | | supplier | Moulding Compound | Silica, vitreous | 60676-86-0 | | 45.065 | mg | 864953 | 563309 |
| | | | | supplier | Moulding Compound | Carbon-black | 1333-86-4 | | 0.263 | mg | 5039 | 3282 |
| | | | | supplier | Bismuth/Bismuth Compounds | Bismuth | 7440-69-9 | | 0.210 | mg | 4031 | 2625 |
| Finishing | M-011 Other inorganic materials | 0.001 | mg | supplier | connections coating | Nickel (Ni) | 7440-02-0 | | 0.001 | mg | 916800 | 14 |
| | | | | supplier | connections coating | Palladium (Pd) | 7440-05-3 | | 0.000 | mg | 58700 | 1 |
| | | | | supplier | connections coating | Gold (Au) | 7440-57-5 | | 0.000 | mg | 24500 | 0 |