

VLSI SOLUTION OY - VS1011E/LSR-ROHS – LQFP48X7X7X1 - document A

| Component | Weight (mg) | Type | Material | CAS# | % | Weight (mg) |
|---------------|-------------|----------------------|------------------------------------|--------------|---------|-------------|
| Chip | 14.455 | | Silicon | 7440-21-3 | 100.000 | 14.455 |
| | | | | | | |
| Lead Frame | 79.408 | C7025 | Copper | 7440-50-8 | 96.200 | 74.834 |
| | | | Fe | 7439-89-6 | 0.000 | 0.000 |
| | | | Ni | 7440-02-0 | 3.000 | 2.334 |
| | | | Sn | 7440-31-5 | 0.000 | 0.000 |
| | | | P | 7723-14-0 | 0.000 | 0.000 |
| | | | Zn | 7440-66-6 | 0.000 | 0.000 |
| | | | Co | 7440-48-4 | 0.000 | 0.000 |
| | | | Si | 7440-21-3 | 0.650 | 0.506 |
| | | | Zr | - | 0.000 | 0.000 |
| | | | Al | 7429-90-5 | 0.000 | 0.000 |
| | | | Mn | 7439-96-5 | 0.000 | 0.000 |
| | | | Cr | 7440-47-3 | 0.000 | 0.000 |
| | | | Mg | 7439-95-4 | 0.150 | 0.117 |
| | | | C | 7440-44-0 | 0.000 | 0.000 |
| | | | S | 7704-34-9 | 0.000 | 0.000 |
| | | | | | | |
| | | | | Ag | Silver | 7440-22-4 |
| | | | | | | |
| Mold Compound | 51.110 | SUMIKON EMEG700LX | Silica Fused | 60676-86-0 | 87.700 | 44.823 |
| | | | Epoxy Resin | Trade Secret | 7.000 | 3.578 |
| | | | Phenol Resin | Trade Secret | 5.000 | 2.555 |
| | | | Phenol Novolac | 9003-35-4 | 0.000 | 0.000 |
| | | | Antimony Trioxide | 1309-64-4 | 0.000 | 0.000 |
| | | | Brominated Epoxy Resin | 68541-56-0 | 0.000 | 0.000 |
| | | | Carbon Black | 1333-86-4 | 0.300 | 0.153 |
| | | | Epoxy, Cresol Novolac | 29690-82-2 | 0.000 | 0.000 |
| Bonding Wire | 0.585 | 1 mils | Gold | 7440-57-5 | 99.990 | 0.585 |
| | | | Dopant | - | 0.010 | 0.000 |
| Epoxy | 1.550 | CRM 1076DF | Silver (Ag) | 7440-22-4 | 74.500 | 1.155 |
| | | | Epoxy Resin | 9003-36-5 | 11.500 | 0.178 |
| | | | t-Butyl phenyl glycidyl ether | 3101-60-8 | 7.500 | 0.116 |
| | | | Butyl Cellosolve acetate | 112-07-2 | 1.500 | 0.023 |
| | | | Diluent | 26647-14-3 | 0.000 | 0.000 |
| | | | Dicydiamide | 461-58-5 | 0.000 | 0.000 |
| | | | Hardener | 620-92-8 | 1.500 | 0.023 |
| | | | Aromatic Amine | Proprietary | 0.000 | 0.000 |
| | | | Elastmer | Trade Secret | 0.000 | 0.000 |
| | | | 1,1,1-Tris(p-hydroxyphenyl) ethane | 27955-94-8 | 3.500 | 0.054 |
| Plating | 2.900 | LEAD FREE SN100 | Sn | 7440-31-5 | 99.975 | 2.899 |
| | | | Pb | 7439-92-1 | 0.011 | 0.000 |
| | | | Cu | 7440-50-8 | 0.009 | 0.000 |
| | | | As | 7440-38-2 | 0.001 | 0.000 |
| | | | Cd | 7440-43-9 | 0.000 | 0.000 |
| | | | Fe | 7439-89-6 | 0.000 | 0.000 |
| | | | Bi | 7440-69-9 | 0.001 | 0.000 |
| | | | Ag | 7440-22-4 | 0.000 | 0.000 |
| | | | Sb | 7440-36-0 | 0.001 | 0.000 |
| | | | Al | 7429-90-5 | 0.000 | 0.000 |
| | | | Zn | 7440-66-6 | 0.001 | 0.000 |
| | | | Ni | 7440-02-0 | 0.000 | 0.000 |
| | | | In | 7440-74-6 | 0.000 | 0.000 |
| | | | Au | 7440-57-5 | 0.000 | 0.000 |
| Total Weight | 150.007 | | | | | 150.007 |