

## PEREGRINE MATERIAL DECLARATION FORM

|                        |                                      |
|------------------------|--------------------------------------|
| <b>Product:</b>        | PE4251                               |
| <b>Ordering Codes:</b> | PE4251MLI, PE4251MLI-Z               |
| <b>Description:</b>    | Absorptive SPDT Ultra CMOS RF Switch |
| <b>Package:</b>        | 8L MSOP-EP                           |
| <b>RoHS Compliant</b>  | Yes                                  |
| <b>Lead Finish</b>     | 100% Matte Tin                       |
| <b>Availability</b>    | TBD                                  |

| Component                  | Material                                   | CAS Number   | Weight (mg)      | %        | PPM       |
|----------------------------|--|--------------|------------------|----------|-----------|
| <b>Die</b>                 |  |              |                  |          |           |
|                            | Sapphire:                                  | 1344-28-1    | 0.9355           | 3.6641%  | 36641.89  |
|                            | Silicon                                    | 7440-21-3    | 0.000022         | 0.00%    | 1         |
|                            | Silicon Dioxide                            | 7631-86-9    | 0.002374         | 0.01%    | 95        |
|                            | Silicon Nitride                            | 12033-89-5   | 0.001376         | 0.01%    | 54        |
|                            | Tungsten Silicide                          | 12039-88-2   | 0.000011         | 0.00%    | 0         |
|                            | Titanium                                   | 7440-33-6    | 0.000069         | 0.00%    | 3         |
|                            | Titanium Nitride                           | 25583-20-4   | 0.000184         | 0.00%    | 7         |
|                            | Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu) | 7429-90-5    | 0.000918         | 0.00%    | 36        |
|                            | Arsenic                                    | 7440-38-2    | 0.000000         | 0.00%    | 0         |
|                            | Boron                                      | 7440-42-8    | 0.000054         | 0.00%    | 2         |
|                            | Phosphorous                                | 7723-14-0    | 0.000049         | 0.00%    | 2         |
| <b>Package</b>             |  |              |                  |          |           |
| Leadframe                  | Copper (Cu)                                | 7440-50-8    | 9.4303           | 36.9412% | 369411.52 |
|                            | Silver (Ag)                                | 7440-22-4    | 0.1857           | 0.7272%  | 7272.50   |
|                            | (Ni)                                       | 7440-02-0    | 0.2941           | 1.1520%  | 11520.11  |
|                            | (Si)                                       | 7440-21-3    | 0.0637           | 0.2496%  | 2496.02   |
|                            | (Mg)                                       | 7439-95-4    | 0.0147           | 0.0576%  | 576.01    |
| Die Attach                 | Silver (70 - 90)                           | 7440-22-4    | 0.2789           | 1.0923%  | 10923.30  |
|                            | Epoxy Resin (10 - 30)                      | Proprietary  | 0.0558           | 0.2185%  | 2184.66   |
|                            | Amine (1 - 10)                             | Proprietary  | 0.0149           | 0.0583%  | 582.58    |
|                            | Gamma Butyrolactone (1 - 10)               | 96480        | 0.0111           | 0.0417%  | 436.93    |
|                            | Metal Oxide (1 - 10)                       | Proprietary  | 0.0111           | 0.0417%  | 436.93    |
| Gold Wire                  | Au   | 7440-57-5    | 0.0780           | 0.3055%  | 3055.16   |
| 100% Matte Tin Lead Finish | Sn   | 7440-31-5    | 0.9267           | 3.6302%  | 36301.54  |
| Mold Compound              | Silica Fused (75 - 95)                     | 60676-86-0   | 11.4638          | 44.9072% | 449071.80 |
|                            | Epoxy Resin (2 - 8)                        | Trade secret | 0.7934           | 3.1078%  | 31077.63  |
|                            | Epoxy, Cresol Novolac (1 - 3)              | 29690-82-2   | 0.2645           | 1.0359%  | 10359.21  |
|                            | Phenol Resin (2 - 8)                       | Trade secret | 0.6611           | 2.5980%  | 25898.03  |
|                            | Carbon Black (0.1 - 0.5)                   | 1333-86-4    | 0.0397           | 0.1554%  | 1553.88   |
| <b>Total Weight (mg)</b>   |  |              | <b>25.528007</b> | 100.00%  | 1,000,000 |