

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE42641
<b>Ordering Codes:</b>	PE42641MLIBB, PE42641MLIBB-Z
<b>Description:</b>	SP4T UltraCMOS RF Switch DC - 3.0GHz
<b>Package:</b>	16L 3X3 QFN
<b>Environmental Compliance</b>	EU RoHS Directive 2002/95/EC, <b>REACH</b> - EU ECHA SVHC, <b>Arsenic Free</b> , <b>JIG 101</b> - EIA/EICTA/JEITA, <b>Halogen Free</b> - IEC61249-2-21, <b>PFOS Free</b> - 2006/122/EC, <b>Antimony Trioxide Free</b>
<b>Lead Finish</b>	NiPdAu
<b>Availability</b>	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	0.895339	4.24%	42,366
	Silicon (Si)	7440-21-3	0.000297	0.00%	14
	Arsenic (As)	7440-38-2	0.000001	0.00%	0
	Boron (B)	7440-42-8	0.000000	0.00%	0
	Phosphorous (P)	7723-14-0	0.000100	0.00%	5
	Titanium (Ti)	7440-32-6	0.000034	0.00%	2
	Tungsten (W)	7440-33-7	0.000003	0.00%	0
	Copper (Cu)	7440-50-8	0.000005	0.00%	0
	Aluminum (Al)	7429-90-5	0.001491	0.01%	71
	Cobalt (Co)	7440-48-4	0.000000	0.00%	0
<b>Package</b>					
Leadframe	Nickel(Ni)	7440-02-0	0.094600	0.45%	4,476
	Palladium(Pd)	7440-05-3	0.005000	0.02%	237
	Gold(Au)	7440-57-5	0.002800	0.01%	132
	Silver (Ag)	7440-22-4	0.002200	0.01%	104
	Copper(Cu)	7440-50-8	9.889300	46.79%	467,947
	Lead(Pb)	7439-92-1	0.000900	0.00%	43
	Zinc(Zn)	7440-66-6	0.012600	0.06%	596
	Phosphorus(P)	7723-14-0	0.008300	0.04%	393
	Ferrous	7439-89-6	0.237400	1.12%	11,233
Die Attach	Bismaleimide Monomer	Trade Secret	0.010000	0.05%	473
	Acrylate Monomer	Trade Secret	0.010000	0.05%	473
	Acrylate Monomer	Trade Secret	0.010000	0.05%	473
	Acrylate Monomer	Trade Secret	0.010000	0.05%	473
	Silver	7440-22-4	0.280000	1.32%	13,249
Gold Wire	Gold(Au)	7440-57-5	0.093000	0.44%	4,401
Mold Compound	Epoxy Resin-1	Trade Secret	0.335000	1.59%	15,852
	Epoxy Resin-2	Trade Secret	0.191000	0.90%	9,038
	Phenol Resin	Trade Secret	0.335000	1.59%	15,852
	Fused Silica	60676-86-0	8.116000	38.40%	384,037
	Carbon Black	1333-86-4	0.019000	0.09%	899
	Metal Hydroxide	Trade Secret	0.526000	2.49%	24,890
	Others	Trade Secret	0.048000	0.23%	2,271
<b>Total Weight (mg)</b>			<b>21.133370</b>	<b>100.00%</b>	<b>1,000,000</b>

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE42641
<b>Ordering Codes:</b>	PE42641MLI, PE42641MLI-Z
<b>Description:</b>	SP4T UltraCMOS RF Switch DC - 3.0 GHz
<b>Package:</b>	16L 3X3 QFN
<b>Environmental Compliance</b>	EU RoHS Directive 2002/95/EC, <b>REACH</b> - EU ECHA SVHC, <b>Arsenic Free</b> , <b>JIG 101</b> - EIA/EICTA/JEITA, <b>Halogen Free</b> - IEC61249-2-21, <b>PFOS Free</b> - 2006/122/EC, <b>Antimony Trioxide Free</b>
<b>Lead Finish</b>	100% Matte Tin
<b>Availability</b>	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	0.895339	4.60%	45,965
	Silicon (Si)	7440-21-3	0.000297	0.00%	15
	Arsenic (As)	7440-38-2	0.000001	0.00%	0
	Boron (B)	7440-42-8	0.000000	0.00%	0
	Phosphorous (P)	7723-14-0	0.000100	0.00%	5
	Titanium (Ti)	7440-32-6	0.000034	0.00%	2
	Tungsten (W)	7440-33-7	0.000003	0.00%	0
	Copper (Cu)	7440-50-8	0.000005	0.00%	0
	Aluminum (Al)	7429-90-5	0.001491	0.01%	77
	Cobalt (Co)	7440-48-4	0.000000	0.00%	0
<b>Package</b>					
Leadframe	Copper (Cu)	7440-50-8	4.921000	25.26%	252,635
	Iron (Fe)	7439-89-6	0.118600	0.61%	6,089
	Zinc (Zn)	7440-66-6	0.006100	0.03%	313
	Phosphorus (P)	7723-14-0	0.001500	0.01%	77
	Silver (Ag)	7440-22-4	0.152200	0.78%	7,814
Die Attach	Silver (Ag)	7440-22-4	0.245400	1.26%	12,598
	Epoxy Resin	9003-36-5	0.061300	0.31%	3,147
	t-Butyl phenyl glycidyl ether	3101-60-8	0.025600	0.13%	1,314
	Phenolic hardener	92-88-6	0.005100	0.03%	262
	Butyl cellosolve acetate	112-07-2	0.003400	0.02%	175
Gold Wire	Gold (Au)	7440-57-5	0.125500	0.64%	6,443
100% Matte Tin Lead Finish	Tin (Sn)	7440-31-5	0.166300	0.85%	8,538
Mold Compound	Silica Fused	60676-86-0	11.691200	60.02%	600,205
	Epoxy Resin	Trade secret	0.510000	2.62%	26,182
	Phenol Resin	Trade secret	0.510000	2.62%	26,182
	Carbon Black	1333-86-4	0.038200	0.20%	1,961
<b>Total Weight (mg)</b>			<b>19.478670</b>	<b>100.00%</b>	<b>1,000,000</b>