

PEREGRINE MATERIAL DECLARATION FORM

Product:	PE561221
Ordering Codes:	PE561221A-R
Description:	UltraCMOS WiFi RFFE (PA+LNA+SW)
Package:	LGA
Environmental Compliance	EU RoHS2 Directive 2011/65/EC, REACH - EU ECHA SVHC, Arsenic Free, JIG 101 - EIA/EICTA/JEITA, Halogen Free - IEC61249-2-21, PFOS Free - 2006/122/EC, Antimony Trioxide Free
Lead Finish	Solder Bump
Availability	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
Die	Silicon	7440-21-3	1.878858	31.3145%	313,145
Die	Phosphorus	7723-14-0	0.000009	0.0002%	2
Die	Boron	7440-42-8	0.000009	0.0002%	2
Die	Arsenic	7440-38-2	0.000009	0.0002%	2
Die	Germanium	7440-56-4	0.000009	0.0002%	2
Die	Indium	7440-74-6	0.000009	0.0002%	2
Die	Cobalt	7440-48-4	0.000009	0.0002%	2
Die	Tungsten	7440-33-7	0.000354	0.0059%	59
Die	Copper	7440-50-8	0.010722	0.1787%	1,787
Die	Tantalum	7440-25-7	0.000509	0.0085%	85
Die	Aluminum	7429-90-5	0.000197	0.0033%	33
Sputter	Titanium	7440-32-6	0.000031	0.0005%	5
Sputter	Tungsten	7440-33-7	0.000031	0.0005%	5
Sputter	Copper	7440-50-8	0.000061	0.0010%	10
Polyimide	Proprietary polymer	-	0.027852	0.4642%	4,642
UBM	Nickel	7440-02-0	0.000460	0.0077%	77
Solder Plating	Tin	7440-31-5	0.010646	0.1774%	1,774
Solder Plating	Silver	7440-22-4	0.000184	0.0031%	31
Coating Resin	Silica	7631-86-9	1.898750	31.6460%	316,460
Coating Resin	Epoxy resin	---	0.245000	4.0834%	40,834
Coating Resin	Phenol resin	---	0.245000	4.0834%	40,834
Coating Resin	Carbon Black	1333-86-4	0.012250	0.2042%	2,042
Coating Resin	Bismuth	7440-69-9	0.049000	0.8167%	8,167
Solder	Silver	7440-22-4	0.018716	0.3119%	3,119
Solder	Tin	7440-31-5	0.588512	9.8086%	98,086
Solder	Copper	7440-50-8	0.002772	0.0462%	462
Ceramic	Silica	7631-86-9	0.415483	6.9248%	69,248
Ceramic	Barium oxide	1304-28-5	0.318859	5.3144%	53,144
Ceramic	Aluminium trioxide	1344-28-1	0.115949	1.9325%	19,325
Ceramic	Titanium dioxide	13463-67-7	0.048312	0.8052%	8,052
Ceramic	Manganese(II) oxide	1344-43-0	0.048312	0.8052%	8,052
Ceramic	misc	---	0.019325	0.3221%	3,221
Plating 1	Gold	7440-57-5	0.000193	0.0032%	32
Plating 2	Nickel	7440-02-0	0.001019	0.0170%	170
Plating 2	Lead	7439-92-1	0.000001	0.0000%	0
Plating 2	Phosphorus	7723-14-0	0.000075	0.0013%	13
Electrode	Copper	7440-50-8	0.042472	0.7079%	7,079
Total Weight (mg)			5.999961	100.00%	1,000,000