

PEREGRINE MATERIAL DECLARATION FORM

Product:	PE4151
Ordering Codes:	PE4151MLAA-Z, PE4151B-Z
Description:	UltraCMOS® Low Frequency Passive Mixer with Integrated LO Amplifier
Package:	10L MSOP
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	NiPdAu
Availability	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
Die	Aluminum oxide	1344-28-1	0.860622	3.68%	36,837
Die	Aluminum	7429-90-5	0.002618	0.01%	112
Die	Silicon	7440-21-3	0.000175	0.00%	7
Die	Arsenic	7440-38-2	0.000001	0.00%	0
Die	Boron	7440-42-8	0.000001	0.00%	0
Die	Phosphorus	7723-14-0	0.000003	0.00%	0
Die	Titanium	7440-32-6	0.000436	0.00%	19
Die	Tungsten	7440-33-7	0.008726	0.04%	374
Die	Cobalt	7440-48-4	0.000017	0.00%	1
Die	Copper	7440-50-8	0.000007	0.00%	0
Leadframe	Copper	7440-50-8	9.641600	41.27%	412,690
Leadframe	Nickel	7440-02-0	0.300700	1.29%	12,871
Leadframe	Silicon	7440-21-3	0.065100	0.28%	2,786
Leadframe	Magnesium	7439-95-4	0.015000	0.06%	642
Die Attach	Silver	7440-22-4	0.318800	1.36%	13,646
Die Attach	Epichlorohydrin-Formaldehyde-Phenol Copolymer	9003-36-5	0.021300	0.09%	912
Die Attach	Epoxy Resin	68475-94-5	0.021300	0.09%	912
Die Attach	Lactone	96-48-0	0.021300	0.09%	912
Die Attach	Polyoxypropylenediamine	9046-10-0	0.021300	0.09%	912
Die Attach	2,6-Diglycidyl Phenyl Allyl Ether Oligomer	Trade secret	0.021300	0.09%	912
Wire	Gold	7440-57-5	0.157000	0.67%	6,720
Internal Plating	Nickel	7440-02-0	0.127300	0.54%	5,449
Internal Plating	Palladium	7440-05-3	0.010300	0.04%	441
Internal Plating	Gold	7440-57-5	0.000400	0.00%	17
External Plating	Nickel	7440-02-0	0.068300	0.29%	2,923
External Plating	Palladium	7440-05-3	0.005500	0.02%	235
External Plating	Gold	7440-57-5	0.000200	0.00%	9
Mold Compound	Silica Fused	60676-86-0	10.120900	43.32%	433,206
Mold Compound	Epoxy Resin	Trade secret	0.700400	3.00%	29,979
Mold Compound	Epoxy, Cresol Novolac	29690-82-2	0.233500	1.00%	9,995
Mold Compound	Phenol Resin	Trade secret	0.583700	2.50%	24,984
Mold Compound	Carbon Black	1333-86-4	0.035000	0.15%	1,498
Total Weight (mg)			23.362807	100.00%	1,000,000