

PEREGRINE MATERIAL DECLARATION FORM

Product:	PE4152
Ordering Codes:	PE4152A-Z
Description:	UltraCMOS® Quad MOSFET Mixer
Package:	20L 4x4 QFN
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	0.855935	2.00%	20,017.13
Die	Aluminum	7429-90-5	0.002604	0.01%	60.89
Die	Silicon	7440-21-3	0.000174	0.00%	4.06
Die	Arsenic	7440-38-2	0.000001	0.00%	0.02
Die	Boron	7440-42-8	0.000001	0.00%	0.02
Die	Phosphorus	7723-14-0	0.000003	0.00%	0.08
Die	Titanium	7440-32-6	0.000434	0.00%	10.15
Die	Tungsten	7440-33-7	0.008679	0.02%	202.96
Die	Cobalt	7440-48-4	0.000017	0.00%	0.41
Die	Copper	7440-50-8	0.000007	0.00%	0.16
Leadframe	Copper	7440-50-8	20.443000	47.81%	478,085.27
Leadframe	Iron	7439-89-6	0.049300	0.12%	1,152.94
Leadframe	Zinc	7440-66-6	0.026000	0.06%	608.04
Leadframe	Phosphorus	7723-14-0	0.017000	0.04%	397.57
Die Attach	Proprietary acrylates	-	0.045000	0.11%	1,052.38
Die Attach	Silver	7440-22-4	0.277000	0.65%	6,477.99
Die Attach	Proprietary Bismaleimide	-	0.010000	0.02%	233.86
Die Attach	Methacrylate ester	-	0.010000	0.02%	233.86
Die Attach	Proprietary polymer	-	0.004000	0.01%	93.55
Gold Wire	Gold	7440-57-5	0.689000	1.61%	16,113.13
Plating	Nickel	7440-02-0	0.407000	0.95%	9,518.21
Plating	Palladium	7440-05-3	0.011000	0.03%	257.25
Plating	Gold	7440-57-5	0.004000	0.01%	93.55
Mold Compound	Silica fused	60676-86-0	18.000000	42.10%	420,952.64
Mold Compound	Multi-aromatic resin	-	1.900000	4.44%	44,433.89
Total Weight (mg)			42.760155	100.00%	1,000,000