

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE44820
<b>Ordering Codes:</b>	PE44820A-X
<b>Description:</b>	UltraCMOS® RF Digital Phase Shifter 8-bit, 1.7–2.2 GHz
<b>Package:</b>	32L 5X5 QFN
<b>Environmental Compliance</b>	EU RoHS2 Directive 2011/65/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	10.663212	12.86%	128,557
<b>Package</b>					
Leadframe	Copper (Cu)	7440-50-8	39.000000	47.02%	470,190
	Iron (Fe)	7439-89-6	0.900000	1.09%	10,851
	Zinc (Zn)	7440-66-6	0.100000	0.12%	1,206
	Phosphorus (P)	7723-14-0	0.031992	0.04%	386
Die Attach	Proprietary Acrylates	Trade secret	0.121000	0.15%	1,459
	Silver (Ag)	7440-22-4	0.746000	0.90%	8,994
	Proprietary Bismaleimide	Trade secret	0.028000	0.03%	338
	Methacrylate Ester	Trade secret	0.028000	0.03%	338
Gold Wire	Proprietary Polymer	Trade secret	0.009000	0.01%	109
	Gold (Au)	7440-57-5	2.502000	3.02%	30,164
Frame Plating	Nickel (Ni)	7440-02-0	0.565000	0.68%	6,812
	Palladium (Pd)	7440-05-3	0.012000	0.01%	145
	Gold (Au)	7440-57-5	0.001000	0.00%	12
	Silver (Ag)	7440-22-4	0.001000	0.00%	12
External Plating	Nickel (Ni)	7440-02-0	0.121000	0.15%	1,459
	Palladium (Pd)	7440-05-3	0.007000	0.01%	84
	Gold (Au)	7440-57-5	0.005000	0.01%	60
	Silver (Ag)	7440-22-4	0.004000	0.00%	48
Mold Compound	Silica Fused	60676-86-0	24.200000	29.18%	291,759
	Epoxy Resin	Trade secret	2.500000	3.01%	30,140
	Phenol Resin	Trade secret	1.300000	1.57%	15,673
	Carbon Black	1333-86-4	0.100000	0.12%	1,206
<b>Total Weight (mg)</b>			<b>82.945204</b>	100.00%	1,000,000