

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE3336
<b>Ordering Codes:</b>	3336-53; 3336-54
<b>Description:</b>	Integer-N Phase Locked-Loop (PLL) for Low Phase Noise Applications
<b>Package:</b>	48L QFN
<b>RoHS Compliant</b>	Yes
<b>Lead Finish</b>	100% Matte Tin
<b>Peak Reflow Temp</b>	260 degree C
<b>Time at Peak Temp</b>	20 Sec
<b>Max No. of Reflow</b>	Three
<b>Availability</b>	TBD

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire:	1344-28-1	7.81279413	10.36%	103,560
	Silicon:	7440-21-3	0.00056822	0.00%	8
	Silicon Dioxide:	7631-86-9	0.03592683	0.05%	476
	Silicon Nitride:	12033-89-5	0.01462902	0.02%	194
	Tungsten Silicide:	12039-88-2	0.00070504	0.00%	9
	Titanium:	7440-33-6	0.00131327	0.00%	17
	Titanium Nitride:	25583-20-4	0.00267241	0.00%	35
	Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu):	7429-90-5	0.01852362	0.02%	246
	Arsenic:	7440-38-2	0.00023423	0.00%	3
	Boron:	7440-42-8	0.00095258	0.00%	13
	Phosphorous:	7723-14-0	0.0005199	0.00%	7
<b>Package</b>					
Leadframe 421950	Cu:	7440-50-8	25.906800	34.34%	343,401
	Fe:	7439-89-6	0.624400	0.83%	8,277
	Zn:	7440-66-6	0.031900	0.04%	423
	P:	7723-14-0	0.008000	0.01%	106
	Ag (weight estimate):	7440-22-4	0.379400	0.50%	5,029
Die attach material	Silver (65 - 85):	7440-22-4	0.337500	0.45%	4,474
	Acrylate Resin (1-5):	Proprietary	0.031800	0.04%	422
	2-Butoxyethyl Acetate (1-5):	1121-07-2	0.013900	0.02%	184
	2-(2-Butoxyethoxy) ethyl Acetate (1-5):	124-17-4	0.013900	0.02%	184
Gold Wire	Au:	7440-57-5	0.069400	0.09%	920
100% Matte Tin Lead Finish	Sn:	7440-31-5	1.109100	1.47%	14,701
Mold Compound	Silica Fused (75 - 95):	60676-86-0	35.787600	47.44%	474,373
	Epoxy Resin (1 - 5):	Trade secret	1.561100	2.07%	20,693
	Phenol Resin (1 - 5):	Trade secret	1.561100	2.07%	20,693
	Carbon Black (0.1- 0.5):	1333-86-4	0.117100	0.16%	1,552
<b>Total Weight (mg)</b>			<b>75.441839</b>	100.00%	1,000,000