

## PEREGRINE MATERIAL DECLARATION FORM

<b>Product:</b>	PE3341
<b>Ordering Codes:</b>	3341-53; 3341-54
<b>Description:</b>	Integer-N Phase Locked-Loop (PLL) Frequency Synthesizer
<b>Package:</b>	20L 4X4 QFN
<b>RoHS Compliant</b>	Yes
<b>Lead Finish</b>	100% Matt 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>	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
<b>Die</b>					
	Sapphire:	1344-28-1	2.579040	5.75%	57,539
	Silicon:	7440-21-3	0.000285	0.00%	6
	Silicon Dioxide:	7631-86-9	0.014534	0.03%	324
	Silicon Nitride:	12033-89-5	0.005920	0.01%	132
	Tungsten Silicide:	12039-88-2	0.000305	0.00%	7
	Titanium:	7440-33-6	0.000637	0.00%	14
	Titanium Nitride:	25583-20-4	0.001372	0.00%	31
	Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu):	7429-90-5	0.008878	0.02%	198
	Arsenic:	7440-38-2	0.000001	0.00%	0
	Boron:	7440-42-8	0.000235	0.00%	5
	Phosphorous:	7723-14-0	0.000214	0.00%	5
<b>Package</b>					
Leadframe 421950	Cu:	7440-50-8	13.837525	30.87%	308,719
	Fe:	7439-89-6	0.333520	0.74%	7,441
	Zn:	7440-66-6	0.017031	0.04%	380
	P:	7723-14-0	0.004258	0.01%	95
	Ag (weight estimate):	7440-22-4	0.168000	0.37%	3,748
Die attach material	Silver (65 - 85):	7440-22-4	0.129812	0.29%	2,896
	Epoxy Resin (15 - 25):	9003-36-5	0.034617	0.08%	772
	t-Butyl phenyl glycidyl ether (5 - 10):	3101-60-8	0.012981	0.03%	290
	Phenolic hardener (1 - 2):	92-88-6	0.002596	0.01%	58
	Butyl cellosolve acetate (0.5 - 1.5):	112-07-2	0.001731	0.00%	39