

Package Material Composition and Mass Calculation

Manufacture:	SCK
Package type:	PBGA 15x15 196LD
Total weight(g)	0.6498g

TABLE OF MATERIAL DECLARATION									
No.	BOM	Weight(gram) 100%	Materials Analysis (Element)	CAS Number	Material Mass (Gram)	Material (Weight %)	Material PPM	Package Composition (Weight %)	Package Composition (Weight ppm)
1	Die Attach Epoxy	0.00270	Silver	7440-22-4	0.002160	80.00	800000	0.33%	3324
			benzene, epoxidized Bismaleimide resin	No CAS#	0.000405	15.00	150000	0.06%	623
			Functionalized Ester	Proprietary	0.000041	1.50	15000	0.01%	62
			Epoxy resin	Proprietary	0.000041	1.50	15000	0.01%	62
			1,3-Di-2-propenyl-2-(2-propenyloxy	No CAS#	0.000027	1.00	10000	0.00%	42
			Diester resin	Proprietary	0.000027	1.00	10000	0.00%	42
					0.00270	100.00	1000000	0.42%	4155
2	Die	0.01570	Silicone	-	0.015700	100.00	1000000	2.42%	24161
					0.01570	100.00	1000000	2.42%	24161
3	Molding Compound	0.21760	Silica Fused	60676-86-0	0.186483	85.70	857000	28.70%	286986
			Epoxy Resin	Trade secret	0.010880	5.00	50000	1.67%	16744
			Metal Hydroxide	Trade secret	0.006528	3.00	30000	1.00%	10046
			Phenol Novolac	9003-35-4	0.006528	3.00	30000	1.00%	10046
			Phenol Resin	Trade secret	0.006528	3.00	30000	1.00%	10046
			Carbon Black	1333-86-4	0.000653	0.30	3000	0.10%	1005
					0.21760	100.00	1000000	33.49%	334872
4	Au Wire	0.00140	Gold	7440-57-5	0.001386	99.00	990000	0.21%	2133
			Palladium	5/3/7440	0.000014	1.00	10000	0.00%	22
					0.00140	100.00	1000000	0.22%	2155
5	Solder Ball	0.09530	Tin	7440-31-5	0.091965	96.50	965000	14.15%	141527
			Silver	7440-22-4	0.002859	3.00	30000	0.44%	4400
			Copper	7440-50-8	0.000477	0.50	5000	0.07%	733
					0.09530	100.00	1000000	14.67%	146661
8	Substrate	0.31710	Copper	7440-50-8	0.158550	50.00	500000	24.40%	243998
			Fiber glass/SiO2	14808-60-7	0.127601	40.24	402400	19.64%	196370
			Multi-Function Epoxy	30621-65-9	0.013350	4.21	42100	2.05%	20545
			TBBA	79-94-7	0.006818	2.15	21500	1.05%	10492
			Gold	7440-57-5	0.001268	0.40	4000	0.20%	1952
			Nickel	7440-02-0	0.009513	3.00	30000	1.46%	14640
					0.31710	100.00	1000000	48.80%	487996
Total Package Weight		0.64980						#REF!	#REF!