



Part Number:		AS4C128M16D3-12BCN / AS4C128M16D3-12BIN / AS4C128M16D3-12BAN							
Part Weight:		222.3mg							
No.	Part Name	Material Name	Component wt (mg)	Material Content (Element)	CAS Number	Element wt (%)	Element wt (mg)	wt % of Total unit wt	PPM
1	Substrate	NPG-200 / AUS 308	83.54	E-Glass fabric	65997-17-3	21.00%	17.543	7.89	210000
				Epoxy resin	29690-82-2	21.00%	17.543	7.89	210000
				Fillers	21645-51-2	7.00%	5.848	2.63	70000
				DOPO	35948-25-5	7.00%	5.848	2.63	70000
				Copper	7440-50-8	14.00%	11.696	5.26	140000
				Talc containing no asbestiform fibers	14807-96-6	0.47%	0.391	0.18	4680
				Morpholine derivative	Trade secret	0.47%	0.391	0.18	4680
				Barium sulfate	7727-43-7	5.48%	4.581	2.06	54840
				Silica, amorphous	7631-86-9	0.11%	0.090	0.04	1080
				Dipropylene glycol monomethyl ether	34590-94-8	0.95%	0.792	0.36	9480
				Epoxy resin A	Trade secret	3.46%	2.887	1.30	34560
				Epoxy resin B	85954-11-6	1.07%	0.892	0.40	10680
				Nickel	7440-02-0	15.00%	12.531	5.64	150000
				Gold	7440-57-5	3.00%	2.506	1.13	30000
2	Mold compound	CEL-9120HF	87.42	Epoxy resin	Trade secret	3.50%	3.060	1.38	35000
				Hardener	Trade secret	4.50%	3.934	1.77	45000
				Metal Hydroxide	Trade secret	10.25%	8.961	4.03	102500
				Carbon black	1333-86-4	0.20%	0.175	0.08	2000
				Amorphous silica	60676-86-0	76.55%	66.920	30.10	765500
				Crytal silica	14808-60-7	5.00%	4.371	1.97	50000
3	Epoxy	6202C	0.48	Polymeric material	Trade secret	20.00%	0.096	0.04	200000
				Epoxy resin	Trade secret	7.50%	0.036	0.02	75000
				Di-ester resin	Trade secret	3.00%	0.014	0.01	30000
				Functionalized urethane resin	Trade secret	3.00%	0.014	0.01	30000
				Siloxane polymer	Trade secret	20.00%	0.096	0.04	200000
				Mixture of synthetic and fused silica	Trade secret	20.00%	0.096	0.04	200000
				Carbitol acetate	112-15-2	26.50%	0.127	0.06	265000
4	Solder ball	Sn/Ag/Cu	31.02	Tin	7440-31-5	96.50%	29.934	13.47	965000
				Silver	7440-22-4	3.00%	0.931	0.42	30000
				Copper	7440-50-8	0.50%	0.155	0.07	5000
5	Gold wire	Au	0.49	Gold	7440-57-5	99.99%	0.490	0.22	999900
				Impurity	Trade secret	0.01%	0.000	0.00	100
6	Die	Chip	19.35	Silicon	7440-21-3	100.00%	19.350	8.70	1000000
			222.3			600.00%	222.300	100.00	6000000