

Part Description:			AS4C64M32MD1-5BCN / AS4C64M32MD1-5BIN							
Wieght (mg):			218.5 mg							
No.	Part Name	Material Name	Material mass (mg)	Substance in Materials	CAS Number	Element wt (%)	Element wt (mg)	wt % of total unit wt	PPM	
1	Chip	Silicon	20.775	Silicon (Si)	7440-21-3	99.84%	20.742	9.493%	998400	
				Aluminum (Al)	7429-90-5	0.025%	0.005	0.002%	250	
				Titanium (Ti)	7440-32-6	0.1%	0.021	0.010%	1000	
				Tungsten (W)	7440-33-7	0.025%	0.005	0.002%	250	
				Copper (Cu)	7440-50-8	0.01%	0.002	0.001%	100	
2	Substrate	Resin	90.964	E-Glass Fabric	65997-17-3	26.068%	23.712	10.852%	260680	
				Epoxy Resin	29690-82-2	28.098%	25.559	11.698%	280980	
				Fillers	19287-45-7	8.798%	8.003	3.663%	87980	
				DOPO	35948-25-5	8.798%	8.003	3.663%	87980	
				Copper	7440-50-8	17.598%	16.008	7.326%	175980	
				gold potassium cyanide	13967-50-5	0.279%	0.254	0.116%	2790	
				Nickel	7440-02-0	2.646%	2.407	1.102%	26460	
				Acrylic resin	Trade Secret	2.749%	2.501	1.144%	27490	
				Barium Sulfate	7727-43-7	1.897%	1.726	0.790%	18970	
				3-Methoxy-3-Methyl Butyl-Acetate	103429-90-9	0.948%	0.862	0.395%	9480	
				Dipropylene glycol monomethyl ether	34590-94-8	0.261%	0.237	0.109%	2610	
				Talc containing no asbestiform fibers	14807-96-6	0.032%	0.029	0.013%	320	
				auxiliaries ; additives	Trade Secret	0.457%	0.416	0.190%	4570	
				SiO2 Compounds	60676-86-0	0.457%	0.416	0.190%	4570	
				Phthalocyanine Green G	Trade Secret	0.457%	0.416	0.190%	4570	
organic pigments	Trade Secret	0.457%	0.416	0.190%	4570					
3	Die Adhesive_1	Epoxy	1.278	Polymeric material	Trade Secret	20.00%	0.256	0.117%	200000	
				Epoxy Resin	Trade Secret	8.00%	0.102	0.047%	80000	
				Di-ester Resin	Trade Secret	3.00%	0.038	0.018%	30000	
				Functionalized urethane resin	Trade Secret	3.00%	0.038	0.018%	30000	
				Siloxane Polymer	Trade Secret	20.00%	0.256	0.117%	200000	
				Mixture of synthetic & fused silica	Trade Secret	20.00%	0.256	0.117%	200000	
				Carbitol acetate	112-15-2	26.00%	0.332	0.152%	260000	
4	Die Adhesive_2	Epoxy	1.256	Solide epoxy resin	7631-86-9	12.50%	0.157	0.072%	125000	
				Phenol resin	Trade Secret	12.50%	0.157	0.072%	125000	
				Silica	Trade Secret	35.00%	0.440	0.201%	350000	
				Synthetic rubber	Trade Secret	40.00%	0.502	0.230%	400000	
5	Gold Wire	Metal	8.972	Au	7440-57-5	99.00%	8.882	4.065%	990000	
				Pd	7440-05-3	1.00%	0.090	0.041%	10000	
6	Compound	Resin	72.931	Epoxy resin	29690-82-2	12.00%	8.752	4.005%	120000	
				Phenol Resin	9003-35-4	6.00%	4.376	2.003%	60000	
				Metal Hydroxide	Trade Secret	7.00%	5.105	2.336%	70000	
				Silica	60676-86-0	71.20%	51.927	23.765%	712000	
				Silica fused	7631-86-9	3.50%	2.553	1.168%	35000	
				Carbon black	1333-86-4	0.30%	0.219	0.100%	3000	
7	Solder Ball	Metal	22.324	Sn	7440-31-5	96.50%	21.543	9.859%	965000	
				Ag	7440-22-4	3.00%	0.670	0.307%	30000	
				Cu	7440-50-8	0.50%	0.112	0.051%	5000	
			218.5				218.5	100.00%		