



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C4M32D1A-5BCN / AS4C4M32D1A-5BIN							
Part Weight:		342.75mg							
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	HL-832NX / AUS 308	85.6667	Bismaleimide Triazine resin, Epoxy resin	105391-33-1	26.00%	22.2733	6.50%	260000
				Inorganic Filler	21645-51-2	13.00%	11.1367	3.25%	130000
				Continuous Filament Fiber Glass	65997-17-3	26.00%	22.2733	6.50%	260000
				Copper	7440-50-8	25.00%	21.4167	6.25%	250000
				Talc containing no asbestiform fibers	14807-96-6	0.27%	0.2339	0.07%	2730
				Morpholine derivative	Trade secret	0.27%	0.2339	0.07%	2730
				Barium sulfate	7727-43-7	3.20%	2.7405	0.80%	31990
				Silica, amorphous	7631-86-9	0.06%	0.0540	0.02%	630
				Dipropylene glycol monomethyl ether	34590-94-8	0.55%	0.4737	0.14%	5530
				Epoxy resin A	Trade secret	2.02%	1.7270	0.50%	20160
				Epoxy resin B	85954-11-6	0.62%	0.5337	0.16%	6230
				Nickel	7440-02-0	2.50%	2.1417	0.62%	25000
				Gold	7440-57-5	0.50%	0.4283	0.12%	5000
2	Mold compound	G770SY	199.4667	Epoxy resin A	Trade secret	2.80%	5.5851	1.63%	28000
				Epoxy resin B	Trade secret	2.80%	5.5851	1.63%	28000
				Phenol resin A	Trade secret	2.80%	5.5851	1.63%	28000
				Phenol resin B	Trade secret	2.80%	5.5851	1.63%	28000
				Metal hydroxide	Trade secret	1.40%	2.7925	0.81%	14000
				Carbon black	1333-86-4	0.20%	0.3989	0.12%	2000
				Silica fused A	60676-86-0	77.00%	153.5894	44.81%	770000
				Silica fused B	7631-86-9	10.00%	19.9467	5.82%	100000
				Silica, crystalline	14808-60-7	0.20%	0.3989	0.12%	2000
3	Epoxy	2025D	0.2219	Silica, amorphous, fused	Trade secret	50.00%	0.1110	0.03%	500000
				Bismaleimide monomer	Trade secret	35.00%	0.0777	0.02%	350000
				Acrylate monomer	Trade secret	5.00%	0.0111	0.00%	50000
				Epoxy resin	Trade secret	5.00%	0.0111	0.00%	50000
				Acrylic resin	Trade secret	5.00%	0.0111	0.00%	50000
4	Solder Ball	SnAgCu	50.6016	Tin	7440-31-5	96.50%	48.8305	14.25%	965000
				Silver	7440-22-4	3.00%	1.5180	0.44%	30000
				Copper	7440-50-8	0.50%	0.2530	0.07%	5000
5	Gold Wire	Au	0.8837	Gold	7440-57-5	99.99%	0.8836	0.26%	999900
				Other	Trade secret	0.01%	0.0001	0.00%	100
6	Die	Chip	5.9094	Silicon	7440-21-3	100.00%	5.9094	1.72%	1000000
342.75				600.00%		342.7500	100.00%	6000000	