



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C8M32SA-7BCN / AS4C8M32SA-6BIN								
Part Weight:		195.044mg								
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-832NXA / AUS 308	50.86	Continuous Filament Fiber Glass	65997-17-3	30.68%	15.601	8.00%	306750	
				Cured thermosetting resin (including inorganic filler)	Trade secret	30.68%	15.601	8.00%	306750	
				Talc containing no asbestiform fibers	14807-96-6	0.40%	0.205	0.11%	4036	
				Morpholine derivative	Trade secret	0.40%	0.205	0.11%	4036	
				Barium sulfate	7727-43-7	4.44%	2.258	1.16%	44396	
				Silica, amorphous	7631-86-9	0.10%	0.051	0.03%	1009	
				Dipropylene glycol monomethyl ether	34590-94-8	2.42%	1.232	0.63%	24216	
				Naphthalene	91-20-3	0.10%	0.051	0.03%	1009	
				Epoxy resin A	Trade secret	1.31%	0.667	0.34%	13117	
				Epoxy resin B	85954-11-6	0.91%	0.462	0.24%	9081	
				Copper	7440-50-8	26.98%	13.722	7.04%	269800	
				Nickel	7440-02-0	1.24%	0.631	0.32%	12400	
				Gold	7440-57-5	0.34%	0.173	0.09%	3400	
2	Mold compound	G770SY	106.136	Epoxy resin A	Trade secret	2.80%	2.972	1.52%	28000	
				Epoxy resin B	Trade secret	2.80%	2.972	1.52%	28000	
				Phenol resin A	Trade secret	2.80%	2.972	1.52%	28000	
				Phenol resin B	Trade secret	2.80%	2.972	1.52%	28000	
				Metal hydroxide	Trade secret	1.40%	1.486	0.76%	14000	
				Carbon black	1333-86-4	0.20%	0.212	0.11%	2000	
				Silica fused A	60676-86-0	77.00%	81.724	41.90%	770000	
				Silica fused B	7631-86-9	10.00%	10.614	5.44%	100000	
				Silica, crystalline	14808-60-7	0.20%	0.212	0.11%	2000	
3	Film	EM-760	0.668	Acrylic resin	Trade secret	50.00%	0.334	0.17%	500000	
				Silica, amorphous	7631-86-9	42.00%	0.281	0.14%	420000	
				Phenol resin	Trade secret	8.00%	0.053	0.03%	80000	
4	Solder ball	SnAgCu	31.76	Tin	7440-31-5	96.50%	30.649	15.71%	965000	
				Silver	7440-22-4	3.00%	0.953	0.49%	30000	
				Copper	7440-50-8	0.50%	0.159	0.08%	5000	
5	Gold wire	Au	0.406	Gold	7440-57-5	99.99%	0.406	0.21%	999900	
				Others	Trade Secret	0.01%	0.000	0.00%	100	
6	Die	Chip	2.607	Silicon	7440-21-3	100.00%	2.607	1.34%	1000000	
7	Die	Chip	2.607	Silicon	7440-21-3	100.00%	2.607	1.34%	1000000	
			195.044				700.00%	195.044	100.00%	7000000