



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C128M8D2-25BCN / AS4C128M8D2-25BIN								
Part Weight:		151.08mg								
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	53	Bismaleimide Triazine resin	105391-33-1	6.36%	3.37	2.23%	63600	
				Epoxy resin -1	25722-66-1	6.36%	3.37	2.23%	63600	
				Epoxy resin -2	9003-36-5	6.36%	3.37	2.23%	63600	
				Inorganic Filler	21645-51-2	14.31%	7.58	5.02%	143100	
				Continuous Filament Fiber Glass	65997-17-3	19.61%	10.39	6.88%	196100	
				Talc containing no asbestiform fibers	14807-96-6	0.48%	0.25	0.17%	4800	
				Morpholine derivative	Trade secret	0.48%	0.25	0.17%	4800	
				Barium sulfate	7727-43-7	5.40%	2.86	1.89%	54000	
				Silica, amorphous	7631-86-9	0.12%	0.06	0.04%	1200	
				Dipropylene glycol monomethyl ether	34590-94-8	2.88%	1.53	1.01%	28800	
				Epoxy resin A	Trade secret	1.56%	0.83	0.55%	15600	
				Epoxy resin B	85954-11-6	1.08%	0.57	0.38%	10800	
				Copper	7440-50-8	25.00%	13.25	8.77%	250000	
				Nickel	7440-02-0	8.00%	4.24	2.81%	80000	
Gold	7440-57-5	2.00%	1.06	0.70%	20000					
2	Mold compound	CEL-9120HF	63.8011	Epoxy resin 1	Trade secret	6.00%	3.83	2.53%	60000	
				Epoxy resin 2	Trade secret	4.00%	2.55	1.69%	40000	
				Phenol Resin	Trade secret	4.00%	2.55	1.69%	40000	
				Carbon black	1333-86-4	0.20%	0.13	0.08%	2000	
				Metal hydroxide	Trade Secret	3.30%	2.11	1.39%	33000	
				Amorphous silica	60676-86-0	82.00%	52.32	34.63%	820000	
				Crystal silica	14808-60-7	0.50%	0.32	0.21%	5000	
3	Epoxy	SA-200-12S	1.0853	Epoxy resin	Trade secret	45.00%	0.49	0.32%	450000	
				Phenol Resin	Trade secret	5.00%	0.05	0.04%	50000	
				Butadiene copolymer	Trade secret	5.00%	0.05	0.04%	50000	
				Silica	7631-86-9	15.00%	0.16	0.11%	150000	
				2-(2-Ethoxyethoxy)ethyl acetate	112-15-2	30.00%	0.33	0.22%	300000	
4	Solder ball	M705	21.1738	Tin	7440-31-5	96.50%	20.43	13.52%	965000	
				Silver	7440-22-4	3.00%	0.64	0.42%	30000	
				Copper	7440-50-8	0.50%	0.11	0.07%	5000	
5	Gold wire	Au	0.166	Gold	7440-57-5	99.99%	0.17	0.11%	999900	
				Others	Trade Secret	0.01%	0.00	0.00%	100	
6	Die	Chip	11.8538	Silicon	7440-21-3	100.00%	11.85	7.85%	1000000	
			151.08				600.00%	151.08	100.00%	600000