



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C64M16D2-25BCN / AS4C64M16D2-25BIN / AS4C64M16D2-25BAN								
Part Weight:		194.92mg								
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	53.56	Bismaleimide Triazine resin	105391-33-1	6.36%	3.406	1.75	63600	
				Epoxy resin -1	25722-66-1	6.36%	3.406	1.75	63600	
				Epoxy resin -2	9003-36-5	6.36%	3.406	1.75	63600	
				Inorganic Filler	21645-51-2	14.31%	7.664	3.93	143100	
				Continuous Filament Fiber Glass	65997-17-3	19.61%	10.503	5.39	196100	
				Talc containing no asbestiform fibers	14807-96-6	0.48%	0.257	0.13	4800	
				Morpholine derivative	Trade secret	0.48%	0.257	0.13	4800	
				Barium sulfate	7727-43-7	5.40%	2.892	1.48	54000	
				Silica, amorphous	7631-86-9	0.12%	0.064	0.03	1200	
				Dipropylene glycol monomethyl ether	34590-94-8	2.88%	1.543	0.79	28800	
				Epoxy resin A	Trade secret	1.56%	0.836	0.43	15600	
				Epoxy resin B	85954-11-6	1.08%	0.578	0.30	10800	
				Copper	7440-50-8	25.00%	13.390	6.87	250000	
				Nickel	7440-02-0	8.00%	4.285	2.20	80000	
Gold	7440-57-5	2.00%	1.071	0.55	20000					
2	Mold compound	CEL-9750ZHF	98.308	Epoxy resin 1	Trade Secret	4.00%	3.932	2.02	40000	
				Epoxy resin 2	Trade Secret	2.00%	1.966	1.01	20000	
				Hardener 1	Trade Secret	3.00%	2.949	1.51	30000	
				Hardener 2	Trade secret	3.00%	2.949	1.51	30000	
				Carbon black	1333-86-4	0.20%	0.197	0.10	2000	
				Silica	60676-86-0	87.80%	86.315	44.28	878000	
3	Epoxy	SA-200-12S	1.085	Epoxy resin	Trade secret	10.00%	0.109	0.06	100000	
				Phenol resin	Trade Secret	6.00%	0.065	0.03	60000	
				2-(2-Ethoxyethoxy)ethyl acetate)	112-15-2	25.00%	0.271	0.14	250000	
				Butadiene copolymer	Trade Secret	30.00%	0.326	0.17	300000	
				Inorganic filler	Trade secret	7.00%	0.076	0.04	70000	
				Silica	7631-86-9	7.00%	0.076	0.04	70000	
4	Solder ball	Sn/Ag/Cu	29.644	Tin	7440-31-5	96.50%	28.606	14.68	965000	
				Silver	7440-22-4	3.00%	0.889	0.46	30000	
				Copper	7440-50-8	0.50%	0.148	0.08	5000	
5	Gold wire	Au	0.469	Gold	7440-57-5	99.99%	0.469	0.24	999900	
				Others	Trade Secret	0.01%	0.000	0.00	100	
6	Die	Chip	11.854	Silicon	7440-21-3	100.00%	11.854	6.08	1000000	
			194.92				600.00%	194.920	100.00	6000000