ALLIANCE MEMORY MDS REPORT

Part Number:	AS4C512M8D3LB-10/12(BCN / BIN / BAN)								
Wieght (mg):	183.372								
NO.	Part Name	Material Name	Part no.	Material mass (mg)	Material mass (%)	Substance in Materials	CAS Number	Substance Weight (mg)	wt % of Total unit wt
1	Chip	Silicon	Wafer	32.264	17.59%	Silica	7440-21-3	32.264	17.59%
2	Substrate	Core	MCL-E-679FGB	38.160	20.81%	Glass Cloth	65997-17-3	17.554	9.57%
						Silica	7631-86-9	1.908	1.04%
						Thermosetting Resin and Other Filler	Trade secret	18.698	10.20%
		Copper Foil	Copper Foil	1.392	0.76%	Cu	Trade secret	1.392	0.76%
		Solder Mask	PSR 4000 AUS-308	13.200	7.20%	Acrylate resin	147-14-8	0.005	0.00%
						Phthalocyanine blue	Trade secret	0.005	0.00%
						Organic Pigment	7727-43-7	1.392	0.76%
						Barium Sulfate	7631-86-9	0.022	0.01%
						Silica	14807-96-6	0.005	0.00%
						Talc	Trade secret	0.136	0.07%
						Aromatic carbonyl compounds	Trade secret	0.022	0.01%
						Amine Compound	Trade secret	0.055	0.03%
						Antifoamer & Leveling agent	112-15-2	0.005	0.00%
						Diethylene glycol monoethyl ether acetate	34590-94-8	0.497	0.27%
						Dipropylene glycol monomethyl ether	103429-90-9	0.780	0.43%
						3-methoxy-3-methyl butyl acetate	64742-94-5	0.131	0.07%
						Solvent naphtha(petroleum), Heavy arom.	Trade secret	0.213	0.12%
						Acrylate monomer	Trade secret	0.726	0.40%
						Epoxy Resin	Trade secret	0.071	0.04%
						Organic Filler	7440-50-8	9.134	4.98%
		Au Plating	Au Plating	0.079	0.04%	Au	7440-57-5	0.079	0.04%
		Ni Plating	Ni Plating	0.610	0.33%	Ni	7440-02-0	0.610	0.33%
3	Die Adhesive	Epoxy Resin	6202C-X	3.288	1.79%	Epoxy resin	22537-15-1	3.288	1.79%
4	Gold Wire	Metal	AT2	0.583	0.32%	Gold	7440-57-5	0.583	0.32%
5	Compound	Epoxy Resin	CEL-1702HF	66.068	36.03%	Epoxy resin	60676-86-0	55.636	30.34%
						Organic Phosphorous Compounds	Trade secret	10.432	5.69%
6	Solder Ball	Metal	SAC302	27.728	15.12%	Tin	7440-31-5	26.841	14.64%
						Silver	7440-22-4	0.831	0.45%
						Copper	7440-50-8	0.056	0.03%