



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C32M16D2A-25BCN / AS4C32M16D2A-25BIN / AS4C32M16D2A-25BAN							
Part Weight:		154mg							
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	49.98	Bismaleimide Triazine resin	105391-33-1	6.36%	3.179	2.06	63600
				Epoxy resin -1	25722-66-1	6.36%	3.179	2.06	63600
				Epoxy resin -2	9003-36-5	6.36%	3.179	2.06	63600
				Inorganic Filler	21645-51-2	14.31%	7.152	4.64	143100
				Continuous Filament Fiber Glass	65997-17-3	19.61%	9.801	6.36	196100
				Talc containing no asbestiform fibers	14807-96-6	0.48%	0.240	0.16	4800
				Morpholine derivative	Trade secret	0.48%	0.240	0.16	4800
				Barium sulfate	7727-43-7	5.40%	2.699	1.75	54000
				Silica, amorphous	7631-86-9	0.12%	0.060	0.04	1200
				Dipropylene glycol monomethyl ether	34590-94-8	2.88%	1.439	0.93	28800
				Epoxy resin A	Trade secret	1.56%	0.780	0.51	15600
				Epoxy resin B	85954-11-6	1.08%	0.540	0.35	10800
				Copper	7440-50-8	25.00%	12.495	8.11	250000
				Nickel	7440-02-0	8.00%	3.998	2.60	80000
				Gold	7440-57-5	2.00%	1.000	0.65	20000
2	Mold compound	CEL-1802HF	70.093	Epoxy resin 1	Trade secret	2.00%	1.402	0.91	20000
				Epoxy resin 2	Trade secret	2.00%	1.402	0.91	20000
				Hardener	Trade secret	4.00%	2.804	1.82	40000
				Metal Hydroxide	Trade secret	4.00%	2.804	1.82	40000
				Carbon black	1333-86-4	0.20%	0.140	0.09	2000
				Amorphous Silica	60676-86-0	84.80%	59.439	38.60	848000
				Crystal silica	14808-60-7	3.00%	2.103	1.37	30000
3	Epoxy	6202C	0.683	Polymeric material	Trade secret	20.00%	0.137	0.09	200000
				Epoxy resin	Trade secret	7.50%	0.051	0.03	75000
				Di-ester resin	Trade secret	3.00%	0.021	0.01	30000
				Functionalized urethane resin	Trade secret	3.00%	0.021	0.01	30000
				Siloxane polymer	Trade secret	20.00%	0.137	0.09	200000
				Mixture of synthetic and fused silica	Trade secret	20.00%	0.137	0.09	200000
				Carbitol acetate	112-15-2	26.50%	0.181	0.12	265000
4	Solder ball	Sn/Ag/Cu	29.518	Tin	7440-31-5	96.50%	28.484	18.50	965000
				Silver	7440-22-4	3.00%	0.886	0.58	30000
				Copper	7440-50-8	0.50%	0.148	0.10	5000
5	Gold wire	Au	0.264	Gold	7440-57-5	99.99%	0.264	0.17	999900
				Others	Trade secret	0.01%	0.000	0.00	100
6	Die	Chip	3.462	Silicon	7440-21-3	100.00%	3.462	2.25	1000000
154				600.00%		154.000	100.00	6000000	