



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C64M8D2-25BCN/AS4C64M8D2-25BIN/AS4C64M8D2-25BAN							
Part Weight:		148.2406mg							
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	39.72	E-Glass fabric	65997-17-3	21.00%	8.3412	5.63%	210000
				Epoxy resin	29690-82-2	21.00%	8.3412	5.63%	210000
				Fillers	21645-51-2	7.00%	2.7804	1.88%	70000
				DOPO	35948-25-5	7.00%	2.7804	1.88%	70000
				Copper	7440-50-8	14.00%	5.5608	3.75%	140000
				Talc containing no asbestiform fibers	14807-96-6	0.47%	0.1859	0.13%	4680
				Morpholine derivative	Trade secret	0.47%	0.1859	0.13%	4680
				Barium sulfate	7727-43-7	5.48%	2.1782	1.47%	54840
				Silica, amorphous	7631-86-9	0.11%	0.0429	0.03%	1080
				Dipropylene glycol monomethyl ether	34590-94-8	0.95%	0.3765	0.25%	9480
				Epoxy resin A	Trade secret	3.46%	1.3727	0.93%	34560
				Epoxy resin B	85954-11-6	1.07%	0.4242	0.29%	10680
				Nickel	7440-02-0	15.00%	5.9580	4.02%	150000
2	Mold compound	CEL-1802HF	78.37	Gold	7440-57-5	3.00%	1.1916	0.80%	30000
				Epoxy resin-1	Trade secret	5.50%	4.3104	2.91%	55000
				Epoxy resin-2	Trade secret	2.75%	2.1552	1.45%	27500
				Phenol Resin	Trade secret	6.50%	5.0941	3.44%	65000
				Metalhydroxide	Trade secret	5.50%	4.3104	2.91%	55000
				Carbon black	1333-86-4	0.20%	0.1567	0.11%	2000
				Silica	60676-86-0	77.55%	60.7759	41.00%	775500
3	B-Stage	6202C	1.0325	Others	Trade secret	2.00%	1.5674	1.06%	20000
				Polymeric material	Trade secret	20.00%	0.2065	0.14%	200000
				Epoxy resin	Trade secret	7.50%	0.0774	0.05%	75000
				Di-ester resin	Trade secret	3.00%	0.0310	0.02%	30000
				Functionalized urethane resin	Trade secret	3.00%	0.0310	0.02%	30000
				Siloxane polymer	Trade secret	20.00%	0.2065	0.14%	200000
				Mixture of synthetic and fused silica	Trade secret	20.00%	0.2065	0.14%	200000
4	Solder ball	M705	21.174	Carbitol acetate	112-15-2	26.50%	0.2736	0.18%	265000
				Tin	7440-31-5	96.50%	20.4329	13.78%	965000
				Silver	7440-22-4	3.00%	0.6352	0.43%	30000
5	Gold wire	Au	0.1584	Copper	7440-50-8	0.50%	0.1059	0.07%	5000
				Gold	7440-57-5	99.99%	0.1584	0.11%	999900
				Others	Trade secret	0.01%	0.0000	0.00%	100
6	Die	Chip	7.7857	Silicon	7440-21-3	100.00%	7.7857	5.25%	1000000
148.2406				600.00%		148.2406	100.00%	6000000	