



ALLIANCE MEMORY MDS REPORT

Part Number :			AS4C64M16D2B-25BCN								
Part Weight (mg):			192.225								
NO.	Part Name	Material Composition	Part no.	Component wt (mg)	Material mass (%)	Substance in Materials	CAS Number	wt % of Total unit wt	Substance Weight(mg)		
1	Substrate	Composite material-CCL (Core)	832NX-A	49.3100	25.652%	Bismaleimide Triazine resin	105391-33-1	1.979%	3.8045		
						Epoxy resin	25722-66-1	1.979%	3.8045		
		Epoxy resin	9003-36-5			1.979%	3.8045				
		Composite material-Ink	AUS308			Inorganic Filler	21645-51-2	3.563%	6.8480		
						Continuous Filament Fiber Glass	65997-17-3	5.938%	11.4134		
						Talc containing no asbestiform fibers	14807-96-6	0.088%	0.1690		
						Morpholine derivative	Trade secret	0.088%	0.1690		
						Barium Sulfate	7727-43-7	0.506%	0.9719		
						Silica , amorphous	7631-86-9	0.022%	0.0423		
						Dipropylene glycol monomethyl ether	34590-94-8	0.176%	0.3381		
						Naphthalene(Carc. Car.3: R40)	91-20-3	0.022%	0.0423		
						Epoxy Resin(MW ≤ 700)	Trade secret	0.286%	0.5494		
						Epoxy Resin(MW ≤ 700, Carc. Car.3:	85954-11-6	0.198%	0.3803		
						Dipropylene glycol monomethyl ether	35490-94-8	0.352%	0.6761		
						Barium Sulfate	7727-43-7	0.462%	0.8874		
						Composite material-Copper	832NX-A	Copper	7440-50-8	7.390%	14.2062
								Composite material-Ni Plating	Ni plating	Nickel	7440-02-0
		Composite material-Au plating	Au plating							Gold	7440-57-5
2	Die Adhesive			Resin	6202C	0.8736	0.454%	Diethylene glycol monoethyl ether acetate	112-15-2	0.159%	0.3058
		Rubber modified epoxy	Trade secret					0.159%	0.3058		
		Carbamate resin	Trade secret					0.023%	0.0437		
		Bismaleimide resin	Trade secret					0.023%	0.0437		
		Others	Trade secret					0.091%	0.1747		
3	Bonding Wire	Metal	Au	0.1700	0.088%	Gold	7440-57-5	0.088%	0.1683		
						Others	Trade secret	0.001%	0.0017		
4	Mold compound	Resin	CEL-1702HF	102.0050	53.065%	Epoxy Resin-1	Trade secret	2.464%	4.7371		
						Epoxy Resin-2	Trade secret	2.464%	4.7371		
						Hardener	Trade secret	3.286%	6.3161		
						Metal hydroxide	Trade secret	4.107%	7.8951		
						Carbon black	1333-86-4	0.082%	0.1579		
						Amorphous silica	60676-86-0	38.608%	74.2142		
						Crystal silica	14808-60-7	2.054%	3.9476		
5	Solder Ball	Metal	M705	29.6434	15.421%	Tin	7440-31-5	14.881%	28.6059		
						Silver	7440-22-4	0.463%	0.8893		
						Copper	7440-50-8	0.077%	0.1482		
6	Chip	Silicon	F38	10.2230	5.318%	Silica	7440-21-3	5.32%	10.2230		
				192.2250	100.000%						