



# ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C16M16D2-25BCN/AS4C16M16D2-25BIN							
Part Weight:		190.9mg							
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	48.764	Continuous Filament Fiber Glass	65997-17-3	23.66%	11.5379	6.04%	236605.92
				Bismaleimide/Triazine/Epoxy Resin	25722-66-1	23.66%	11.5379	6.04%	236605.92
				Inorganic filler	21645-51-2	14.20%	6.9239	3.63%	141988.16
				Talc containing no asbestiform fibers	14807-96-6	0.35%	0.1705	0.09%	3496
				Morpholine derivative	Trade secret	0.35%	0.1705	0.09%	3496
				Barium sulfate	7727-43-7	3.85%	1.8753	0.98%	38456
				Silica, amorphous	7631-86-9	0.09%	0.0426	0.02%	874
				Dipropylene glycol monomethyl ether	34590-94-8	2.10%	1.0229	0.54%	20976
				Naphthalene	91-20-3	0.09%	0.0426	0.02%	874
				Epoxy resin A	Trade secret	1.14%	0.5541	0.29%	11362
				Epoxy resin B	85954-11-6	0.79%	0.3836	0.20%	7866
				Copper	7440-50-8	27.96%	13.6344	7.14%	279600
Nickel	7440-02-0	1.39%	0.6778	0.36%	13900				
Gold	7440-57-5	0.39%	0.1902	0.10%	3900				
2	Mold compound	G770	107.712	Epoxy resinA	Trade Secret	3.23%	3.4791	1.82%	32300
				Epoxy resinB	Trade Secret	3.23%	3.4791	1.82%	32300
				Epoxy resinA	Trade secret	3.23%	3.4791	1.82%	32300
				Epoxy resinB	Trade secret	3.23%	3.4791	1.82%	32300
				Carbon Black	1333-86-4	0.44%	0.4739	0.25%	4400
				Silica (Amorphous)A	60676-86-0	75.45%	81.2687	42.57%	754500
3	Epoxy	2025D	0.3439	Silica, amorphous, fused	112-15-2	45.45%	0.1563	0.08%	454500
				Bismaleimide monomer	Trade secret	31.82%	0.1094	0.06%	318200
				Acrylate monomer	Trade secret	9.09%	0.0313	0.02%	90900
				Epoxy resin	Trade secret	9.09%	0.0313	0.02%	90900
				Acrylic resin	Trade secret	4.55%	0.0156	0.01%	45500
4	Solder ball	M705	29.6433	Tin	7440-31-5	96.50%	28.6058	14.98%	965000
				Silver	7440-22-4	3.00%	0.8893	0.47%	30000
				Copper	7440-50-8	0.50%	0.1482	0.08%	5000
5	Gold wire	Au	0.4299	Gold	7440-57-5	99.99%	0.4299	0.23%	999900
				Others	Trade Secret	0.01%	0.0000	0.00%	100
6	Die	Chip	4.0069	Silicon	7440-21-3	100.00%	4.0069	2.10%	1000000
			190.9			600.00%	190.9000	100.00%	6000000