



# ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C256M16D4A-xxBCN / BIN							
Part Weight:		136.304mg							
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-932NX-A / AUS 308	0.385	Cured epoxy resin	Trade secret	7.36%	0.028	0.02%	73642.5
				Inorganic filler	60676-86-0 21645-51-2	7.91%	0.030	0.02%	79097.5
				Woven glass cloth	65997-17-3	13.64%	0.053	0.04%	136375
				Chromium	7440-47-3	0.27%	0.001	0.00%	2727.5
				Copper foil	7440-50-8	25.37%	0.098	0.07%	253657.5
				Acrylic Resin	Trade secret	7.11%	0.027	0.02%	71064
				Organic pigments	Trade secret	0.10%	0.000	0.00%	987
				Phthalocyanine Blue	Trade secret	0.10%	0.000	0.00%	987
				Talc	14807-96-6	0.49%	0.002	0.00%	4935
				Barium Sulfate	7727-43-7	5.72%	0.022	0.02%	57246
				Silica	Trade secret	0.10%	0.000	0.00%	987
				2-Benzyl-2-dimethylamino-1-(4-morpholino-phenyl)-1-butanone	119313-12-1	0.49%	0.002	0.00%	4935
				Defoamers/leveling agent etc.	Trade secret	0.39%	0.002	0.00%	3948
				Dipropylene glycol monomethylether *)1-(2-methoxy-2-methylethoxy)-2-propanol	34590-94-8	1.48%	0.006	0.00%	14805
				3-methoxy-3-methylbutylacetate	103429-90-9	3.36%	0.013	0.01%	33558
				Heavy Aromatic Solvent naphtha	64742-94-5	0.30%	0.001	0.00%	2961
				Naphthalene	91-20-3	0.10%	0.000	0.00%	987
				Copper Sulfate	7758-98-7	2.76%	0.011	0.01%	27600
				Sulfuric acid	7664-93-9	0.33%	0.001	0.00%	3312
				Nikel Sulfate	7786-81-4	0.11%	0.000	0.00%	1104
				Confidential components	Not Assigned	18.88%	0.073	0.05%	188784
				Sulfur	7704-34-9	0.00%	0.000	0.00%	12.48
				Nikel	7440-02-0	3.12%	0.012	0.01%	31187.52
Gold	7440-57-5	0.51%	0.002	0.00%	5100				
2	Mold compound	CEL-9120HF	82.408	Epoxy resin	Trade secret	6.50%	5.357	3.93%	65000
				hardener	Trade secret	5.00%	4.120	3.02%	50000
				catalyst	Trade secret	0.50%	0.412	0.30%	5000
				Metal hydroxide	Trade secret	9.50%	7.829	5.74%	95000
				Carbon Black	1333-86-4	0.50%	0.412	0.30%	5000
				Silicon dioxide	60676-86-0	70.00%	57.686	42.32%	700000
				Silicon dioxide	7631-86-9	8.00%	6.593	4.84%	80000
3	Epoxy	6202C	1.398	2-(2-Etnoxyethoxy)ethyl acetate	112-15-2	25.00%	0.350	0.26%	250000
				2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymers with bisphenol A and epic	68610-41-3	22.50%	0.315	0.23%	225000
				Isodecyl alcohol, ethoxylated	61827-42-7	2.00%	0.028	0.02%	20000
				ter-butyl peroxyneodecanoate	26748-41-4	0.20%	0.003	0.00%	2000
				Others	-	50.30%	0.703	0.52%	503000
4	Solder ball	SnAgCu	33.328	Tin	7440-31-5	96.50%	32.162	23.60%	965000
				Silver	7440-22-4	3.00%	1.000	0.73%	30000
				Copper	7440-50-8	0.50%	0.167	0.12%	5000
5	Gold wire	Au	0.22	Au	7440-57-5	99.99%	0.220	0.16%	999900
				Others	-	0.01%	0.000	0.00%	100
6	Die	Chip	18.565	Silicon	7440-21-3	100.00%	18.565	13.62%	1000000
						600.00%	136.304	100.00%	6000000