



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C512M16D4A-62BCN / AS4C512M16D4A-62BIN / AS4C512M16D4A-62BAN						
Part Weight:		194.634mg						
No.	Part Name	Material Name	Component wt (mg)	Material Content (Element)	CAS Number	Element wt (%)	Element wt (mg)	PPM
1	Substrate	HL-832NX-A / AUS 308	56.653	E-Glass Fabric	65997-17-3	10.00%	11.700	100000
				Epoxy Resin	29690-82-2	6.88%	8.044	68800
				Fillers	60676-86-0	5.37%	8.044	53700
				Phosphorous Flame Retardant	35948-25-5	1.25%	1.463	12500
				Copper	7440-50-8	25.00%	14.117	250000
				Barium Sulfate	7727-43-7	7.40%	1.413	74000
				3-Methoxy-3-methylbutylacetate	103429-90-9	2.75%	0.382	27500
				Dipropylene Glycol Monomethyl Ether	34590-94-8	4.00%	0.764	40000
				Talc containing no asbestiform fibers	14807-96-6	0.25%	0.048	2500
				Morpholine derivative	Trade Secret	0.25%	0.048	2500
				Solvent naphtha(petroleum), Heavy arom	64742-94-5	0.25%	0.048	2500
				2,4,6-Triamino-1,3,5-Triazine	108-78-1	0.25%	0.048	2500
				Silicon dioxide	7631-86-9	0.03%	0.005	250
				Diethylene Glycol Monoethyl Ether Acetate	112-15-2	0.03%	0.005	250
				Naphthalene	91-20-3	0.03%	0.005	250
				Trimethylbenzene	108-67-8	0.03%	0.005	250
				Epoxy Resin (MW \leq 700)	9003-36-5	7.50%	1.432	75000
				Dipentaerythritol hexaacrylate	29570-58-9	1.50%	0.286	15000
				Dipentaerythritol pentaacrylate	60506-81-2	0.75%	0.143	7500
				2	Mold compound	CEL-9120HF	65.316	Nickel
Gold	7440-57-5	3.72%	1.424					37200
Copper	7440-50-8	0.52%	0.170					5200
Epoxy resin	9003-36-5	5.00%	3.266					50000
2,2'-(2,2',5,5'-tetramethy-(1,1'-biphenyl))-4,4'	85954-11-6	5.00%	3.266					50000
Hardener	Trade Secret	5.00%	3.266					50000
Carbon Black	1333-86-4	0.20%	0.131					2000
Amorphous Silica 1	60676-86-0	80.80%	52.774					808000
3	Epoxy	6202C	3.04	Amorphous Silica 2	7631-86-9	4.00%	2.613	40000
				2-(2-Ethoxyethoxy)ethyl acetate	112-15-2	36.50%	1.110	365000
				Butadiene, acrylonitrile polymer, carboxy-ter	68610-41-3	28.00%	0.851	280000
				Isodecyl alcohol, ethoxylated	61827-42-7	10.00%	0.304	100000
				Silica Filler	112926-00-8	25.00%	0.760	250000
4	Solder ball	SnAgCu	33.878	Tert-butyl peroxyneodecanoate	26748-41-4	0.50%	0.015	5000
				Tin	7440-31-5	96.49%	32.690	964920
				Silver	7440-22-4	3.00%	1.016	30000
				Copper	7440-50-8	0.50%	0.169	5000
5	Gold Wire	Au	0.286	Germanium	7440-56-4	0.01%	0.003	80
				Gold	7440-57-5	100.00%	0.286	1000000
6	Die(Chip)	Chip	35.461	Silicon	7440-21-3	100.00%	35.461	1000000

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