



# ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C256M16D3C / AS4C256M16D3LC								
Part Weight:		192.24mg								
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-A / AUS 308	58	Continuous Filament Fiber Glass	65997-17-3	5.06%	2.932	1.53%	50550	
				Cured thermosetting resin (including inorganic filler)	Trade secret	5.06%	2.932	1.53%	50550	
				Barium Sulfate	7727-43-7	1.57%	0.910	0.47%	15683	
				3-Methoxy-3-methylbutylacetate	103429-90-9	1.08%	0.627	0.33%	10816	
				Dipropylene Glycol Monomethyl Ether	34590-94-8	0.54%	0.314	0.16%	5408	
				Talc containing no asbestiform fibers	14807-96-6	0.14%	0.078	0.04%	1352	
				Morpholine derivative	Trade Secret	0.14%	0.078	0.04%	1352	
				Solvent naphtha(petroleum), Heavy arom	Trade Secret	0.14%	0.078	0.04%	1352	
				2,4,6-Triamino-1,3,5-Triazine	Trade Secret	0.14%	0.078	0.04%	1352	
				Silicon dioxide	Trade Secret	0.01%	0.008	0.00%	135.2	
				Diethylene Glycol Monoethyl Ether Acetate	Trade Secret	0.01%	0.008	0.00%	135.2	
				Naphthalene	91-20-3	0.01%	0.008	0.00%	135.2	
				Trimethylbenzene	Trade Secret	0.01%	0.008	0.00%	135.2	
				Epoxy Resin (MW≤700)	Trade Secret	4.06%	2.352	1.22%	40560	
				Barium Sulfate	7727-43-7	2.43%	1.411	0.73%	24336	
				Dipropylene Glycol Monomethyl Ether	34590-94-8	1.62%	0.941	0.49%	16224	
				Dipentaerythritol hexaacrylate	Trade Secret	0.81%	0.470	0.24%	8112	
				Dipentaerythritol pentaacrylate	Trade Secret	0.41%	0.235	0.12%	4056	
				3-Methoxy-3-methylbutylacetate	103429-90-9	0.41%	0.235	0.12%	4056	
				Copper	7440-50-8	51.49%	29.864	15.53%	514900	
Nickel	7440-02-0	21.82%	12.656	6.58%	218200					
Gold	7440-57-5	3.06%	1.775	0.92%	30600					
2	Mold compound	CEL-1702HF	71.72	Epoxy resin	Trade Secret	2.30%	1.650	0.86%	23000	
				2,2'-((3,3',5,5'-tetramethy-(1,1'-biphenyl)-4,4'-diyl)-bis(oxymethylene))-bis-oxirane	Trade Secret	5.00%	3.586	1.87%	50000	
				Formaldehyde, polymer with 2-(chloromethyl)oxirane and 2-methylphenol	Trade Secret	2.30%	1.650	0.86%	23000	
				Hardener	Trade Secret	3.30%	2.367	1.23%	33000	
				Carbon black	1333-86-4	0.20%	0.143	0.07%	2000	
				Amorphous silica 1	60676-86-0	85.00%	60.965	31.71%	850000	
Amorphous silica 2	7631-86-9	1.90%	1.363	0.71%	19000					
3	Epoxy	6202C	2.233	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2	36.50%	0.815	0.42%	365000	
				Butadiene, acrylonitrile polymer, carboxy-terminated, polymer with bisphenol A and epichlorohydrin	68610-41-3	28.00%	0.625	0.33%	280000	
				Isodecyl alcohol, ethoxylated	61827-42-7	10.00%	0.223	0.12%	100000	
				Silica Filler	112926-00-8	25.00%	0.558	0.29%	250000	
				Tert-butyl peroxyneodecanoate	26748-41-4	0.50%	0.011	0.01%	5000	
4	Solder ball	SnAgCu	33.878	Tin	7440-31-5	96.50%	32.692	17.01%	965000	
				Silver	7440-22-4	3.00%	1.016	0.53%	30000	
				Copper	7440-50-8	0.50%	0.169	0.09%	5000	
5	Gold wire	Au	0.275	Gold	7440-57-5	99.99%	0.275	0.14%	999900	
				Others	Trade Secret	0.01%	0.000	0.00%	100	
6	Die	Chip	26.13	Silicon	7440-21-3	100.00%	26.130	13.59%	1000000	
				192.24			600.00%	192.240	100.00%	6000000