ALLIANCE MEMORY MDS REPORT

Part Number:	**AS4C32M16D2C-25BCN / AS4C32M16D2C-25BIN**
Part Weight:	**191.96mg**

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	41.154	Thermosetting resin (including filler)	Trade Secret	36.45%	15.001	7.81%	364500
				Glass cloth	65997-17-3	36.45%	15.001	7.81%	364500
				Talc containing no asbestiform fibers	14807-96-6	0.39%	0.160	0.08%	3888
				Morpholine derivative	Trade secret	0.39%	0.160	0.08%	3888
				Barium sulfate	7727-43-7	4.28%	1.760	0.92%	42768
				Silica, amorphous	7631-86-9	0.10%	0.040	0.02%	972
				Dipropylene glycol monomethyl ether	34590-94-8	2.33%	0.960	0.50%	23328
				Naphthalene	91-20-3	0.10%	0.040	0.02%	972
				Epoxy resin A	Trade secret	1.26%	0.520	0.27%	12636
				Epoxy resin B	85954-11-6	0.87%	0.360	0.19%	8748
				Copper	7440-50-8	14.13%	5.815	3.03%	141300
				Nickel	7440-02-0	2.85%	1.173	0.61%	28500
				Gold	7440-57-5	0.40%	0.165	0.09%	4000
2	Mold compound	CEL-9120HF	116.007	Epoxy resin 1	Trade Secret	4.00%	4.640	2.42%	40000
				Epoxy resin 2	Trade Secret	4.00%	4.640	2.42%	40000
				Hardener	Trade Secret	5.00%	5.800	3.02%	50000
				Metal hydroxide	Trade Secret	15.00%	17.401	9.06%	150000
				Carbon black	1333-86-4	0.50%	0.580	0.30%	5000
				Amorphous silica 1	60676-86-0	60.00%	69.604	36.26%	600000
				Amorphous silica 2	7631-86-9	11.50%	13.341	6.95%	115000
3	Epoxy	6202C	0.393	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2	36.50%	0.143	0.07%	365000
				Butadiene, acrylonitrile polymer, carboxy-terminated, polymer with bisphenol A and epichlorohydrin	68610-41-3	28.00%	0.110	0.06%	280000
				Isodecyl alcohol, ethoxylated	61827-42-7	10.00%	0.039	0.02%	100000
				Silica Filler	112926-00-8	25.00%	0.098	0.05%	250000
				Tert-butyl peroxyneodecanoate	26748-41-4	0.50%	0.002	0.00%	5000
4	Solder ball	SnAgCu	29.643	Tin	7440-31-5	96.50%	28.605	14.90%	965000
				Silver	7440-22-4	3.00%	0.889	0.46%	30000
				Copper	7440-50-8	0.50%	0.148	0.08%	5000
5	Gold wire	Au	0.169	Gold	7440-57-5	99.99%	0.169	0.09%	999900
				Others	Trade Secret	0.01%	0.000	0.00%	100
6	Die	Chip	4.594	Silicon	7440-21-3	100.00%	4.594	2.39%	1000000
			191.96			600.00%	191.960	100.00%	6000000

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Fax: 425-896-8628 Alliance Memory Inc. reserves the right to change products or specification without notice