



MATERIAL DECLARATION

PART NUMBER : AS4C1G8D3LA-xxBxN

**Approved by:
quality@alliancememory.com**

PART WEIGHT (mg)

187.60

No.	Part Name	Material Name	Material Content (Element)	CAS Number	Material Mass (mg)	Material Mass (%)	Substance wt (%)	Substance wt (mg)
1	Top Chip	Die	Silica	7440-21-3	14.507	7.73%	7.73%	14.507
2	Bottom Chip	Die	Silica	7440-21-3	14.507	7.73%	7.73%	14.507
3	PCB Substrate	Mishibishi MITSUI Mining & Smelting SIMMTECH SIMMTECH	Coninuous Filament Fiber Glass	Trade Secret	16.340	8.71%	5.05%	9.477
			BT Resin	Trade Secret			3.66%	6.863
			Copper	7440-50-8	25.879	13.79%	13.79%	25.879
			Gold	7440-57-5	0.124		0.07%	0.124
			Nickel	7440-02-0	1.118		0.60%	1.118
4	Substrate Solder Mask	TAIYO INK MFG.CO.,LTD	Acrylate resin	Trade secret	5.539	2.95%	0.75%	1.412
			Epoxy resin	Trade secret			0.23%	0.438
			Epoxy resin (MW 700 , Carc. cat. 3 ; R40 , R43)	85954-11-6			0.16%	0.299
			Acrylated monomer	Trade secret			0.12%	0.222
			Organic Filler	Trade secret			0.04%	0.072
			Phthalocyanine blue	147-14-8			0.00%	0.008
			Organic pigment	Trade secret			0.00%	0.008
			Barium sulfate	7727-43-7			0.68%	1.282
			Silica, amorphous	7631-86-9			0.01%	0.024
			Talc containing no asbestiform fibers	14807-96-6			0.07%	0.134
			Amine compounds	Trade secret			0.01%	0.017
			Morpholine derivative	Trade secret			0.07%	0.138
			Antifoamer & Leveling agent	Trade secret			0.03%	0.055
			Diethylene glycol monoethyl ether acetate	112-15-2			0.00%	0.006
			Dipropylene glycol monomethyl ether	34590-94-8			0.27%	0.499
			3-methoxy-3-methyl butylacetate	103429-90-9			0.42%	0.792
			Naphthalene (Carc . Cat. 3 ; R40)	91-20-3			0.00%	0.004
Solvent naphtha(petroleum),	64742-94-5	0.07%	0.129					
5	Die Attach	NITTO DENKO	Acrylic resin	Trade secret	2.258	1.20%	0.48%	0.903
			Phenol resin	Trade secret			0.18%	0.339
			Amorphous Silica	7631-86-9			0.54%	1.016
6	Die Attach	NITTO DENKO	Solid epoxy resin	Trade secret	5.419	2.89%	0.43%	0.813
			Liquid epoxy resin	Trade secret			0.43%	0.813
			Phenol resin	Trade secret			0.58%	1.084
			Amorphous Silica	7631-86-9			1.16%	2.167
			Synthetic rubber	Trade secret			0.29%	0.542
7	Gold Wire	TANAKA	Gold	7440-57-5	1.232	0.66%	0.66%	1.232
8	Compound	SUMITOMO	Epoxy resin A	Trade Secret	72.949	38.89%	1.17%	2.188
			Epoxy resin B	Trade Secret			1.17%	2.188
			Phenol resin A	Trade Secret			1.17%	2.188
			Phenol resin B	Trade Secret			1.17%	2.188
			Silica (Amorphous) A	60676-86-0			29.94%	56.171
			Silica (Amorphous) B	7631-86-9			2.72%	5.106
			Metal Hydroxide	Trade Secret			1.17%	2.188
			Carbon Black	1333-86-4			0.39%	0.729
9	Solder Ball	ACCURUS	Tin	7440-31-5	27.728	14.78%	14.31%	26.841
			Silver	7440-22-4			0.44%	0.831
			Copper	7440-50-8			0.03%	0.056