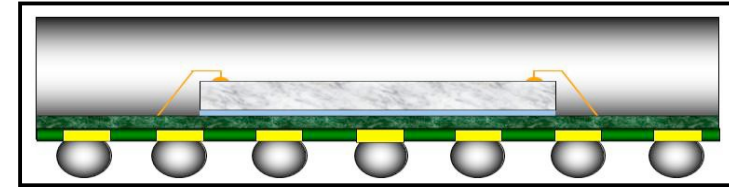


- Company : Alliance Memory, Inc  
 - Address : 511 Taylor Way, San Carlos, CA 94070, USA  
 - Device : AS4C16M16MD1-6BCN  
 - Package : 8 x 9mm 60FBGA  
 - Weight (mg) : 110.491



Material	Substances	Vendor	Type	Purpose	CAS No.	Weight (mg)	%	PPM				
<b>Silicon Chip</b>	Silicon (Si)	<b>Alliance</b>	256M LPDDR x16	Circuit	7440-21-3	3.670	3.32%	33215				
<b>Encapsulation (Mold Compound)</b>	Silica, vitreous 4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethyl(1,1'-biphenyl) Phenol, Polymer with 1,4 -bis benzene Carbon Black Others	<b>KCC</b>	KTMC5900GL	Filler	60676-86-0	57.697	52.22%	522191				
				Resin	85954-11-6	2.013	1.82%	18216				
					26834-02-6	2.013	1.82%	18216				
				Hardener	1333-86-4	0.403	0.36%	3643				
				Colorant	Trade secret	4.965	4.49%	44933				
<b>Substrate</b>	Glass cloth copper Epoxy Flame Resistant Epoxy Resin Heat Resistant resin Silica Filler Metal Hydroxide Barium Sulfate Epoxy resin Dipropylene glycol monomethyl ether Talc containing no asbestiform fibers Morpholine derivative Silica, amorphous Copper and its compounds Nickel and its compounds Gold and its compounds OSP	<b>MTG</b>	SU-FBJS-06002W H Rev.0	Base material,Core composition	65997-17-3	2.489	2.25%	22527				
				Base material,Core composition	7440-50-8	4.978	4.51%	45053				
				Base material,Core composition	7328-97-4	0.490	0.44%	4435				
				Base material,Core composition	223769-10-6	0.490	0.44%	4435				
				Base material,Core composition	25722-66-1	0.490	0.44%	4435				
				Base material,Core composition	7631-86-9	0.792	0.72%	7168				
				Base material,Core composition	Trade secret	0.201	0.18%	1819				
				Base material,Solder mask composition	7727-43-7	1.232	1.12%	11150				
				Base material,Solder mask composition	85954-11-6	0.603	0.55%	5457				
				Base material,Solder mask composition	34590-94-8	0.666	0.60%	6028				
				Base material,Solder mask composition	14807-96-6	0.101	0.09%	914				
				Base material,Solder mask composition	Trade secret	0.101	0.09%	914				
				Base material,Solder mask composition	7631-86-9	0.028	0.03%	253				
				Cu plating	7440-50-8	11.740	10.63%	106253				
				Surface treatment	7440-02-0	0.652	0.59%	5901				
				Surface treatment	13967-50-5	0.086	0.08%	778				
				Surface treatment	Trade secret	0.001	0.00%	9				
				<b>Die Attach (Adhesive)</b>	Acrylic Epoxy Adhesive	<b>KCC</b>	WA-330H-20T	Adhesive materials for die to die, die to sub	Trade secret	0.202	0.18%	1824
					Acrylic Pressure Sensitive Adhesive			UV Cure type dicing tape	Trade secret	0.109	0.10%	982
<b>Gold Wire</b>	Gold (Au)	<b>Heesung</b>	0.7mil Au-Ag wire	Balance Material	7440-57-5	0.225	0.20%	2035				
	Silver(Ag)				7440-22-4	0.054	0.05%	484				
	Palladium(Pd)				2023568	0.003	0.00%	24				
<b>Solder Ball</b>	Tin	<b>Duksan</b>	0.45mm (Sn/3Ag/0.5Cu)	Remain	7440-31-5	13.510	12.23%	122272				
	Silver			Conductivity Improvement	7440-22-4	0.420	0.38%	3801				
	Copper			Heat resistance improvement	7440-50-8	0.070	0.06%	634				

<b>Total</b>	110.491	100.0%
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