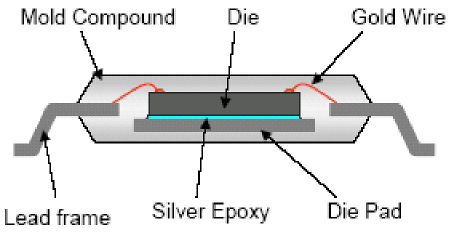
ALLIANCE MEMORY

Material Declaration

Comliance Date: **Jan./06/2022**

RoHS Compliance: **Yes**

MSL: **3**

Pin count /Package	**44L 400mil TSOPII**	
Model (Part) Number	**AS6C8016B-45ZIN**	
Package Weight (mg)	**436.31**	

Composed parts	Purpose	Weight (mg)	%	ppm	Material	CAS No.	Weight (mg)	Material wt% of total Mass	Material wt% of Sub part
Chip	Wafer Circuit	13.79	3.16	31,606	Silicon (Si)	7440-21-3	13.790	3.161%	100.00%
Bonding Wire	Conductivity	0.86	0.20	1,971	Gold (Au)	7440-57-5	0.860	0.197%	100.00%
Die Attach	Conductivity	1.09	0.25	2,498	Silver (metal powder)	7440-22-4	0.839	0.192%	77.00%
					Acrylic resin	(Trade secret)	0.093	0.021%	8.50%
					Polybutadiene derivative	(Trade secret)	0.060	0.014%	5.50%
					Butadiene copolymer	(Trade secret)	0.011	0.002%	1.00%
					Epoxy resin	(Trade secret)	0.027	0.006%	2.50%
					Acrylate	(Trade secret)	0.044	0.010%	4.00%
					Peroxide	(Trade secret)	0.005	0.001%	0.50%
					Additive	(Trade secret)	0.011	0.002%	1.00%
Lead Frame	Base Metal	176.82	40.53	405,262	Copper (Cu)	7440-50-8	166.741	38.216%	94.30%
					Nickel (Ni)	7440-02-0	5.658	1.297%	3.20%
					Silicon (Si)	7440-21-3	1.282	0.294%	0.73%
					Magnesium (Mg)	7439-95-4	0.309	0.071%	0.18%
					Silver (Ag)	7440-22-4	2.829	0.648%	1.60%
Molding Compound	Chip Protection	234.2	53.68	536,774	Amorphous silica 1 (SiO_2)	60676-86-0	197.431	45.250%	84.30%
					Amorphous silica 2 (SiO_2)	7631-86-9	10.539	2.415%	4.50%
					Epoxy resin 1	Trade secret	7.026	1.610%	3.00%
					Epoxy resin 2	Trade secret	8.197	1.879%	3.50%
					Hardener	Trade secret	9.368	2.147%	4.00%
					Catalyst	Trade secret	1.171	0.268%	0.50%
					Carbon black	1333-86-4	0.468	0.107%	0.20%
Plating of lead frame	Solder Plating	9.55	2.19	21,888	Tin (Sn)	7440-31-5	9.550	2.189%	100.00%