

LTM4634 - BGA-PBF-144LD 15mm X 15mm X 5.01mm (TABLE OF MATERIAL DECLARATION)
The LTM4634 is RoHS compliant per EU RoHS Directive 2003/95/EC.

It contains less than 100ppm cadmium (Cd) and less than 1,000ppm of each - lead (Pb), mercury (Hg), hexavalent chromium (Cr+), polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE)

No.	Part Name	Material Name	Component Weight (gram)	Materials Analysis (element)	CAS Number	Material Mass (gram)	Materials Analysis (weight %)	
1	Substrate	Circuit Board	0.2959	Barium Compounds	7727-43-7	0.00509	1.72	
				Bismaleimide/Triazine Resin/Filler Substances (Silica Crystalline)	105391-33-1 1156-51-0/9003-36-5/21645-51-2	0.07851	26.53	
				Copper Metal	7440-50-8	0.13467	45.51	
				Copper Compounds	147-14-8	0.00004	0.02	
				Ecotoxic substances	7440-38-2 7440-28-0	0.00002	0.01	
				Gold metal or alloy	7440-57-5	0.00047	0.16	
				Nickel	7440-02-0	0.00367	1.24	
				Zinc	7440-66-6	0.00027	0.09	
				Bisphenol A epoxyresin	25068-38-6	0.00002	0.01	
				Continuous Filament Fiber Glass	65997-17-3	0.06167	20.84	
				Acrylic Resin	non-disclosure	0.00974	3.29	
				Epoxy Resin	non-disclosure	0.00018	0.06	
				Chromium(III) oxide	1308-38-9	0.00001	0.00	
				Silica amorphous	7631-86-9	0.00006	0.02	
				Talc;not containing fibers like asbestos	14807-96-6	0.00059	0.20	
				Aromatic carbonyl compounds	non-disclosure	0.00056	0.19	
				Cyanoguanidine	461-58-5	0.00002	0.01	
				Amine compounds	non-disclosure	0.00007	0.02	
				Leveling agent and others	non-disclosure	0.00022	0.08	
				Imidazole system curing reagent	*non-disclosure	0.00002	0.01	
2	Solder Paste	Alloy	0.0252	Sn	7440-31-5	0.02394	95.00	
			Sb	7440-36-0	0.00126	5.00		
3	Passive/Active Components		0.8121	Iron Powder (Fe)	7439-89-6	0.54750	67.42	
				Copper (Cu)	7440-50-8	0.17068	21.02	
				Nickel (Ni)	7440-02-0	0.01116	1.37	
				Tin (Sn)	7440-31-5	0.00733	0.90	
				Ceramic (Ba) Compounds	12047-27-7	0.07543	9.29	
4	Active Ics	Silicon	0.0019	Silicon	7440-21-3	0.00185	100.00	
5	FC-DFN		0.1047					
	Active Ics	Silicon		Silicon (Si)	7440-21-3	0.00014	0.13	
	Clip	Copper Clip		Copper (Cu)	7440-50-8	0.01622	15.50	
				Iron (Fe)	7439-89-6	0.00040	0.38	
				Zinc (Zn)	7440-66-6	0.00002	0.02	
	Solder Paste	Alloy		Lead (Pb)	7439-92-1	0.00156	1.49	
				Silver (Ag)	7440-22-4	0.00004	0.04	
				Tin (Sn)	7440-31-5	0.00008	0.08	
	Encapsulation	Epoxy Resin		epoxy resin	29690-82-2	0.00190	1.81	
				Phenol	9003-35-4	0.00114	1.09	
				Silica (Si)	60676-86-0	0.03493	33.38	
	Lead frame	Lead frame		Copper (Cu)	7440-50-8	0.03885	37.13	
				Iron (Fe)	7439-89-6	0.00096	0.92	
				Silver (Ag)	7440-22-4	0.00055	0.53	
				Zinc (Zn)	7440-66-6	0.00005	0.05	
				Tin (Sn)	7440-31-5	0.00726	6.93	
	Wire 1	Copper		Copper (Cu)	7440-50-8	0.00003	0.03	
	Wire 2	Gold		Gold (Au)	7440-57-5	0.00051	0.48	
	6	Wire		Gold	0.00540404	Au	7440-57-5	0.0054035
7	HeatSink		0.4267			0.42665	100	
8	Solder Ball	SAC305	0.2436	Sn	7440-31-5	0.23508	96.50	
				Ag	7440-22-4	0.00731	3.00	
				Cu	7440-50-8	0.00122	0.50	
9	Encapsulation	Epoxy Resin	1.3329	Fused Silica	60676-86-0	1.02901	77.20	
				Epoxy Resin	non-disclosure	0.11863	8.90	
				Phenol Resin	non-disclosure	0.11863	8.90	
				Crytalline Silica	14808-60-7	0.03999	3.00	
				Carbon Black	1333-86-4	0.00666	0.50	
				Metal Hydroxide	non-disclosure	0.01999	1.50	
Total Package Weight			3.2483					

Note: Composition derived from MSDS and material C of C from Vendors
Component Weight based on assembly of generic parts