

LTM4676A 144LD-BGA, 16mm X 16mm X 5.01mm (TABLE OF MATERIAL DECLARATION)

The LTM4676 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	0.3362	Barium Compounds	7727-43-7	0.00787	2.34
				Bismaleimide/Triazine Resin/Filler Substances (Silica Crystalline)	105391-33-1, 1156-51-0/9003-36-5/21645-51-2, non-disclosure	0.06553	19.49
				Copper Metal	7440-50-8	0.18803	55.92
				Copper Compounds	147-14-8	0.00007	0.02
				Ecotoxic substances	7440-38-2, 7440-28-0	0.00003	0.01
				Lead	7439-92-1	0.00000	0.00
				Phosphorus	7723-14-0	0.00025	0.08
				Gold metal or alloy	7440-57-5	0.00091	0.27
				Nickel	7440-02-0	0.00403	1.20
				Zinc	7440-66-6	0.00037	0.11
				Bisphenol A epoxyresin	25068-38-6	0.00002	0.01
				Continuous Filament Fiber Glass	65997-17-3	0.05148	15.31
				Acrylic Resin	Non-disclosure	0.01503	4.47
				Epoxy Resin	Non-disclosure	0.00023	0.07
				Chromium(III) Oxide	1308-38-9	0.00001	0.00
				Silica amorphous	7631-86-9	0.00010	0.03
				Talc;not containing fibers like asbestos	14807-96-6	0.00091	0.27
				Aromatic carbonyl compounds	Non-disclosure	0.00087	0.26
				Cyanoguanidine	461-58-5	0.00003	0.01
				Amine compounds	Non-disclosure	0.00011	0.03
				Leveling agent and others	Non-disclosure	0.00034	0.10
				Imidazole system curing agent	Non-disclosure	0.00002	0.01
2	Solder Paste	Alloy	0.0692	Sn	7440-31-5	0.06579	95.00
				Sb	7440-36-0	0.00346	5.00
3	Passive Components		1.0529	Iron Powder (Fe)	7439-89-6	0.71127	67.55
				Copper (Cu)	7440-50-8	0.22105	20.99
				Nickel (Ni)	7440-02-0	0.01433	1.36
				Tin (Sn)	7440-31-5	0.00947	0.90
				Ceramic (Ba) Compounds	12047-27-7	0.09678	9.19
4	Active Ics	Silicon	0.0194	Silicon	7440-21-3	0.01937	100.00
5	IC packaging	LTC3880IUHE-9	0.0806	SEE LTC WEBSITE	LTC WEBSITE	0.0806	100.00
6	Wire	Gold	0.0043	Au	7440-57-5	0.00426	99.99
7	Solder Ball	SAC305	0.2419	Sn	7440-31-5	0.23343	96.50
				Ag	7440-22-4	0.00726	3.00
				Cu	7440-50-8	0.00121	0.50
8	Encapsulation	Epoxy Resin	1.5193	Fused Silica	60676-86-0	1.17292	77.20
				Epoxy Resin	Non-disclosure	0.13522	8.90
				Phenol Resin	Non-disclosure	0.13522	8.90
				Crytalline Silica	14808-60-7	0.04558	3.00
				Carbon Black	1333-86-4	0.00760	0.50
				Metal Hydroxide	Non-disclosure	0.02279	1.50
Total Package Weight			3.3238				

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