

LTM4631 144LD LGA 16mm X 16mm X 1.82mm (TABLE OF MATERIAL DECLARATION)

This Package 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	0.2229	Bismaleimide/Triazine Resin/Filler Substances (Silica Crystalline)	105391-33-1 1156-51-0/9003-36-5/21645-51-2 non-disclosure	0.04227	18.96
				Continuous Filament Fiber Glass	65997-17-3	0.03749	16.82
				Copper Metal	7440-50-8	0.11703	52.50
				Zinc	7440-66-6	0.00004	0.02
				Chromium(III) oxide	1308-38-9	0.00003	0.01
				Silver coated Copper powder	7440-22-4	0.00073	0.33
				Epoxy Resin	non-disclosure	0.00011	0.05
				1-Cyanoethyl-2-Undecylimidazole	23996-16-9	0.00001	0.00
				Curing reagent	*non-disclosure	0.00001	0.01
				Acrylic Resin	non-disclosure	0.01227	5.51
				Copper Compounds	147-14-8	0.00006	0.03
				Barium Compounds	7727-43-7	0.00644	2.89
				Silica amorphous	7631-86-9	0.00008	0.04
				Talc;not containing fibers like asbestos	14807-96-6	0.00074	0.33
				Aromatic carbonyl compounds	non-disclosure	0.00070	0.31
				Cyanoguanidine	461-58-5	0.00002	0.01
				Amine compounds	non-disclosure	0.00009	0.04
				Leveling agent and others	non-disclosure	0.00028	0.13
				Nickel	7440-02-0	0.00396	1.78
				Phosphorus	*non-disclosure	0.00030	0.14
				Gold metal or alloy	7440-57-5	0.00019	0.08
				Palladium	7440-05-3	0.00006	0.03
				Ecotoxic substances	7440-38-2 7439-92-1	0.00003	0.01
2	Solder Paste	Alloy	0.0181	Tin (Sn)	7440-31-5	0.01715	95.00
				Antimony (Sb)	7440-36-0	0.00090	5.00
3	Components	Passive/Active	0.2333	Iron Powder (Fe)	7439-89-6	0.17360	74.41
				Copper (Cu)	7440-50-8	0.04638	19.88
				Nickel (Ni)	7440-02-0	0.00160	0.69
				Tin (Sn)	7440-31-5	0.00174	0.75
				Ceramic (Ba) Compounds	12047-27-7	0.00999	4.28
4	FC-DFN		0.1905				
	Active Ics	Silicon		Silicon (Si)	7440-21-3	0.00251	1.32
		Copper Clip		Copper (Cu)	7440-50-8	0.02917	15.31
				Iron (Fe)	7439-89-6	0.00072	0.38
	Clip			Zinc (Zn)	7440-66-6	0.00004	0.02
	Solder Paste	Alloy		Lead (Pb)	7439-92-1	0.00280	1.47
				Silver (Ag)	7440-22-4	0.00008	0.04
				Tin (Sn)	7440-31-5	0.00015	0.08
	Encapsulation	Epoxy Resin		epoxy resin	29690-82-2	0.00342	1.79
				Phenol	9003-35-4	0.00205	1.08
				Silica (Si)	60676-86-0	0.06283	32.99
	Lead frame	Lead frame		Copper (Cu)	7440-50-8	0.06988	36.69
				Iron (Fe)	7439-89-6	0.00172	0.90

	Wire 1	Copper		Silver (Ag)	7440-22-4	0.00100	0.52
				Zinc (Zn)	7440-66-6	0.00009	0.05
				Tin (Sn)	7440-31-5	0.01305	6.85
				Copper (Cu)	7440-50-8	0.00005	0.03
				Gold (Au)	7440-57-5	0.00091	0.48
5	Active Ics	Silicon	0.0017	Silicon (Si)	7440-21-3	0.00167	100.00
6	Wire	Gold	0.0003	Gold (Au)	7440-57-5	0.00031	99.99
7							
8	Encapsulation	Epoxy Resin	0.6880	Fused Silica	60676-86-0	0.53116	77.20
				Epoxy Resin	non-disclosure	0.06123	8.90
				Phenol Resin	non-disclosure	0.06123	8.90
				Crytalline Silica	14808-60-7	0.02064	3.00
				Carbon Black	1333-86-4	0.00344	0.50
				Metal Hydroxide	non-disclosure	0.01032	1.50
Total Package Weight			1.3548				

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