

LTM4641-BGA, 144LD 15mm X 15mm X 5.01mm (TABLE OF MATERIAL DECLARATION)							
The LTM4641 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	0.2325	Barium Compounds	7727-43-7	0.00326	1.40
				Bismaleimide/Triazine/Resin/Filler Substances (Silica Crystalline)	105391-33-1, 1156-51-0/9003-36-5/21645-51-2, non-disclosure	0.01774	7.63
				Copper Metal	7440-50-8	0.18343	78.88
				Copper Compounds	147-14-8	0.00003	0.01
				Ecotoxic substances	7440-38-2, 7440-28-0	0.00001	0.01
				Gold metal or alloy	7440-57-5	0.00091	0.39
				Nickel	7440-02-0	0.00584	2.51
				Zinc	7440-66-6	0.00015	0.07
				ContinuousFilament Fiber Glass	65997-17-3	0.01393	5.99
				Acrylic Resin	non-disclosure	0.00619	2.66
				Epoxy Resin	non-disclosure	0.00009	0.04
				Chromium(III) Oxide	1308-38-9	0.00000	0.00
				Silica Amorphous	7631-86-9	0.00004	0.02
				Talc;not containing fiber like asbestos	14807-96-6	0.00037	0.16
				Aromatic carbonyl compounds	non-disclosure	0.00035	0.15
				Cyanoguanidine	461-58-5	0.00001	0.00
				Amine compounds	non-disclosure	0.00005	0.02
				Leveling agent and others	non-disclosure	0.00014	0.06
				Imidazole system curing agent	non-disclosure	0.00001	0.00
2	Solder Paste	Alloy	0.0212	Sn	7440-31-5	0.02011	95.00
				Sb	7440-36-0	0.00106	5.00
3	Passive/Active Components		0.8849	Iron Powder (Fe)	7439-89-6	0.61639	69.66
				Copper (Cu)	7440-50-8	0.18275	20.65
				Nickel (Ni)	7440-02-0	0.01021	1.15
				Tin (Sn)	7440-31-5	0.00755	0.85
				Ceramic (Ba) Compounds	12047-27-7	0.06800	7.68
4	Active Ics	Silicon	0.01352	Silicon	7440-21-3	0.01352	100.00
5	Wire	Gold	0.0006	Au	7440-57-5	0.00063	99.99
6	Solder Ball	SAC305	0.2401	Sn	7440-31-5	0.23167	96.50
				Ag	7440-22-4	0.00720	3.00
				Cu	7440-50-8	0.00120	0.50
7	Encapsulation	Epoxy Resin	1.7413	Fused Silica	60676-86-0	1.34426	77.20
				Epoxy Resin	non-disclosure	0.15497	8.90
				Phenol Resin	non-disclosure	0.15497	8.90
				Crytalline Silica	14808-60-7	0.05224	3.00
				Carbon Black	1333-86-4	0.00871	0.50
				Metal Hydroxide	non-disclosure	0.02612	1.50
Total Package Weight			3.1341				

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