

LTM4613-BGA-PBF 133LD 15mm X 15mm X 4.92mm (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	0.2174	Barium Compounds	7727-43-7	0.00317	1.46
				Bismaleimide/Triazine Resin/Filler Substances (Silica Crystalline)	105391-33-1, 1156-51-0/9003-36-5/21645-51-2	0.06584	30.29
				Copper Metal	7440-50-8	0.09536	43.87
				Copper Compounds	1328-53-6	0.00005	0.02
				Ecotoxic substances	7440-38-2, 7440-28-0	0.00001	0.00
				Gold metal or alloy	7440-57-5	0.00083	0.38
				Nickel	7440-02-0	0.00530	2.44
				Zinc	7440-66-6	0.00007	0.03
				Bisphenol A epoxyresin	25068-38-6	0.01167	5.37
				Continous Filament Fiber Glass	65997-17-3	0.03328	15.31
				Silica amorphous	7631-86-9	0.00007	0.03
				Talc;not containing fibers like asbestos	14807-96-6	0.00070	0.32
				Cyanoguanidine	461-58-5	0.00002	0.01
				Leveling agent and others	non-disclosure	0.00101	0.47
2	Solder Paste	Alloy	0.0042	Sn	7440-31-5	0.00396	95.00
				Sb	7440-36-0	0.00021	5.00
3	Passive/Active Components		0.8340	Iron Powder (Fe)	7439-89-6	0.6091	73.04
				Copper (Cu)	7440-50-8	0.1677	20.10
				Nickel (Ni)	7440-02-0	0.0069	0.82
				Tin (Sn)	7440-31-5	0.0065	0.78
				Ceramic (Ba) Compounds	12047-27-7	0.0439	5.26
4	Active Ics	Silicon	0.0111	Silicon	7440-21-3	0.01106	100.00
5	Wire	Gold	0.0007	Au	7440-57-5	0.00070	99.99
6	Solder Ball	Alloy	0.2234	Tin (Sn)	7440-31-5	0.21558	96.50
				Silver (Ag)	7440-22-4	0.00670	3.00
				Copper (Cu)	7440-50-8	0.00112	0.50
7	Encapsulation	Epoxy Resin	1.5198	Fused Silica	60676-86-0	1.17332	77.20
				Epoxy Resin	non-disclosure	0.13527	8.90
				Phenol Resin	non-disclosure	0.13527	8.90
				Crytalline Silica	14808-60-7	0.04560	3.00
				Carbon Black	1333-86-4	0.00760	0.50
				Metal Hydroxide	non-disclosure	0.02280	1.50
Total Package Weight			2.8105				

Note: Composition derived from MSDS and material C of C from Vendors

Component Weight based on assembly of generic parts