

**LTM9011-BGA-PBF 140LD 11.25mm X 9mm X 2.72mm (TABLE OF MATERIAL DECLARATION)**

*The LTM9011 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	0.0954	Barium Compounds	7727-43-7	0.00259	2.72
				Bismaleimide/Triazine/Resin/Filler Substance(Silica Crystalline)	105391-33-1,1156-51-0/9003-36-5/21645-51-2	0.01746	18.31
				Copper Metal	7440-50-8	0.06308	66.14
				Copper Compounds	1328-53-6	0.00002	0.02
				Ecotoxic substances	7440-38-2, 7440-28-0	0.00001	0.02
				Gold metal or alloy	7440-57-5	0.00030	0.31
				Nickel	7440-02-0	0.00191	2.00
				Zinc	7440-66-6	0.00015	0.16
				Continuous Filament Fiber Glass	65997-17-3	0.00948	9.94
				Chromium(III) Oxide	1308-38-9	0.00000	0.01
				Silica amorphous	7631-86-9	0.00005	0.06
				Talc;not containing fibers like asbestos	14807-96-9	0.00030	0.31
				Cyanoguanidine	461-58-5	0.00001	0.01
				Calcium caobonate	471-34-1	0.00000	0.00
2	Solder Paste	Alloy	0.0045	Sn	7440-31-5	0.00425	95.00
				Sb	7440-36-0	0.00022	5.00
3	Epoxy I		0.0002	Di-ester resin	non-disclosure	0.00002	10.00
				Functionalized ester	non-disclosure	0.00002	10.00
				Silver	7440-22-4	0.00014	80.00
4	Epoxy II		0.0010	Ethyl acetate	112-15-2	0.00029	30.00
				Phenol bis polymer	25036-25-3	0.00029	30.00
				Bisphenol-A epoxy resin	25068-38-6	0.00019	20.00
				Aromatic amine Proprietary	non-disclosure	0.00019	20.00
5	Passive/Active Components		0.0308	Copper (Cu)	7440-50-8	0.00986	32.00
				Nickel (Ni)	7440-02-0	0.00246	8.00
				Tin (Sn)	7440-31-5	0.00074	2.40
				Ceramic (Ba) Compounds	12047-27-7	0.01774	57.60
6	Active Ics	Silicon	0.0106	Silicon	7440-21-3	0.01062	100.00
7	Wire	Gold	0.0064	Au	7440-57-5	0.00636	99.99
8	Solder Ball	SAC305	0.0674	Sn	7440-31-5	0.06502	96.50
				Ag	7440-22-4	0.00202	3.00
				Cu	7440-50-8	0.00034	0.50
9	Encapsulation	Epoxy Resin	0.3786	Fused Silica	60676-86-0	0.29230	77.20
				Epoxy Resin	non-disclosure	0.03370	8.90
				Phenol Resin	non-disclosure	0.03370	8.90
				Crytalline Silica	14808-60-7	0.01136	3.00
				Carbon Black	1333-86-4	0.00189	0.50
				Metal Hydroxide	non-disclosure	0.00568	1.50
Total Package Weight			0.5948				

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