

# LTM4604A -BGA-66LD-PBF 15mm X 9mm X 3.42mm (TABLE OF MATERIAL DECLARATION)

*The LTM4604A 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	0.2125	Barium Compounds	7727-43-7	0.0032	1.500
				Filler Substances (Silica Crystalline)	14808-60-7	0.0848	39.915
				Copper Metal	7440-50-8	0.1190	56.000
				Copper Compounds	1328-53-6	0.0000	0.018
				Ecotoxic substances	7439-92-1	0.0000	0.000
				Gold metal or alloy	7440-57-5	0.0010	0.460
				Nickel	7440-02-0	0.0045	2.100
				Zinc	7440-66-6	0.0000	0.007
2	Solder Paste	Alloy	0.0079	Sn	7440-31-5	0.0075	95.000
				Sb	7440-36-0	0.0004	5.000
3	Passive/Active Components		0.2450	Ni Oxide	1313-99-1	0.0176	7.184
				Cu Oxide	1317-38-1	0.0059	2.416
				Zn Oxide	1314-13-2	0.0268	10.939
				Fe Oxide	1309-37-1	0.0977	39.863
				Copper (Cu)	7440-50-8	0.0569	23.234
				Nickel (Ni)	7440-02-0	0.0045	1.833
				Tin (Sn)	7440-31-5	0.0033	1.365
	Ceramic (Ba Compounds)	12047-27-7	0.0323	13.166			
4	Active Ics	Silicon	0.0039	Silicon	7440-21-3	0.0039	100.000
5	Wire	Gold	0.0009	Au	7440-57-5	0.0009	100.000
6	Solder Balls	SAC305	0.1254	Tin (Sn)	7440-57-5	0.1210	96.500
				Silver (Ag)	7440-22-4	0.0038	3.000
				Copper (Cu)	7440-50-8	0.0006	0.500
7	Encapsulation	Epoxy Resin	0.5370	Fused Silica	60676-86-0	0.4145	77.200
				Epoxy Resin	non-disclosure	0.0478	8.900
				Phenol Resin	non-disclosure	0.0478	8.900
				Crytalline Silica	14808-60-7	0.0161	3.000
				Carbon Black	1333-86-4	0.0027	0.500
				Metal Hydroxide	non-disclosure	0.0081	1.500
Total Package Weight			1.1325				

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