Jul-14

LTM4630-BGA-Pb 144LD 16mm X 16mm X 5.01mm (TABLE OF MATERIAL DECLARATION)

Contains > 1,000ppm of Lead (Pb) in the terminations

No.	Part Name	Material Name	Component Weight (gram)	Materials Analysis (element)	CAS Number	Material Mass (gram)	Materials Analysis (weight %)
1	Substrate	Circuit Board	0.2914	Barium Compounds	7727-43-7	0.00519	1.78
				Bismaleimide/Triazine Resin/Filler Substances (Silica Crystalline)	105391-33-1 1156-51-0/9003-36-5/21645-51-2 non-disclosure	0.08637	29.64
				Copper Metal	7440-50-8	0.11586	39.76
				Copper Compounds	147-14-8	0.00005	0.02
				Silver	7440-22-4	0.00008	0.03
				Ecotoxic substances	7440-38-2 7439-92-1	0.00002	0.01
				Phosphorus	7723-14-0	0.00032	0.11
				Palladium	7440-05-3	0.00005	0.02
				Gold metal or alloy	7440-57-5	0.00017	0.06
				Nickel	7440-02-0	0.00364	1.25
				Zinc	7440-66-6	0.00019	0.06
				Continuous Filament Fiber Glass	65997-17-3	0.06787	23.29
				Acrylic Resin	non-disclosure	0.00991	3.40
				Epoxy Resin	non-disclosure	0.00012	0.04
				Chromium(III) oxide	1308-38-9	0.00001	0.00
				Silica amorphous	7631-86-9	0.00006	0.02
				Talc;not containing fibers like asbestos	14807-96-6	0.00061	0.21
				Aromatic carbonyl compounds	non-disclosure	0.00055	0.19
				Cyanoguanidine	461-58-5	0.00002	0.01
				Amine compounds	non-disclosure	0.00007	0.03
				Leveling agent and others	non-disclosure	0.00023	0.08
				Curing reagent	*non-disclosure	0.00002	0.01
2	Solder Paste	Alloy	0.0401	Sn	7440-31-5	0.03810	95.00
				Sb	7440-36-0	0.00201	5.00
3	Passive/Active Components		1.2371	Iron Powder (Fe)	7439-89-6	0.97956	79.18
				Copper (Cu)	7440-50-8	0.23696	19.15
				Nickel (Ni)	7440-02-0	0.00261	0.21
				Tin (Sn)	7440-31-5	0.00794	0.64
				Ceramic (Ba) Compounds	12047-27-7	0.00999	0.81
4	FC-DFN		0.1905				
	Active Ics	Silicon		Silicon (Si)	7440-21-3	0.00025	0.13
	Clip	Copper Clip		Copper (Cu)	7440-50-8	0.02952	15.50
				Iron (Fe)	7439-89-6	0.00073	0.38
				Zinc (Zn)	7440-66-6	0.00004	0.02
	Solder Paste	Alloy		Lead (Pb)	7439-92-1	0.00284	1.49
				Silver (Ag)	7440-22-4	0.00008	0.04
				Tin (Sn)	7440-31-5	0.00015	0.08

No.	Part Name	Material Name	Component Weight (gram)	Materials Analysis (element)	CAS Number	Material Mass (gram)	Materials Analysis (weight %)
	Encapsulation	Epoxy Resin		epoxy resin	29690-82-2	0.00346	1.81
				Phenol	9003-35-4	0.00208	1.09
				Silica (Si)	60676-86-0	0.06359	33.38
	Lead frame	Lead frame		Copper (Cu)	7440-50-8	0.07072	37.13
				Iron (Fe)	7439-89-6	0.00174	0.92
				Silver (Ag)	7440-22-4	0.00101	0.53
				Zinc (Zn)	7440-66-6	0.00010	0.05
				Tin (Sn)	7440-31-5	0.01321	6.93
	Wire 1	Copper		Copper (Cu)	7440-50-8	0.00005	0.03
	Wire 2	Gold		Gold (Au)	7440-57-5	0.00092	0.48
5	Active Ics	Silicon	0.0017	Silicon	7440-21-3	0.00167	100.00
6	Wire	Gold	0.0003	Au	7440-57-5	0.00031	99.99
7	Solder Balls	Alloy	0.2749	Tin (Sn)	7440-31-5	0.17318	63.00
				Lead (Pb)	9439-92-1	0.10171	37.00
8	Encapsulation	Epoxy Resin	1.4346	Fused Silica	60676-86-0	1.10755	77.20
				Epoxy Resin	non-disclosure	0.12768	8.90
				Phenol Resin	non-disclosure	0.12768	8.90
				Crytalline Silica	14808-60-7	0.04304	3.00
				Carbon Black	1333-86-4	0.00717	0.50
				Metal Hydroxide	non-disclosure	0.02152	1.50
	Total Package Weight		**3.4706**				

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