



PK652 (v1.0) May 5, 2014

100% Material Declaration Data Sheet for 7 Series RF676 Package

Average Weight: 7.8847 g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die					0.297103	3.768
	Silicon	7440-21-3	100.00	Basis	0.297103	
Solder Bump					0.014081	0.179
	Tin	7440-31-5	63.00	Basis	0.008871	
	Lead	7439-92-1	37.00	Basis	0.005210	
Underfill					0.045000	0.571
	Bisphenol F/ Epichlorohydrin	9003-36-5	20.00	Basis	0.009000	
	Phenolic Resin	Trade Secret	15.00	Basis	0.006750	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	Basis	0.002250	
	Amine type accelerator	Trade Secret	5.00	Basis	0.002250	
	Silicon Dioxide	60676-86-0	51.50	Basis	0.023175	
	Carbon Black	1333-86-4	1.00	Basis	0.000450	
	Additives	Trade Secret	2.50	Additive	0.001125	
Solder Paste					0.005700	0.072
	Tin	7440-31-5	63.00	Metal	0.003591	
	Lead	7439-92-1	37.00	Metal	0.002109	
Capacitor 1					0.021600	0.274
	Barium	12047-27-7	88.86	Ceramic	0.019193	
	Manganese	1313-13-9	1.43	Ceramic	0.000309	
	Nickel	7440-02-0	4.29	Internal Electrode	0.000926	
	Copper	7440-50-8	0.70	Termination	0.000151	
	Boron	1303-86-2	0.01	Termination	0.000003	
	Nickel	7440-02-0	3.57	Plating	0.000771	
	Tin	7440-31-5	0.90	Plating	0.000194	
	Lead	7439-92-1	0.24	Plating	0.000052	

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Capacitor 2					0.003800	0.048
	Barium	12047-27-7	88.86	Ceramic	0.003377	
	Manganese	1313-13-9	1.43	Ceramic	0.000054	
	Nickel	7440-02-0	4.29	Internal Electrode	0.000163	
	Copper	7440-50-8	0.70	Termination	0.000027	
	Glass Oxide	65997-17-3	0.01	Termination	0.000001	
	Nickel	7440-02-0	3.57	Plating	0.000136	
	Tin	7440-31-5	0.86	Plating	0.000033	
	Lead	7439-92-1	0.29	Plating	0.000011	
Capacitor 3					0.001200	0.015
	Barium	12047-27-7	71.29	Ceramic	0.000855	
	Manganese	1313-13-9	10.43	Ceramic	0.000125	
	Nickel	7440-02-0	2.00	Internal Electrode	0.000024	
	Copper	7440-50-8	11.57	Termination	0.000139	
	Boron	1303-86-2	0.21	Termination	0.000003	
	Nickel	7440-02-0	1.80	Plating	0.000022	
	Gold	7440-57-5	2.70	Plating	0.000032	
Capacitor 4					0.007440	0.094
	Barium	12047-27-7	72.40	Ceramic	0.005387	
	Manganese	1313-13-9	10.60	Ceramic	0.000789	
	Nickel	7440-02-0	4.00	Internal Electrode	0.000298	
	Copper	7440-50-8	5.80	Termination	0.000432	
	Glass Oxide	65997-17-3	0.20	Termination	0.000015	
	Nickel	7440-02-0	2.66	Plating	0.000198	
	Tin	7440-31-5	3.99	Plating	0.000297	
	Lead	7439-92-1	0.35	Plating	0.000026	
Heat Sink					4.615000	58.531
	Copper	7440-50-8	99.15	Main Material	4.575773	
	Nickel	8049-31-8	0.85	Main Material	0.039228	
Heat Sink Adhesive					0.074000	0.939
	Aluminium Oxide Al2O3	1344-28-1	70.00	Main Material	0.051800	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	30.00	Main Material	0.022200	
Solder Ball					0.643415	8.160
	Tin	7440-31-5	63.00	Main Material	0.405351	
	Lead	7439-92-1	37.00	Main Material	0.238064	

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Substrate					2.156403	27.349
	Copper	7440-50-8	40.39		0.871057	
	Tin	7440-31-5	0.85		0.018421	
	Lead	7439-92-1	0.50		0.010819	
	BT Core	Trade Secret	42.32		0.912582	
	ABF	Trade Secret	13.74		0.296319	
	Solder Mask	Trade Secret	2.19		0.047205	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
05/05/2014	1.0	Xilinx Initial Release

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