



100% Material Declaration Data Sheet for 7 Series FFG900

PK524 (v1.2) October 12, 2012

Average Weight: 11.5795g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die					0.296758	2.563
	Silicon (Si)	7440-21-3	100.00	Basis	0.296758	
Solder Bump					0.019315	0.167
	Tin (Sn)	7440-31-5	63.00		0.012168	
	Lead (Pb)	7439-92-1	37.00		0.007147	
Solder Paste					0.071000	0.613
	Tin (Sn)	7440-31-5	96.50	Basis	0.068515	
	Silver (Ag)	7440-22-4	3.00	Basis	0.002130	
	Copper (Cu)	7440-50-8	0.50	Basis	0.000355	
Capacitor 1					0.023400	0.202
	BaTiO3 type	12047-27-7	70.60	Ceramic	0.016520	
	Nickel (Ni)	7440-02-0	6.70	Inner electrode	0.001568	
	Copper (Cu)	7440-50-8	20.10	Outer electrode	0.004703	
	Nickel (Ni)	7440-02-0	0.80	Plating 1	0.000187	
	Tin (Sn)	7440-31-5	1.80	Plating 2	0.000421	
Capacitor 2					0.003800	0.033
	BaTiO3 type	12047-27-7	61.70	Ceramic	0.002345	
	Nickel (Ni)	7440-02-0	4.89	Inner electrode	0.000186	
	Indium tin oxide	50926-11-9	18.30	Outer electrode	0.000695	
	Copper (Cu)	7440-50-8	13.40	Outer electrode	0.000509	
	Nickel (Ni)	7440-02-0	0.49	Plating 1	0.000019	
	Tin (Sn)	7440-31-5	1.22	Plating 2	0.000046	
Capacitor 3					0.002400	0.021
	BaTiO3 type	12047-27-7	66.00	Ceramic	0.001584	
	Nickel (Ni)	7440-02-0	2.67	Inner electrode	0.000064	
	Copper (Cu)	7440-50-8	23.33	Outer electrode	0.000560	
	Nickel (Ni)	7440-02-0	2.33	Plating 1	0.000056	
	Tin (Sn)	7440-31-5	5.67	Plating 2	0.000136	

© Copyright 2012 Xilinx, Inc. XILINX, the Xilinx logo, Virtex, Spartan, ISE, and other designated brands included herein are trademarks of Xilinx in the United States and other countries. All other trademarks are the property of their respective owners

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Capacitor 4					0.012880	0.111
	BaTiO3 type	12047-27-7	51.10	Ceramic	0.006582	
	Copper (Cu)	7440-50-8	27.00	Inner electrode	0.003478	
	Nickel (Ni)	7440-02-0	16.90	Outer electrode	0.002177	
	Nickel (Ni)	7440-02-0	2.00	Plating 1	0.000258	
	Tin (Sn)	7440-31-5	3.00	Plating 2	0.000386	
Underfill					0.053000	0.458
	Bisphenol F/ epichlorohydrin copolymer	9003-36-5	20.00	Basis	0.010600	
	Phenolic Resin	Trade Secret	15.00	Basis	0.007950	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	Basis	0.002650	
	Amine type accelerator	Trade Secret	5.00	Basis	0.002650	
	Silicon Dioxide	60676-86-0	51.50	Basis	0.027295	
	Carbon Black	1333-86-4	1.00	Basis	0.000530	
	Additives	Trade Secret	2.50	Additive	0.001325	
Lid					7.639000	65.970
	Copper (Cu)	7440-50-8	99.80	Main Material	7.623722	
	Nickel (Ni)	7440-02-0	0.10	Main Material	0.007639	
	Nickel Sulfate	7786-81-4	0.10	Main Material	0.007639	
Lid Adhesive					0.102000	0.881
	Aluminum Oxide Al2O3	1344-28-1	70.00	Basis	0.071400	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	30.00	Basis	0.030600	
Solder Ball					0.751829	6.493
	Tin (Sn)	7440-31-5	96.50	Main Material	0.725515	
	Silver (Ag)	7440-22-4	3.00	Main Material	0.022555	
	Copper (Cu)	7440-50-8	0.50	Main Material	0.003759	
Substrate					2.604098	22.489
	Copper (Cu)	7440-50-8	40.10		1.044296	
	Tin (Sn)	7440-31-5	0.82		0.021224	
	Lead (Pb)	7439-92-1	0.17		0.004427	
	Silver (Ag)	7440-22-4	0.02		0.000417	
	BT Core	N/A	43.50		1.132886	
	ABF	N/A	13.14		0.342231	
	Solder Mask	Trade Secret	2.25		0.058617	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
03/29/2012	1.0	Initial Xilinx release.
08/17/2012	1.1	Updated Component Names
10/12/2012	1.2	Updated Substrate Component

Notice of Disclaimer

Xilinx regards this materials data to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. Xilinx subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers (“Contractors”). All data provided hereunder is based on information received from Contractors. Xilinx has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of Xilinx products.