

**Average Weight: 3.7977g**

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
<b>Silicon Die</b>					<b>0.388303</b>	<b>10.225%</b>
	Silicon (Si)	7440-21-3	100.00	Basis	0.388303	
<b>Solder Bump</b>					<b>0.015339</b>	<b>0.404%</b>
	Sn	7440-31-5	98.20	basis	0.015063	
	Ag	7440-22-4	1.80	basis	0.000276	
<b>Solder Paste</b>					<b>0.004284</b>	<b>0.113%</b>
	Tin (Sn)	7440-31-5	96.50	Basis	0.004134	
	Silver (Ag)	7440-22-4	3.00	Basis	0.000129	
	Copper (Cu)	7440-50-8	0.50	Basis	0.000021	
<b>Capacitor 1</b>					<b>0.002400</b>	<b>0.063%</b>
	BaTiO3 type	1304-28-5	30.22	Ceramic	0.000725	
	Titanium dioxide	13463-67-7	15.11		0.000363	
	Misc.	trade secret	5.04		0.000121	
	Ni	7440-02-0	33.44	Inner electrode	0.000803	
	Cu	7440-50-8	11.87	Out electrode	0.000285	
	Silicon dioxide	7631-86-9	1.06		0.000025	
	boric oxide	1303-86-2	0.26		0.000006	
	Ni	7440-02-0	0.81	Plating1	0.000019	
	Sn	7440-31-5	2.19	Plating2	0.000053	
<b>Capacitor 2</b>					<b>0.009200</b>	<b>0.242%</b>
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.002914	
	Titanium dioxide	13463-67-7	15.83		0.001456	
	Misc.	-	5.28		0.000486	
	Ni	7440-02-0	26.67	Inner Electrode	0.002454	
	Cu	7440-50-8	15.10	Outer Electrode	0.001389	
	Silicon dioxide	7631-86-9	1.34		0.000123	
	boric oxide	1303-86-2	0.33		0.000030	
	Ni	7440-02-0	1.00	Plating1	0.000092	
	Sn	7440-31-5	2.78	Plating2	0.000256	

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
<b>Capacitor 3</b>					<b>0.010800</b>	<b>0.284%</b>
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.003420	
	Titanium dioxide	13463-67-7	15.83		0.001710	
	Misc.	-	5.28		0.000570	
	Ni	7440-02-0	26.67	Inner Electrode	0.002880	
	Cu	7440-50-8	15.10	Outer Electrode	0.001631	
	Silicon dioxide	7631-86-9	1.34		0.000145	
	diboron trioxide; boric oxide	1303-86-2	0.33		0.000036	
	Ni	7440-02-0	1.00	Plating1	0.000108	
	Sn	7440-31-5	2.78	Plating2	0.000300	
<b>Underfill</b>					<b>0.049000</b>	<b>1.290%</b>
	Bisphenol F type liquid epoxy resin	9003-36-5	15.00	basis	0.007350	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.004900	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	basis	0.002450	
	Amine type hardener	trade secret	10.00	basis	0.004900	
	Silicon dioxide	60676-86-0	58.00	filler	0.028420	
	Carbon black	1333-86-4	1.00	color agent	0.000490	
	Additives	trade secret	1.00	additives	0.000490	
<b>Solder Ball</b>					<b>0.751829</b>	<b>19.797%</b>
	Sn	7440-31-5	96.50	basis	0.725515	
	Ag	7440-22-4	3.00	basis	0.022555	
	Cu	7440-50-8	0.50	basis	0.003759	
<b>Substrate</b>					<b>2.566547</b>	<b>67.582%</b>
	Cu	7440-50-8	36.975		0.943301	
	Sn	7440-31-5	1.112		0.028490	
	Ag	7440-22-4	0.035		0.000886	
	Core	trade secret	48.199		1.240861	
	ABF	trade secret	11.204		0.290237	
	Solder Mask	trade secret	2.475		0.062772	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
08/28/2015	1.0	Initial Xilinx release.

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