



PK942 (v1.0) November 10, 2017

# 100% Material Declaration Data Sheet for Spartan-7 CSGA324

Average Weight : 0.6710 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight ( in grams)	Component % of total
Silicon die					<b>0.017861</b>	<b>2.662%</b>
	Silicon	7440-21-3	100.00		0.017861	
Die Attach Material					<b>0.005739</b>	<b>0.855%</b>
	Silver	7440-22-4	77.50		0.004448	
	Bismaleimide monomer	trade secret	15.00		0.000861	
	Acrylate monomer	trade secret	7.50		0.000430	
Mold Compound					<b>0.295183</b>	<b>43.992%</b>
	Epoxy Resin	Trade secret	7.50		0.022139	
	Phenol Resin A	9003-35-4	3.00		0.008855	
	Phenol Resin B	Trade secret	3.00		0.008855	
	Silica(Amorphous) A	60676-86-0	67.95		0.200577	
	Silica(Amorphous) B	7631-86-9	15.00		0.044277	
	Metal Hydroxide	Trade secret	3.00		0.008855	
Carbon black	1333-86-4	0.55		0.001624		
Copper Wire					<b>0.004678</b>	<b>0.697%</b>
	Copper	7440-50-8	98.08		0.004588	
	Palladium	7440-05-3	1.80		0.000084	
	Gold	7440-57-5	0.12		0.000006	
Solder Ball					<b>0.114184</b>	<b>17.017%</b>
	Tin	7440-31-5	96.50		0.110188	
	Silver	7440-22-4	3.00		0.003426	
	Copper	7440-50-8	0.50		0.000571	
Substrate					<b>0.233355</b>	<b>34.777%</b>
	Gold	7440-57-5	1.99		0.004652	
	Nickel	7440-02-0	12.26		0.028605	
	Copper Foil	7440-50-8	3.75		0.008758	
	Copper plating	7440-50-8	19.70		0.045974	
	Continuous Filament Fiber Glass	65997-17-3	16.29		0.038018	
	BT Core	Trade secret	30.15		0.070363	
	Prepreg	Trade secret	9.36		0.021846	
	Solder mask	Trade secret	6.49		0.015138	

## Revision History

Date	Version	Description of Revisions
11/10/2017	1.0	Initial Xilinx release.