



PK974(v1.0) February 14, 2019

100% Material Declaration Data Sheet for Spartan-7 CPGA196

Average Weight : 0.1710 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die	Silicon	7440-21-3	100.00		0.005429	3.175%
					0.005429	
Die Attach Material	Silver	7440-22-4	74		0.001333	0.780%
	Bismaleimide monomer	trade secret	15		0.000986	
	Methacrylate resin	trade secret	7.5		0.000200	
	Additive	trade secret	3.50		0.000100	
					0.000047	
Mold Compound					0.083755	48.980%
	Epoxy Resin	Trade secret	7.5		0.006282	
	Phenol Resin A	9003-35-4	3		0.002513	
	Phenol Resin B	Trade secret	3		0.002513	
	Silica(Amorphous) A	60676-86-0	67.95		0.056912	
	Silica(Amorphous) B	7631-86-9	15		0.012563	
	Metal Hydroxide	Trade secret	3		0.002513	
	Carbon black	1333-86-4	0.55		0.000461	
					0.001724	1.008%
Copper Wire	Copper	7440-50-8	98.08		0.001691	
	Palladium	7440-05-3	1.3		0.000031	
	Gold	7440-57-5	0.12		0.000002	
Solder Ball					0.020328	11.888%
	Tin	7440-31-5	96.5		0.019617	
	Silver	7440-22-4	3		0.000610	
	Copper	7440-50-8	0.5		0.000102	
Substrate					0.058431	34.170%
	Solder mask	trade secret	4.51		0.002638	
	BT Core	trade secret	22.06		0.012889	
	Prepreg	N/A	8.34		0.004875	
	Continuous Filament Fiber	65997-17-3	9.98		0.005829	
	Glass					
	Gold	7440-57-5	0.22		0.000127	
	Nickel	7440-02-0	1.34		0.000783	
	Copper Foil	7440-50-8	44.74		0.026143	
	Copper plating	7440-50-8	8.81		0.005146	

Revision History

Date	Version	Description of Revisions
2/14/2019	1.0	Initial Xilinx release.

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