

\* Material Composition - nRF52810-CAAA + Backside Coating

Material	Purpose	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Polybenzoxazole1	Dielectric	Proprietary	-----	0.04501	100.00%	7668	0.77%
Polybenzoxazole2	Dielectric	Proprietary	-----	0.03835	100.00%	6533	0.65%
RDL Seed Layer	Seed Layer	Ti	7440-32-6	0.00031	3.98%	53	0.01%
	Seed Layer	W	7440-33-7	0.00275	35.35%	468	0.05%
	Seed Layer	Cu	7440-50-8	0.00472	60.67%	804	0.08%
Copper	Interconnect	Cu	7440-50-8	0.09433	100.00%	16070	1.61%
UBM Seed Layer	Seed Layer	Ti	7440-32-6	0.00014	3.97%	24	0.00%
	Seed Layer	W	7440-33-7	0.00125	35.41%	213	0.02%
	Seed Layer	Cu	7440-50-8	0.00214	60.62%	365	0.04%
Copper	UBM	Cu	7440-50-8	0.09629	100.00%	16404	1.64%
Solder Ball	Interconnect	Sn	7440-31-5	1.00848	95.50%	171804	17.18%
	Interconnect	Ag	7440-22-4	0.04224	4.00%	7196	0.72%
	Interconnect	Cu	7440-50-8	0.00528	0.50%	899	0.09%
BS Coating	Silica	Proprietary	-----	0.15228	60.00%	25942	2.59%
	Epoxy Resin	Proprietary	-----	0.03046	12.00%	5189	0.52%
	Acrylic ester co-polymer	Proprietary	-----	0.03046	12.00%	5189	0.52%
	Additive	Proprietary	-----	0.03046	12.00%	5189	0.52%
	Pigment	Proprietary	-----	0.01015	4.00%	1729	0.17%
Die	Circuit	Si	7440-21-3	4.27484	100.00%	728260	72.83%
<b>Package Weight (mg):</b>				<b>5.87</b>		<b>% Total:</b>	<b>100%</b>