

* Material Composition - nRF52833-CJAA-R

Material	Purpose	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Polybenzoxazole1	Dielectric	Proprietary	-----	0.04518	100%	7988	0.799%
Polybenzoxazole2	Dielectric	Proprietary	-----	0.03962	100%	7004	0.700%
RDL Seed Layer	Seed Layer	Ti	7440-32-6	0.00034	4.64%	61	0.006%
	Seed Layer	W	7440-33-7	0.00310	41.73%	548	0.055%
	Seed Layer	Cu	7440-50-8	0.00399	53.63%	705	0.070%
Copper	Interconnect	Cu	7440-50-8	0.07974	100%	14098	1.410%
UBM Seed Layer	Seed Layer	Ti	7440-32-6	0.00016	4.64%	28	0.003%
	Seed Layer	W	7440-33-7	0.00141	41.73%	250	0.025%
	Seed Layer	Cu	7440-50-8	0.00182	53.63%	321	0.032%
Copper	UBM	Cu	7440-50-8	0.08170	100%	14443	1.444%
Solder Ball	Interconnect	Sn	7440-31-5	0.85568	95.50%	151280	15.128%
	Interconnect	Ag	7440-22-4	0.03584	4.00%	6336	0.634%
	Interconnect	Cu	7440-50-8	0.00448	0.50%	792	0.079%
Die	Circuit	Si	7440-21-3	4.28310	100%	757232	75.723%
Top Surface Laminate	Mark Surface	Proprietary	-----	0.22011	100%	38914	3.891%
Package Weight (mg):				5.66		% Total:	100%