

Material Declaration Data Sheet (MDDS)



Customer	Nordic
Device Name	nRF52811-QCAA Build ABO
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Material Type	Material Name	Supplier Name	Material Weight(g)	Material Weight(mg)	Material % in Product	Substance Name	CAS#	Substance % in Material	Substance Weight(g)	Substance Weight(mg)	PPM in Product	
Lead Frame	C194	HDS	0.031920	31.92	45.0530%	Iron (Fe)	7439-89-6	2.35%	0.000750	0.75	10587.47	
						Phosphorus (P)	7723-14-0	0.03%	0.000010	0.01	135.16	
						Zinc (Zn)	7440-66-6	0.12%	0.000038	0.04	540.64	
						Copper (Cu)	7440-50-8	97.50%	0.031122	31.12	439267.17	
Internal Lead Frame Plating	Ag Plating	HDS	0.000658	0.66	0.9285%	Silver (Ag)	7440-22-4	100.00%	0.000658	0.66	9285.42	
External Lead Frame Plating	Sn Plating	Rohm and Haas	0.001804	1.80	2.5465%	Tin (Sn)	7440-31-5	100.00%	0.001804	1.80	25465.00	
EMC (Epoxy Molding Compound)	G700	Sumitomo	0.030970	30.97	43.7127%	Epoxy Resin	Proprietary	5.00%	0.001548	1.55	21856.34	
						Phenol Resin	Proprietary	5.00%	0.001548	1.55	21856.34	
						Silica(Amorphous) A	60676-86-0	75.00%	0.023227	23.23	327845.03	
						Silica(Amorphous) B	7631-86-9	14.50%	0.004491	4.49	63383.37	
						Carbon Black	1333-86-4	0.50%	0.000155	0.15	2185.63	
Die	Silicon Die	Customer Consigned	0.004819	4.82	6.8021%	Silicon (Si)	7440-21-3	100.00%	0.004819	4.82	68021.40	
						Silver	7440-22-4	78.00%	0.000384	0.38	5413.47	
Die Attach	AMK-06	Henkel	0.000492	0.49	0.6940%	Carbocyclic acrylate	Proprietary	10.00%	0.000049	0.05	694.03	
						Bismaleimide resin	13676-54-5	10.00%	0.000049	0.05	694.03	
						Acrylate	Proprietary	1.00%	0.000005	0.00	69.40	
						2-(3-A-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3	1.00%	0.000005	0.00	69.40	
						Copper (Cu)	7440-50-8	98.00%	0.000183	0.18	2578.09	
Bonding Wire	AuPCC	MKE	0.000186	0.19	0.2631%	Palladium (Pd)	7440-05-3	1.50%	0.000003	0.00	39.46	
						Gold (Au)	7440-57-5	0.4986%	0.000001	0.00	13.12	
						Silver (Ag)	7440-22-4	0.0014%	0.000000	0.00	0.04	
			0.070849	70.85	100.0000%				700.00%	0.070849	70.85	1000000.00

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