

MATERIAL DECLARATION SHEET



Material number	SSD-1000A-RA			
Product Line	Sensors & Controls			
Compliance Date	9/22/2025			
RoHS Compliant	Yes	MSL	N/A	

No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material/	CASRN	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
				Substances	if applicable			
1	Ceramic Capacitor 10UF 16V	Dielectric	0.0023	Barium Titanate (IV)	12047-27-7	96.70	0.002	0.002
				Additives	Trade Secret	3.3	0.0001	
		Inner Electrode	0.0014	Nickel	7440-02-0	100.00	0.002	0.001
		Terminal Electrode	3.09	Copper	7440-50-8	100.00	2.103	2.10
		Electro-Plating	0.0004	Nickel	7440-02-0	62.50	0.0002	0.0003
				Tin	7440-31-5	37.50	0.0001	
2	Ceramic Capacitor 4.7 μ F $\pm$ 10% 100V	Dielectric	0.0023	Barium Titanate (IV)	12047-27-7	96.70	0.002	0.002
				Additives	Trade Secret	3.3	0.0001	
		Inner Electrode	0.0014	Nickel	7440-02-0	100.00	0.001	0.001
		Terminal Electrode	3.09	Copper	7440-50-8	100.00	2.103	2.10
		Electro-Plating	0.0004	Nickel	7440-02-0	62.50	0.0002	0.0003
				Tin	7440-31-5	37.50	0.0001	
3	Ceramic Capacitor	Dielectric	0.033	Barium Titanate (IV)	12047-27-7	97.82	0.0220	0.02
				Additives	Trade Secret	2.18	0.0005	

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	0.1UF 25V 9X	Inner Electrode	0.004	Nickel	7440-02-0	100.00	0.0029	0.003
		Terminal Electrode	0.008	Copper	7440-50-8	100.00	0.0053	0.005
		Electro-Plating	0.001	Nickel	7440-02-0	63.64	0.0004	0.001
				Tin	7440-31-5	36.36	0.0002	
4	Ceramic Capacitor 22UF 10V X6S 2X	Ceramic Substrate	0.0322	Barium Oxide	1304-28-5	60.00	0.0132	0.02
				Titanium Dioxide	13463-67-7	30.00	0.0066	
				Misc	-	10.00	0.0022	
		Outer Electrode	0.0057	Copper	7440-50-8	90.00	0.0035	0.004
				Boron Oxide	1303-86-2	2.00	0.0001	
				Silicon Dioxide	7631-86-9	8.00	0.0003	
		Plating layer	0.0002	Nickel	7440-02-0	100.00	0.0002	0.0002
		Inner Electrode	0.0072	Nickel	7440-02-0	100.00	0.0049	0.0049
		Plating layer	0.0006	Tin	7440-31-5	100.00	0.0004	0.0004
5	Ceramic Capacitor 0.033UF 50V C0G	Dielectric	0.0037	Barium Titanate (IV)	12047-27-7	97.82	0.002	0.0025
				Additives	Trade Secret	2.18	0.0001	
		Inner Electrode	0.0005	Nickel	7440-02-0	100.00	0.0003	0.0003
		Terminal Electrode	0.0009	Copper	7440-50-8	100.00	0.00059	0.0006
		Electro-Plating	0.0001	Nickel	7440-02-0	63.64	0.00005	0.0001
				Tin	7440-31-5	36.36	0.00003	
6	Ceramic Capacitor 1UF 25V X7R 5X	Dielectric	0.0184	Barium Titanate (IV)	12047-27-7	97.82	0.01	0.01
				Additives	Trade Secret	2.18	0.0003	
		Inner Electrode	0.0024	Nickel	7440-02-0	100.00	0.0016	0.002
		Terminal Electrode	0.0043	Copper	7440-50-8	100.00	0.0029	0.003
		Electro-Plating	0.00055	Nickel	7440-02-0	63.64	0.0002	0.0004
				Tin	7440-31-5	36.36	0.0001	
7	Capacitor 16pF 50V NPO 060 2X	Ceramic Substrate	0.0093	Calcium Zirconium Oxide	12013-47-7	100.00	0.00636	0.0064
		Inner Electrode	0.0005	Nickel	7440-02-0	100.00	0.00035	0.0004

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		Termination Electrode	0.0010	Copper	7440-50-8	100.00	0.00070	0.0007
		Under plating	0.00008	Nickel	7440-02-0	100.00	0.00005	0.0001
		Surface plating	0.0002	Tin	7440-31-5	100.00	0.00016	0.0002
8	Ceramic Capacitor 0.22UF 25	Dielectric	0.00367	Barium Titanate (IV)	12047-27-7	97.82	0.0024	0.002
				Additives	Trade Secret	2.18	0.0001	
		Inner Electrode	0.00048	Nickel	7440-02-0	100.00	0.0003	0.0003
		Terminal Electrode	0.00086	Copper	7440-50-8	100.00	0.001	0.001
		Electro-Plating	0.00011	Nickel	7440-02-0	63.64	0.00005	0.0001
				Tin	7440-31-5	36.36	0.00003	
9	Diodo 75 V 300mA 2X	Mold Compound	0.0162	Fused Silica	60676-86-0	79.50	0.00874	0.011000
				Epoxy Resin	29690-82-2	10.00	0.00110	
				Phenolic Resin	9003-35-4	10.00	0.00110	
				Carbon Black	1333-86-4	0.50	0.00005	
		Lead Frame	0.0047	Silicon	7440-21-3	36.30	0.00115	0.003168
				Manganese	7439-96-5	50.20	0.00159	
				Nickel	7440-02-0	13.50	0.00043	
				Cobalt	7440-48-4	3.00	0.00010	
				Iron	7439-89-6	0.50	0.00002	
				Phosphorus	7723-14-0	3.00	0.00010	
				Carbon	7440-44-0	80.00	0.00253	
				Carbon Black	1333-86-4	1.00	0.00003	
				Sulfur	7704-34-9	8.00	0.00025	
				Chromium	7440-47-3	4.50	0.00014	
		Plating 1	0.000005	Copper	7440-50-8	100.00	0.000003	0.000003
		Plating 2	0.000001	Silver	7440-22-4	100.00	0.000001	0.000001
		Terminal	0.00029	Tin	7440-31-5	100.00	0.00020	0.000199
		Chip	0.00015	Silicon	7440-21-3	99.57	0.00010	0.000101
				Silicon Dioxide	14808-60-7	0.43	0.0000004	
		Chip Metal	0.000013	Gold	7440-57-5	100.00	0.00001	0.000009

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		Bond Wire	0.000018	Copper	7440-50-8	100.00	0.00001	0.000012
		Bond Wire Plating 1	0.0000004	Palladium	7440-05-3	100.00	0.0000003	0.0000003
		Bond Wire Plating 1	0.0000004	Gold	7440-57-5	100.00	0.0000003	0.0000003
10	Tvs Diode Surface Mount, 40V Clamp 8A (8/20µs) lpp	Encapsulation	0.0051	Amorphous Silica	60676-86-0	91.69	0.0032	0.004
				Epoxy Resin A	Proprietary	4.17	0.0001	
				Epoxy Resin B	29690-82-2	1.41	0.00005	
				Phenol Resin	Proprietary	2.15	0.0001	
				Carbon Black	1333-86-4	0.58	0.00002	
		Leadframe	0.0039	Copper	7440-50-8	97.40	0.0026	0.003
				Iron	7439-89-6	2.39	0.0001	
				Phosphorus	7723-14-0	0.08	0.000002	
				Zinc	7440-66-6	0.13	0.000003	
				Lead	7439-92-1	0.01	0.0000002	
		Leadframe Plating	0.000022	Silver	7440-22-4	100.00	0.000015	0.00001
		Chip	0.0007	Silicon	7440-21-3	88.37	0.0004	0.001
				Nickel	7440-02-0	5.91	0.00003	
				Aluminum	7429-90-5	5.35	0.00003	
				Gold	7440-57-5	0.37	0.000002	
		Die Attach	0.0002	Silver	7440-22-4	95.19	0.0001	0.00013
				Bisphenol-F- (Epichlorhydrin); Epoxy resin	9003-36-5	2.76	0.000004	
				1,4-Bis(2,3- Epoxypropoxy) Butane	2425-79-8	1.06	0.000001	
				Aromatic Polyamine	Proprietary	0.97	0.000001	
				Adipic Acid	124-04-9	0.03	0.00000004	
		Bond Wires	0.000069	Gold	7440-57-5	99.99	0.000047	0.00005
				Non- Au Elements	Proprietary	0.01	0.000000005	
		Lead Finish Plating	0.00024	Tin	7440-31-5	100.00	0.0002	0.00016

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11	Diode 10V 300MW SO	Die	0.00049	Silicon	7440-21-3	100.00	0.00033	0.000334
		Lead Frame	0.00086	Nickel	7440-02-0	36.30	0.00021	0.000585
				Iron	7439-89-6	50.20	0.00029	
				Copper	7440-50-8	13.50	0.00008	
		Mold Compound	0.00302	Boron Zinc Hydroxide Oxide	138265-88-0	3.00	0.00006	0.002056
				Zinc Monoxide	1314-13-2	0.50	0.00001	
				2,4,6-Triamino-s-Triazincompd.Withs-Triazine-Triol	37640-57-6	3.00	0.00006	
				Silica Amorphous	7631-86-9	80.00	0.00164	
				Carbon Black	1333-86-4	1.00	0.00002	
				Ortho-Cresol Novolac Resin	29690-82-2	8.00	0.00016	
				Phenolic Resin	9003-35-4	4.50	0.00009	
		Plating	0.00013	Tin	7440-31-5	100.00	0.00009	0.000088
		Wire Bond - Cu	0.00001	Copper	7440-50-8	100.00	0.00001	0.000007
12	TVS DIODE 60VWM 96.8VC	Dice	0.0013	Silicon	7440-21-3	60.18	0.001	0.001
				Phosphorus	7723-14-0	0.01	0.0000001	
				Boron	7440-42-8	0.01	0.0000001	
				Nickel	7440-02-0	14.80	0.0001	
				Lead	7439-92-1	12.50	0.0001	
				Silicon Dioxide	7631-86-9	10.00	0.0001	
				Aluminum Oxide	1344-28-1	2.50	0.00002	
		Solder paste	0.0020	Tin	7440-31-5	5.00	0.0001	0.001
				Lead	7439-92-1	92.50	0.001	
				Silver	7440-22-4	2.50	0.00003	
		Lead frame	0.0275	Copper	7440-50-8	99.80	0.019	0.02
				Iron	7439-89-6	0.15	0.00003	
				Phosphorus	7723-14-0	0.05	0.00001	
		Epoxy	0.0310	Silicon Dioxide	14808-60-7	76.00	0.016	0.02
				Epoxy Resin	25928-94-3	9.00	0.002	
				Phenolic Resin-A,B	9003-35-4	8.00	0.002	

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				Hydroxide Metal	Trade Secret	6.00	0.001	
				Carbon Black	1333-86-4	1.00	0.0002	
		Plating	0.00066	Tin	7440-31-5	100.00	0.0005	0.0005
13	Connector R/A 4POS 0.38um GOLD 2 2X	LCP-GF30	0.68	Carbon Black	1333-86-4	0.50	0.00231	0.462854
				Liquid Crystal Polymer	70679-92-4	68.00	0.31474	
				Further Additives	Trade Secret	1.50	0.00694	
				Glass Fiber	65997-17-3	30.00	0.13886	
		Tin Plating	0.0068	Tin	7440-31-5	100.00	0.00463	0.004629
		Gold Plating	0.000816	Cobalt	7440-48-4	99.50	0.00055	0.000555
				Nickel	7440-02-0	0.25	0.000001	
				Gold	7440-57-5	0.25	0.000001	
		Nickel Plating	0.0128	Nickel	7440-02-0	100.00	0.00871	0.008713
		Cartridge Brass 70% Unplate	0.344	Copper	7440-50-8	70.00	0.16390	0.234150
				Nickel	7440-02-0	30.00	0.07024	
14	Connector R/A 2POS 0.38um GOLD	LCP-GF30	0.21	Carbon Black	1333-86-4	0.50	0.00071	0.143
				Liquid Crystal Polymer	70679-92-4	68.00	0.09720	
				Further Additives	Trade Secret	1.50	0.00214	
				Glass Fiber	65997-17-3	30.00	0.04288	
		Tin Plating	0.0017	Tin	7440-31-5	100.00	0.00116	0.001
		Gold Plating	0.000204	Cobalt	7440-48-4	0.25	0.0000003	0.0001
				Nickel	7440-02-0	0.25	0.0000003	
				Gold	7440-57-5	99.50	0.00014	
		Nickel Plating	0.0032	Nickel	7440-02-0	100.00	0.00218	0.002
		Cartridge Brass 70% Unplate	0.086	Copper	7440-50-8	70.00	0.04098	0.059
				Nickel	7440-02-0	30.00	0.01756	
15	FIXED IND 68UH 480MA 890MOHM	Ferrite Ni-Zn	0.0514	Iron Oxide	1309-37-1	62	0.022	0.03
				Nickel Oxide	1313-99-1	11	0.004	
				Zinc Oxide	1314-13-2	20	0.007	
				Copper Oxide	1317-38-0	7	0.002	

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		Copper Wire	0.0156	Copper	7440-50-8	100	0.011	0.01
		Wire Coating	0.0003	Polyurethane Resin	26680-22-8	100	0.0002	0.0002
		Terminal - Silver Paste	0.00171	Silver	7440-22-4	73.7	0.001	0.0012
				Silicon Dioxide	60676-86-0	15.8	0.0002	
				Ethyl Cellulose	9004-57-3	10.5	0.0001	
		Terminal Nickel Pellets	0.00019	Nickel	7440-02-0	100	0.0001	0.0001
		Lead Free Solder	0.00019	Tin	7440-31-5	100	0.0001	0.0001
		Solder Bar	0.0003344	Tin	7440-31-5	99.3	0.0002	0.0002
				Copper	7440-50-8	0.7	0.000002	
		Magnetic Resin	0.00624	Iron	7439-89-6	59.4	0.003	0.004
				Silicon	7440-21-3	2.1	0.00009	
				Chromium	7440-47-3	1	0.00004	
				Polyester Resin	-	30	0.001	
				Carbon Black	1333-86-4	7.5	0.0003	
		Ink	0.00003	Amines, C12-14-Tert-Alkyl, Compounds With 1-[[5-(1,1-Dimethylpropyl)-2-Hydroxy-3-Nitrophenyl]azo]-2-Naphthalenol 1-[(2-Hydroxy-4(or 5)-Nitrophenyl)Azo]-2-Naphthenol Chromium Complexes	117527-94-3	100	0.00002	0.00002
16	MOSFETs P-CH 80V 2.2A S	Bond Wire	0.00002	Copper	7440-50-8	100.000	0.00001	0.00001
		Die	0.00099	Aluminum	7429-90-5	1.010	0.00001	0.001
				Doped Silicon	7440-21-3	98.990	0.00067	
		Die Attach Adhesive	0.00003	Proprietary Resin	129915-35-1	33.330	0.00001	0.00002
				Silver	7440-22-4	66.670	0.00001	
		Lead frame	0.00402	Copper	7440-50-8	99.480	0.002723	0.003
				Iron	7439-89-6	0.250	0.000007	
				Phosphorus	7723-14-0	0.020	0.000001	

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		Mold Compound	0.006	Zinc	7440-66-6	0.250	0.000007	0.004
				Epoxy Resin	29690-82-2	8.000	0.0003	
				Fused Silica	60676-86-0	76.870	0.0030	
				Metal Hydroxide	21645-51-2	8.000	0.0003	
		Solder Plating	0.0001	Phenol Resin	9003-35-4	7.130	0.0003	0.0001
17	Thin Film Resistors SMD 200 OHM 0.1% 2X	Inner Electrode	0.0005	Tin	7440-31-5	100.000	0.0001	0.0003
				Nickel	7440-02-0	48.700	0.0002	
				Copper	7440-50-8	49.390	0.0002	
		Protective Film	0.0018	Tin	7440-31-5	1.910	0.000006	0.0012
				Silicon Dioxide	7631-86-9	66.000	0.0008	
				Misc. not to Declare	Proprietary	34.000	0.0004	
		External Electrode	0.0003	Tin	7440-31-5	100.000	0.0002	0.0002
		Ceramic	0.0072	Aluminum Oxide	1344-28-1	99.500	0.0049	0.0049
				Silicon Dioxide	14808-60-7	0.300	0.00001	
				Magnesium Oxide	1309-48-4	0.200	0.00001	
18	Resistor 10K OHM 1% 1/10W 06 2X	Ceramic Substrate	0.0033	Nickel	7440-02-0	50.000	0.0000004	0.0000008
				Chromium	7440-47-3	50.000	0.0000004	0.0000008
				Silicon Dioxide	7631-86-9	100.000	0.00002	0.00002
		Inner termination - top side	0.00019	Aluminum Oxide	1344-28-1	96.00	0.00214	0.002226
				Silicon Dioxide	14808-60-7	3.00	0.00007	
				Magnesium Oxide	1309-48-4	1.00	0.00002	
				Silver	7440-22-4	70.00	0.00009	
		Inner termination - bottom side	0.0001	Palladium	9004-57-3	0.40	0.000001	0.000127
				Ethyl Cellulose	9004-57-3	8.00	0.00001	
				Butyl Carbitol	112-34-5	21.60	0.00003	
				Silver	7440-22-4	61.00	0.00004	
		Resistive element	0.00005	Butyl Digol	112-34-5	22.00	0.00002	0.000070
				Terpineol	8000-41-7	17.00	0.00001	
				Silver	7440-22-4	25.00	0.00001	0.000035
				Palladium	9004-57-3	5.00	0.000002	

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				Ruthenium Oxide	12036-10-1	35.00	0.00001	
				Lead	7439-92-1	11.66	0.000004	
				Boron	7440-42-8	11.67	0.000004	
				Silica	10279-57-9	11.67	0.000004	
		Pre-coat	0.000040	Lead Bisilicate	65997-18-4	75.00	0.00002	0.000027
		Over-coat	0.000040	Terpineol	8000-41-7	25.00	0.00001	
		Marking	0.000008	Polydimethylsiloxane	9016-00-6	100.00	0.00003	0.000027
				Bisphenol A Diglycidyl Ether Homopolymer	25085-99-8	50.00	0.0000027	
				Barium Sulfate	7727-43-7	15.00	0.0000008	
				Titanium Dioxide	13463-67-7	30.00	0.0000016	
		Middle Termination	0.0000099	Diethylene Glycol Monoethyl Ether Acetate	112-15-2	5.00	0.0000003	0.000005
				Nickel	7440-02-0	100.00	0.00007	
				Nickel	7440-02-0	80.00	0.000002	
		Side termination	0.000004	Chromium	7440-47-3	20.00	0.000001	0.000003
		Outer termination	0.000004	Tin	7440-31-5	100.00	0.000003	

19	Resistor 1M OHM 5% 1/10W 0603	Substrate	0.0018	Aluminum Oxide	1344-28-1	96.60	0.00118	0.001225
				Silicon Dioxide	14808-60-7	2.10	0.00003	
				Magnesium Oxide	1309-48-4	1.00	0.00001	
				Calcium Oxide	1305-78-8	0.30	0.000004	
		Top Terminal	0.00001	Silver	7440-22-4	96.88	0.00001	0.000009
				Palladium	9004-57-3	1.31	0.00000012	
				Lead Oxide	1317-16-8	0.90	0.00000008	
				Cupric Oxide	1317-38-0	0.60	0.00000005	
		Bottom Terminal	0.000015	Silicon Dioxide	7631-86-9	0.31	0.00000003	0.000010
				Silver	7440-22-4	97.49	0.00001	
				Lead Oxide	1317-16-8	1.50	0.0000002	
			0.0000083	Silicon Dioxide	7631-86-9	1.01	0.0000001	0.000006
				Lead Oxide	1317-16-8	44.00	0.000002	

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20	Resistor 2.2K OHM 1% 1/10W 0 2X	Resistive element		Ruthenium Oxide	12036-10-1	38.20	0.000002	
				Boron Oxide	1303-86-2	15.00	0.000001	
				Antimony Compounds	Propietary	1.88	0.0000001	
				Manganese Dioxide	1313-13-9	0.92	0.0000001	
		First Protective Coating	0.000015	Lead Oxide	1317-16-8	54.99	0.0000056	0.000010
				Silicon Dioxide	7631-86-9	25.60	0.0000026	
				Boron Oxide	1303-86-2	12.904	0.0000013	
				Zinc Oxide	1314-13-2	4.205	0.0000004	
		Second Protective Coating	0.0000153	Chromium Oxide	1308-38-9	2.305	0.0000002	0.000010
				Poly[(O-Cresyl Glycidyl Ether)-Co-Formaldehyde]	29690-82-2	69.00	0.0000072	
				Silicon Dioxide	7631-86-9	23.00	0.0000024	
		Marking	0.0000017	Carbon Black	1333-86-4	8.00	0.0000008	0.000001
				Poly[(O-Cresyl Glycidyl Ether)-Co-Formaldehyde]	29690-82-2	61.00	0.0000007	
				Silica Gel	7631-86-9	30.50	0.0000004	
		Side Terminal	0.000082	Titanium Dioxide	13463-67-7	8.50	0.0000001	0.000056
				Bisphenol A Diglycidyl Ethe	25068-38-6	45.00	0.00003	
				Silver	7440-22-4	45.00	0.00003	
		Middle Terminal	0.00012	Carbon Black	1333-86-4	10.00	0.00001	0.000084
				Nickel	7440-02-0	100.00	0.00008	
		Outer Terminal	0.00009	Tin	7440-31-5	100.00	0.00006	0.000059
20	Resistor 2.2K OHM 1% 1/10W 0 2X	Ceramic Substrate	0.003271	Aluminum Oxide	1344-28-1	96.00	0.00214	0.002226
				Silicon Dioxide	14808-60-7	3.00	0.00007	
				Magnesium Oxide	1309-48-4	1.00	0.00002	
		Inner termination - top side	0.0001862	Silver	7440-22-4	70.00	0.00009	0.000127
				Palladium	9004-57-3	0.40	0.000001	
				Ethyl Cellulose	9004-57-3	8.00	0.00001	
				Butyl Carbitol	112-34-5	21.60	0.00003	
			0.000103	Silver	7440-22-4	61.00	0.00004	0.000070

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		Inner termination - bottom side		Butyl Digol	112-34-5	22.00	0.00002	0.000035
				Terpineol	8000-41-7	17.00	0.00001	
		Resistive element	0.0000514	Silver	7440-22-4	25.00	0.00001	
				Palladium	9004-57-3	5.00	0.000002	
				Ruthenium Oxide	12036-10-1	35.00	0.00001	
				Lead	7439-92-1	11.66	0.000004	
				Boron	7440-42-8	11.67	0.000004	
				Silica	10279-57-9	11.67	0.000004	
		Pre-coat	0.0000396	Lead Bisilicate	65997-18-4	75.00	0.00002	
				Terpineol	8000-41-7	25.00	0.00001	
		Over-coat	0.0000396	Polydimethylsiloxane	9016-00-6	100.00	0.00003	
		Marking	0.000008	Bisphenol A Diglycidyl Ether Homopolymer	25085-99-8	50.00	0.0000027	0.000005
				Barium Sulfate	7727-43-7	15.00	0.0000008	
				Titanium Dioxide	13463-67-7	30.00	0.0000016	
				Diethylene Glycol Monoethyl Ether Acetate	112-15-2	5.00	0.0000003	
		Middle Termination	0.000099	Nickel	7440-02-0	100.00	0.00007	0.000067
		Side termination	0.000004	Nickel	7440-02-0	80.00	0.000002	0.000003
				Chromium	7440-47-3	20.00	0.000001	
		Outer termination	0.000004	Tin	7440-31-5	100.00	0.000003	0.000003
21	Resistor 0 OHM Jumper 0603	Substrate	0.0018	Aluminum Oxide	1344-28-1	96.00	0.001202	0.001252
				Crystalline Silica, Quartz	14808-60-7	3.00	0.000038	
				Magnesium Oxide	1309-48-4	0.80	0.000010	
				Others, not to Declare	Proprietary	0.20	0.000003	
		Inner Electrode (Top)	0.00005	Silver	7440-22-4	91.50	0.000031	0.000033
				Palladium	7440-05-3	2.50	0.000001	
				Lead Monoxide	1317-36-8	2.00	0.000001	
				Boric Anhydride	1303-86-2	1.00	0.0000003	

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22				Crystalline Silica, Quartz	14808-60-7	2.00	0.000001	
				Others, not to Declare	Propietary	1.00	0.0000003	
		Inner Electrode (Bottom)	0.000034	Silver	7440-22-4	92.00	0.000021	0.000023
				Lead Monoxide	1317-36-8	3.00	0.000001	
				Boric Anhydride	1303-86-2	2.00	0.0000005	
				Crystalline Silica, Quartz	14808-60-7	2.00	0.0000005	
				Others, not to Declare	Propietary	1.00	0.0000002	
		Inner Electrode (Side)	0.0000008	Nickel	7440-02-0	50.00	0.0000003	0.000001
				Chromium	7440-47-3	50.00	0.0000003	
		Resistive film	0.000016	Silver	7440-22-4	92.00	0.0000100	0.000011
				Lead Monoxide	1317-36-8	3.00	0.0000003	
				Boric Anhydride	1303-86-2	2.00	0.0000002	
				Crystalline Silica, Quartz	14808-60-7	2.00	0.0000002	
				Others, not to Declare	Propietary	1.00	0.0000001	
		Inner Protective Coat	0.000013	Lead Monoxide	1317-36-8	49.00	0.0000043	0.000009
				Boric Anhydride	1303-86-2	19.50	0.0000017	
				Crystalline Silica, Quartz	14808-60-7	29.50	0.0000026	
				Others, not to Declare	Propietary	2.00	0.0000002	
		Outer Protective Coat	0.000034	Epoxy Resin	129915-35-1	59.00	0.00001	0.000023
				Crystalline Silica, Quartz	14808-60-7	7.00	0.0000016	
				Copper(II) Oxide	1317-38-0	8.80	0.0000020	
				Chromium(III) Oxide	1308-38-9	18.00	0.0000042	
				Manganese(IV) Oxide	1313-13-9	3.00	0.0000007	
				Others, not to Declare	Propietary	4.20	0.0000010	
		Marking	0.0000078	Epoxy Resin	129915-35-1	67.00	0.0000036	0.000005
				Crystalline Silica, Quartz	14808-60-7	10.00	0.0000005	
				Titanium(IV) Oxide	13463-67-7	20.00	0.0000011	
				Others, not to Declare	Propietary	3.00	0.0000002	
		Plating	0.000078	Nickel	7440-02-0	100.00	0.000053	0.000053
		Solder Plating	0.000068	Tin	7440-31-5	100.00	0.000046	0.000046
			0.00175	Aluminum Oxide	1344-28-1	96.00	0.001144	0.001191

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	Resistor 10K OHM 0.1% 1/16W	Ceramic Substrate		Silicon Oxide	7631-86-9	3.00	0.000036	0.000030
				Magnesium Oxide	1309-48-4	1.00	0.000012	
		Inner termination layer	0.000044	Silver	7440-22-4	90.00	0.000027	
				Terpineol	8000-41-7	10.00	0.000003	
		Resistive element	0.000001	Nickel	7440-02-0	55.00	0.000004	0.000008
				Chromium	7740-47-3	45.00	0.000004	
		Over-coat	0.000035	2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	45.00	0.000011	0.000024
				Carbon Black	1333-86-4	3.00	0.000001	
				Silicon Dioxide	60676-86-0	25.00	0.000006	
				Talc	14807-96-6	15.00	0.000004	
				Diethylene Glycol Monobutyl Ether	112-34-5	12.00	0.000003	
		Marking	0.000001	Ethyl Cellulose	9004-57-3	80.00	0.000001	0.000007
				Pigment	13463-67-7	20.00	0.0000014	
		Side Termination layer	0.0000001	Nickel	7440-02-0	55.00	0.00000004	0.0000001
				Chromium	7440-47-3	45.00	0.00000003	
		Middle termination layer	0.0000005	Nickel	7440-02-0	100.00	0.0000034	0.000003
		Outer Termination layer	0.0000009	Tin	7440-31-5	100.00	0.000001	0.000006
23	Resistor SMD 2.26K OHM	Inner Electrode	0.0002	Nickel	7440-02-0	48.700	0.00008	0.0002
				Copper	7440-50-8	49.390	0.00008	
				Tin	7440-31-5	1.910	0.000003	
		Protective Film	0.0009	Silicon Dioxide	7631-86-9	66.000	0.00040	0.001
				Misc. not to Declare	Propietary	34.000	0.00020	
		External Electrode	0.0002	Tin	7440-31-5	100.000	0.00010	0.0001
		Ceramic	0.0036	Aluminum Oxide	1344-28-1	99.500	0.00244	0.002

MATERIAL DECLARATION SHEET



				Silicon Dioxide	14808-60-7	0.300	0.00001	
				Magnesium Oxide	1309-48-4	0.200	0.000005	
		Resistive element	0.000001	Nickel	7440-02-0	50.000	0.0000002	0.0000004
		Marking	0.00002	Chromium	7440-47-3	50.000	0.0000002	0.0000004
24	Resistor 1.2M OHM 0.1% 1/8 8X	Inner Electrode	0.0019	Silicon Dioxide	7631-86-9	100.000	0.00001	0.00001
				Nickel	7440-02-0	48.700	0.00062	0.0013
				Copper	7440-50-8	49.390	0.00063	
		Protective Film	0.0070	Tin	7440-31-5	1.910	0.00002	
				Silicon Dioxide	7631-86-9	66.000	0.00316	0.005
				Misc. not to Declare	Propietary	34.000	0.00163	
		External Electrode	0.0012	Tin	7440-31-5	100.000	0.00082	0.0008
		Ceramic	0.03	Aluminum Oxide	1344-28-1	99.500	0.01956	0.020
				Silicon Dioxide	14808-60-7	0.300	0.00006	
				Magnesium Oxide	1309-48-4	0.200	0.00004	
		Resistive element	0.000005	Nickel	7440-02-0	50.000	0.000002	0.0000033
				Chromium	7440-47-3	50.000	0.000002	0.0000033
25	RES 47 OHM 1% 1/10W 0603	Ceramic Substrate	0.00164	Silicon Dioxide	7631-86-9	100.000	0.00008	0.00008
				Aluminum Oxide	1344-28-1	96.00	0.00107	0.001113
				Silicon Dioxide	14808-60-7	3.00	0.00003	
		Inner termination - top side	0.00009	Magnesium Oxide	1309-48-4	1.00	0.00001	
				Silver	7440-22-4	70.00	0.00004	0.000063
				Palladium	9004-57-3	0.40	0.0000003	
				Ethyl Cellulose	9004-57-3	8.00	0.00001	
		Inner termination - bottom side	0.00005	Butyl Carbitol	112-34-5	21.60	0.00001	0.000035
				Silver	7440-22-4	61.00	0.00002	
				Butyl Digol	112-34-5	22.00	0.00001	
		Resistive element	0.00003	Terpineol	8000-41-7	17.00	0.00001	0.000017
				Silver	7440-22-4	25.00	0.000004	
				Palladium	9004-57-3	5.00	0.000001	
				Ruthenium Oxide	12036-10-1	35.00	0.00001	

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26	Resistor SMD 3.3 OHM 5% 0.4W 0		0.00002	Lead	7439-92-1	11.66	0.000002	0.000013
				Boron	7440-42-8	11.67	0.000002	
				Silica	10279-57-9	11.67	0.000002	
		Pre-coat	0.00002	Lead Bisilicate	65997-18-4	75.00	0.00001	0.000013
				Terpineol	8000-41-7	25.00	0.000003	
		Over-coat	0.00002	Polydimethylsiloxane	9016-00-6	100.00	0.00001	0.000013
		Marking	0.000004	Bisphenol A Diglycidyl Ether Homopolymer	25085-99-8	50.00	0.0000014	0.000003
				Barium Sulfate	7727-43-7	15.00	0.0000004	
				Titanium Dioxide	13463-67-7	30.00	0.0000008	
				Diethylene Glycol Monoethyl Ether Acetate	112-15-2	5.00	0.0000001	
		Middle Termination	0.00005	Nickel	7440-02-0	100.00	0.00003	0.000034
		Side termination	0.000002	Nickel	7440-02-0	80.00	0.000001	0.000001
				Chromium	7440-47-3	20.00	0.0000003	
		Outer termination	0.000002	Tin	7440-31-5	100.00	0.000001	0.000001
26	Resistor SMD 3.3 OHM 5% 0.4W 0	Substrate	0.0041	Aluminum Oxide	1344-28-1	96.90	0.00272	0.002810
				Silicon Dioxide	7631-86-9	2.10	0.00006	
				Magnesium Oxide	1309-48-4	1.00	0.00003	
		Electrode 1	0.00004	Silver	7440-22-4	80.00	0.00002	0.000028
				Glass	65997-18-4	10.40	0.000003	
				Lead Oxide	1317-36-8	3.20	0.000001	
				Bismuth Oxide	1304-76-3	4.00	0.000001	
				Copper Oxide	1317-39-1	2.40	0.000001	
		Electrode 2	0.000076	Silver	7440-22-4	94.48	0.00005	0.000052
				Glass	65997-18-4	4.74	0.0000024	
				Lead Oxide	1317-36-8	0.53	0.0000003	
				Boron Oxide	1303-86-2	0.25	0.0000001	
		Under coat	0.000051	Glass	65997-18-4	29.90	0.00001	0.000035
				Lead Oxide	1317-36-8	59.65	0.00002	

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27	RES 0 OHM JUMPER 1/16W 0402			Boron Oxide	1303-86-2	8.21	0.000003	
				Chrome (III) Oxide	1308-38-9	2.24	0.000001	
		Over coat	0.000064	Epoxy Resin	Propietary	47.69	0.00002	0.000043
				Silicone Dioxide	7631-86-9	48.82	0.00002	
				Manganese Oxide	1313-13-9	1.01	0.0000004	
				Chrome (III) Oxide	1308-38-9	2.48	0.000001	
		Marking	0.000004	Epoxy Resin	Propietary	36.10	0.000001	0.000003
				Silicone Dioxide	7631-86-9	63.90	0.000002	
		Side electrode	0.00041	Silver	7440-22-4	83.22	0.00023	0.000276
				Glass	65997-18-4	6.40	0.00002	
				Epoxy Resin	Propietary	10.38	0.00003	
		Middle electrode	0.00015	Nickel	7440-02-0	100.00	0.00010	0.000102
		External electrode	0.00013	Tin	7440-31-5	100.00	0.00009	0.000085
27	RES 0 OHM JUMPER 1/16W 0402	Ceramic Substrate	0.0004	Aluminum Oxide	1344-28-1	96.00	0.00027	0.000281
				Silicon Dioxide	14808-60-7	3.00	0.00001	
				Magnesium Oxide	1309-48-4	1.00	0.000003	
		Inner termination - top side	0.00002	Silver	7440-22-4	70.00	0.00001	0.000016
				Palladium	9004-57-3	0.40	0.0000001	
				Ethyl Cellulose	9004-57-3	8.00	0.000001	
				Butyl Carbitol	112-34-5	21.60	0.000003	
		Inner termination - bottom side	0.00001	Silver	7440-22-4	61.00	0.00001	0.000009
				Butyl Digol	112-34-5	22.00	0.000002	
				Terpineol	8000-41-7	17.00	0.000002	
		Resistive element	0.00001	Silver	7440-22-4	25.00	0.000001	0.000004
				Palladium	9004-57-3	5.00	0.0000002	
				Ruthenium Oxide	12036-10-1	35.00	0.000002	
				Lead	7439-92-1	11.66	0.000001	
				Boron	7440-42-8	11.67	0.000001	
				Silica	10279-57-9	11.67	0.000001	
		Pre-coat	0.000005	Lead Bisilicate	65997-18-4	75.00	0.000003	0.000003

MATERIAL DECLARATION SHEET



				Terpineol	8000-41-7	25.00	0.000001	
		Over-coat	0.000006	Polydimethylsiloxane	9016-00-6	100.00	0.000004	0.000004
		Middle termination	0.00001	Nickel	7440-02-0	100.00	0.000009	0.000009
		Side termination	0.0000005	Nickel	7440-02-0	80.00	0.0000003	0.0000003
				Chromium	7440-47-3	20.00	0.0000001	
		Outer termination	0.00002	Tin	7440-31-5	100.00	0.000014	0.000014
28	THERMISTOR NTC 10KOHM 3380K 0603	Ceramic	0.004	Manganese Oxide	1317-35-7	50.00	0.0014	0.003
				Cobalt Oxide	1308-06-1	5.00	0.0001	
				Nickel Monoxide	1313-99-1	20.00	0.0005	
				Iron(III) Oxide	1309-37-1	15.00	0.0004	
				Misc	-	10.00	0.0003	
		Inner Electrode	0.000157	Palladium	7440-05-3	70.00	0.0001	0.0001
				Silver	7440-22-4	30.00	0.00003	
		Outer Electrode	0.0004284	Copper	7440-50-8	89.00	0.0003	0.0003
				Boron Oxide	1303-86-2	3.00	0.00001	
				Silicon Dioxide	7631-86-9	8.00	0.00002	
		Plating layer	0.0000332	Nickel	7440-02-0	100.00	0.00002	0.0000
		Plating layer	0.0000779	Tin	7440-31-5	100.00	0.0001	0.0001
29	XFMR FWD P- P DC/DC CONV 340UH SM	Header	0.4828	Antimony Oxide	1309-64-4	4.50	0.014788	0.328617
				Carbon Black	1333-86-4	0.50	0.001643	
				Aluminum Hydroxide.	21645-51-2	40.00	0.131447	
				Diallyl Phthalate Rsin	25035-78-3	25.00	0.082154	
				Glass Fiber	65997-17-3	30.00	0.098585	
		Terminal	0.0634	Iron	7439-89-6	0.05	0.000022	0.043158
				Tin	7440-31-5	6.05	0.002611	
				Copper	7440-50-8	93.45	0.040331	
				Zinc	7440-66-6	0.10	0.000043	
				Phosphorus	7723-14-0	0.35	0.000151	
		Terminal Plating	0.0033	Nickel	7440-02-0	34.00	0.000773	0.002274
				Tin	7440-31-5	66.00	0.001501	

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BOURNS®

		Ceramic	0.1198	Zinc Oxide	1314-13-2	13.00	0.010597	0.081517
				Manganese Oxide	1317-35-7	17.00	0.013858	
				Iron Oxide	1317-61-9	70.00	0.057062	
		Wire	0.0297	Tin	7440-31-5	1.30	0.000263	0.020219
				Copper	7440-50-8	98.70	0.019956	
		Wire Coating	0.0029	Carbon Black	1333-86-4	0.09	0.000002	0.001951
				Propane, 1,1,1,2,2,3,3-Heptafluoro-3-[(Trifluoroethenyl)oxy]-, Polymer with Tetrafluoroethene	26655-00-5	99.91	0.001949	
		Wire	0.0162	Copper	7440-50-8	100.00	0.011005	0.011005
		Wire Coating	0.0018	Polyurethane	9009-54-5	100.00	0.001223	0.001223
		Solder	0.0346	Silver	7440-22-4	4.00	0.000943	0.023578
				Tin	7440-31-5	96.00	0.022635	
		Ink	0.0003	Carbon Black	1333-86-4	9.54	0.000023	0.000236
				Poly(Oxy-1,4-Butanediyl), Alpha-Hydro- Omega -Hydroxy-, Polymer with 5-Isocyanato-1-(Isocyanatomethyl)-1,3,3-Trimethylcyclohexane, Hydroxyethyl Acrylate-Blocked	82339-25-1	90.46	0.000214	
		Coating	0.0012	Paracyclophane	1633-22-3	99.00	0.000819	0.000828
				Trade Secret	N/A	1.00	0.000008	
		Wire	0.0138	Copper	7440-50-8	100.00	0.009416	0.009416
		Wire Coating	0.0041	Polyurethane	9009-54-5	100.00	0.002812	0.002812
		Wire	0.0123	Tin	7440-31-5	2.00	0.000167	0.008360
				Copper	7440-50-8	98.00	0.008193	
		Wire Isolation Coating	0.0126	C.I. Pigment Blue 28	1345-16-0	0.18	0.000015	0.008604
				Titanium Oxide	13463-67-7	0.18	0.000015	

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				Propane, 1,1,1,2,2,3,3-Heptafluoro-3-[(Trifluoroethenyl)oxy]-, Polymer with Tetrafluoroethene	26655-00-5	99.58	0.008567	
				C.I. Pigment Green 50	68186-85-6	0.06	0.000005	
		Wire Isolation	0.0076	Tin	7440-31-5	2.05	0.000107	0.005206
				Copper	7440-50-8	97.95	0.005100	
		Adhesives, sealants	0.0198	Limestone	1317-65-3	25.00	0.003371	0.013483
				Titanium Oxide	13463-67-7	1.00	0.000135	
				Talc	14807-96-6	14.00	0.001888	
				Crystalline Silica	14808-60-7	10.00	0.001348	
				1,6-Bis(2,3-Epoxypropoxy) Hexane	16096-31-4	5.00	0.000674	
				Bisphenol A Diglycidyl Ether Resin	25068-38-6	45.00	0.006068	
30	IC REG BUCK 5V 300MA 9VQFN	Lead Frame	0.0024	Copper	7440-50-8	97.44	0.00159	0.001634
				Iron	7439-89-6	2.35	0.00004	
				Phosphorus	7723-14-0	0.08	0.000001	
				Zinc	7440-66-6	0.125	0.000002	
		Lead Frame Plating	0.00049	Tin	7440-31-5	100.00	0.00033	0.000334
		Mold Compound	0.00364	Silicon Dioxide	60676-86-0	91.00	0.00225	0.002478
				Carbon Black	1333-86-4	0.50	0.00001	
				Epoxy	85954-11-6	8.50	0.00021	
		Semiconductor	0.00200	Silicon	7440-21-3	100.00	0.00136	0.001359
		Solder Bump	0.00010	Copper	7440-50-8	88.12	0.00006	0.000069
				Tin	7440-31-5	11.28	0.00001	
				Silver	7440-22-4	0.60	0.0000004	
31	IC XFRMR DRV R NCH	Bond Wire	0.00009	Gold	7440-57-5	100.00	0.0001	0.000059
		Die Attach Adhesive	0.00016	Silver	7440-22-4	80.00	0.0001	0.000108
				Epoxy	85954-11-6	20.00	0.00002	

MATERIAL DECLARATION SHEET



32	350MA SOT23-5	Lead Frame	0.0058	Copper	7440-50-8	97.44	0.0038	0.003948
				Iron	7439-89-6	2.35	0.0001	
				Phosphorus	7723-14-0	0.08	0.000003	
				Zinc	7440-66-6	0.13	0.000005	
		Lead Frame Plating	0.0000004	Nickel	7440-02-0	95.24	0.0000003	0.0000003
				Gold	7440-57-5	0.75	0.00000002	
				Palladium	7440-05-3	4.01	0.00000001	
		Mold Compound	0.0088	Silicon Dioxide	60676-86-0	86.00	0.0051	0.005961
				Carbon Black	1333-86-4	0.50	0.00003	
				Epoxy	85954-11-6	13.50	0.0008	
32	IC REG LINEAR 3.3V 200MA SOT23	Semiconductor	0.00048	Silicon	7440-21-3	100.00	0.0003	0.000329
		Bond Wire	0.0000298	Gold	7440-57-5	100.00	0.00002	0.000000002
		Die Attach Adhesive	0.00009	Silver	7440-22-4	75.00	0.00005	0.000000006
				Epoxy	85954-11-6	25.00	0.00002	
		Lead Frame	0.0118	Copper	7440-50-8	97.45	0.01	0.0000008
				Iron	7439-89-6	2.35	0.0002	
				Phosphorus	7723-14-0	0.08	0.00001	
				Zinc	7440-66-6	0.12	0.00001	
		Lead Frame Plating	0.000163	Nickel	7440-02-0	95.12	0.0001	0.000000011
				Gold	7440-57-5	0.78	0.000001	
				Palladium	7440-05-3	4.10	0.000005	
		Mold Compound	0.0064	Silicon Dioxide	60676-86-0	87.00	0.00377	0.0000004
				Carbon Black	1333-86-4	0.10	0.000004	
				Epoxy	85954-11-6	12.90	0.00056	
		Semiconductor	0.0003	Silicon	7440-21-3	100.00	0.0002	0.00000002
33	Analog Front End IC 24-BIT 2CH 32-Ksps	Bond Wire	0.000062	Copper	7440-50-8	97.533766	0.00004	0.000042
				Proprietary Materials	Trade Secret	0.01135	0.000000005	
				Gold	7440-57-5	0.051887	0.00000002	
				Palladium	7440-05-3	2.399754	0.0000010	
				Silver	7440-22-4	0.003243	0.000000001	

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34	Microcontroller IC MCU 16BIT 32K	Die Attach Adhesive	0.00068	Silver	7440-22-4	80.00	0.00037	0.000466
				Epoxy	85954-11-6	20.00	0.00009	
		Lead Frame	0.0286	Copper	7440-50-8	97.59	0.01900	0.019467
				Iron	7439-89-6	2.30	0.00045	
				Phosphorus	7723-14-0	0.02	0.000003	
				Zinc	7440-66-6	0.10	0.00002	
		Lead Frame Plating	0.0001	Nickel	7440-02-0	95.12	0.00006	0.000068
				Gold	7440-57-5	0.78	0.000001	
				Palladium	7440-05-3	4.10	0.000003	
		Mold Compound	0.0455	Silicon Dioxide	60676-86-0	86.00	0.02665	0.0310
				Carbon Black	1333-86-4	0.30	0.00009	
				Epoxy	85954-11-6	13.70	0.00425	
		Semiconductor	0.0022	Silicon	7440-21-3	100.00	0.00153	0.0015
35		Mold Compound	0.23	Silica, Vitreous	60676-86-0	86.910	0.14	0.16
				Epoxy Resin	Trade Secret	7.670	0.01	
				Phenolic Resin	Trade Secret	5.110	0.01	
				Carbon Black	1333-86-4	0.310	0.0005	
		Die Attach	0.002	Silver	7440-22-4	75.000	0.0011	0.001
				Modified Epoxy Resin	13561-08-5	14.000	0.0002	
				Diglycidylether of Bisphenol-F	54208-63-8	7.500	0.0001	
				Modified Amine	827-43-0	3.500	0.0001	
		Lead Frame	0.030	Copper	7440-50-8	95.540	0.02	0.02
				Iron	7439-89-6	2.350	0.0005	
				Silver	7440-22-4	1.900	0.0004	
				Zinc	7440-66-6	0.130	0.00003	
				Phosphorous	7723-14-0	0.080	0.00002	
		Chip (Die)	0.022	Doped Silicon	7440-21-3	100.000	0.0146	0.01
		Bond Wire	0.001	Doped Gold	7440-57-5	100.000	0.0004	0.0004
		Plating	0.004	Tin	7440-31-5	100.000	0.0024	0.002
		Bond Wire	0.00048	Iron	7439-89-6	0.0002	0.000000001	0.000325

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	IC TRANSCEIVER HALF 1/1 16SOIC			Calcium	7440-70-2	0.0002	0.000000001	
				Yttriu	7440-65-5	0.00063	0.000000002	
				Gold	7440-57-5	99.998	0.0003	
				Silver	7440-22-4	0.00105	0.000000003	
		Die Attach Adhesive	0.00048	Silver	7440-22-4	75.00	0.0002	0.0003278
				Epoxy	85954-11-6	25.00	0.0001	
		Die Attach Adhesive 2	0.00018	Silver	7440-22-4	75.00	0.0001	0.000124
				Epoxy	85954-11-6	25.00	0.00003	
		Die Attach Adhesive 3	0.00018	Silver	7440-22-4	75.00	0.0001	0.000124
				Epoxy	85954-11-6	25.00	0.00003	
		Lead Frame	0.41522	Copper	7440-50-8	97.05	0.2743	0.282629
				Iron	7439-89-6	2.60	0.0073	
				Phosphorus	7723-14-0	0.15	0.0004	
				Zinc	7440-66-6	0.20	0.0006	
		Lead Frame Plating	0.00144	Nickel	7440-02-0	95.12	0.0009	0.000983
				Gold	7440-57-5	0.78	0.00001	
				Palladium	7440-05-3	4.10	0.00004	
		Semiconductor	0.00251	Silicon	7440-21-3	100.00	0.0017	0.001706
		Semiconductor 2	0.00095	Silicon	7440-21-3	100.00	0.0006	0.000644
		Semiconductor 3	0.00095	Silicon	7440-21-3	100.00	0.0006	0.000644
		Mold Compound	0.3384	Silicon Dioxide	60676-86-0	89.50	0.2061	0.23
				Chlorine	7782-50-5	0.002	0.000005	
				Carbon Black	1333-86-4	0.50	0.0012	
				Epoxy	85954-11-6	10.00	0.0230	
36	IC EEPROM 2KBIT I2C SOT23-5	Mold Compound	0.001277	Silica	60676-86-0	86.91	0.00076	0.000869
				Epoxy Resin	Trade Secret	7.67	0.00007	
				Phenolic Resin	Trade Secret	5.11	0.00004	
				Carbon Black	1333-86-4	0.31	0.000003	

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		Lead Frame	0.00168	Copper	7440-50-8	95.54	0.00109	0.001144
				Iron	7439-89-6	2.35	0.00003	
				Silver	7440-22-4	1.90	0.00002	
				Zinc	7440-66-6	0.13	0.000001	
				Phosphorus	7723-14-0	0.08	0.000001	
		Die Attach	0.00012	Silver	7440-22-4	75.00	0.00006	0.000082
				2,6-Diglycidylphenyl Glycidyl Ether	13561-08-5	14.00	0.00001	
				Bisphenol A Epoxy Resin	54208-63-8	7.50	0.00001	
				4-Methyl-2-Phenylimidazole	827-43-0	3.50	0.000003	
		Chip (Die)	0.0012	Silicon	7440-21-3	100.00	0.00082	0.000817
		Wire Bond	0.00003	Copper	7440-50-8	98.25	0.00002	0.000020
				Palladium	5/3/7440	1.75	0.0000004	
		Plating (external leads)	0.0002	Tin	7440-31-5	100.00	0.00014	0.000136
37	Crystal 16.0000MHZ 10PF SMD	Package - Ceramics	0.011648	Aluminum Oxide	1344-28-1	90.00	0.0071	0.008
				Silicon Oxide	7631-86-9	6.00	0.0005	
				Chromium Oxide	1308-38-9	2.00	0.0002	
				Molybdenum	7439-98-7	2.00	0.0002	
		Package - Kovar	0.0003	Iron	7439-89-6	53.00	0.0001	0.0002
				Nickel	7440-02-0	29.00	0.0001	
				Cobalt	7440-48-4	18.00	0.00003	
		Package - Plate	0.0004	Gold	7440-57-5	19.00	0.0000	0.0003
				Nickel	7440-02-0	81.00	0.0002	
		Package- Metallizing	0.0001	Tungsten	7440-33-7	100.00	0.0001	0.0001
		Package- Solder	0.0004	Silver	7440-22-4	71.00	0.0002	0.0003
				Copper	7440-50-8	29.00	0.0001	
		Lid - Kovar	0.00319	Iron	7439-89-6	53.24	0.0012	0.002
				Nickel	7440-02-0	29.00	0.0006	
				Cobalt	7440-48-4	17.00	0.0004	
				Manganese	7439-96-5	0.50	0.000011	

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				Silicon	7440-21-3	0.20	0.000004	
				Carbon	7440-44-0	0.06	0.000001	
		Lid - Plating	0.00029	Nickel	7440-02-0	100.00	0.0002	0.0002
		Quartz	0.00063	Silicon dioxide	14808-60-7	100.00	0.0004	0.0004
		Electrode Cr target	0.000002	Chromium	7440-47-3	100.00	0.000001	0.000001
		Electrode Ag target	0.000037	Silver	7440-22-4	100.00	0.000025	0.000025
		Conductive Adhesive	0.00003	Silver	7440-22-4	77.08	0.000018	0.00002
				Silica	7631-86-9	8.33	0.000002	
				Silicone Resin	Propietary	14.59	0.000003	
38	PCB Multilayer NEW	Copper Alloy	5.4500	Copper	7440-50-8	100.000	3.710	3.710
		Conformal Coating	0.0039	Epoxy Resin	26265-08	45.000	0.001	0.003
				Glass Fiber	26265-08-7	45.000	0.001	
				Silicon Dioxide	65997-17-3	10.000	0.0003	
39	Solder Preform x4	Tin-Silver	0.104	Tin	7440-31-5	96.500	0.068	0.071
				Silver	7440-22-4	3.500	0.002	
40	Adhesive	Silicone	0.8	Limestone	1317-65-3	90.000	0.490	0.545
				Trimethoxyvinylsilane	2768-02-7	5.000	0.027	
				3-(Trimethoxysilyl) Propylamine	13822-56-5	4.000	0.022	
				Quartz (SiO2)	14808-60-7	1.000	0.005	
41	Conformal coating	Coating Silica	0.7000	Dichlorodimethyl	68611-44-9	97.000	0.462	0.476
				Aminopropyltriethoxysilane	919-30-2	3.000	0.014	
42	Screw 2X	Stainless Steel 304	0.513	Carbon	7440-44-0	0.080	0.0003	0.35
				Manganese	7439-96-5	2.000	0.0070	
				Phosphorus	7723-14-0	0.045	0.0002	
				Sulfur	7704-34-9	0.030	0.0001	
				Silicon	7440-21-3	0.750	0.003	
				Chromium	7440-47-3	18.000	0.063	
				Nickel	7440-02-0	8.000	0.028	

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				Iron	7439-89-6	71.095	0.248	
43	Top Housing	Resin	9.918	Polyphenylene Sulfide	26125-40-6	59.500	4.017	6.7509
				Glass Fiber	65997-17-3	40.000	2.700	
				Carbon Black	1333-86-4	0.500	0.034	
44	Bottom Housing	Resin	9.358	Polyphenylene Sulfide	26125-40-6	59.500	3.790	6.3697
				Glass Fiber	65997-17-3	40.000	2.548	
				Carbon Black	1333-86-4	0.500	0.032	
45	Shunt	Manganin	9.891	Copper	7440-50-8	86.000	5.790	6.73
				Manganese	7439-96-5	12.000	0.808	
				Nickel	7440-02-0	2.000	0.135	
		Plating	0.005	Nickel	7440-02-0	100.000	0.003	0.003
		Copper Alloy	98.655	Copper	7440-50-8	99.950	67.118	67.15
				Oxygen	7782-44-7	0.050	0.034	
46	Silicone	SS-5600 Part A	0.8	Dimethyl Silicone Resin	63148-62-9	44.03	0.231	0.52411
				3-Aminopropyltrimethoxysilane	13822-56-5	5.25	0.028	
				Hexamethyldisiloxane	107-46-0	2.40	0.013	
				Quartz	14808-60-7	35.03	0.184	
				Silicon Dioxide	7631-86-9	13.29	0.070	
47	Silicone	SS-5600 Part B	0.8	Dimethyl Silicone Resin	63148-62-9	47.45	0.249	0.52411
				Quartz	14808-60-7	35.56	0.186	
				Silicon Dioxide	7631-86-9	16.93	0.089	
				Dibutyltin Dilaurate	77-58-7	0.06	0.0003	
48	Solder Paste	Solder Paste, 96.5 Sn/3.5Ag	0.003	Tin	7440-31-5	86	0.0018	0.002
				Silver	7440-22-4	5	0.0001	
				Rosin	65997-06-0	5	0.0001	
				2-ethylhexane-1,3-diol	94-96-2	3	0.0001	
				Misc, not to declare	--	1	0.00002	
49	Solder	Lead Free Solder	0.02	Tin	7440-31-5	88	0.0120	0.014
				Silver	7440-22-4	7	0.0010	
				Copper	7440-50-8	5	0.0007	

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Total Weight	146.91
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This Document was updated on: **09/11/2025**

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