Layer	Material	Density (g/cm**3)	X0 (cm)	Coverage (fraction)	Number parts	Length (cm)	width (cm)	Thickness (microns)	Mass (gram)	Area (cm**2)	Hybrid area (cm**2)	Ladder Area (cm**2)	Hybrid %X0	Ladder %X0
Traces 1	Gold	19.3000	0.3350	0.3500	1.0000	1.9000	1.7500	8	0.0180	3.3250	8.7150	25.26	0.0319	0.0110
Traces 2	Gold	19.3000	0.3350	0.3000	1.0000	1.8000	1.7500	8	0.0146	3.1500	8.7150	25.26	0.0259	0.0089
Solder Pads	Gold	19.3000	0.3350	0.2000	1.0000	1.8000	1.7500	8	0.0097	3.1500	8.7150	25.26	0.0173	0.0060
Vias	Gold	19.3000	0.3350	1.0000	290.0000	0.0125	0.0125	50	0.0044	0.0002	8.7150	25.26	0.0078	0.0027
SUBTOTAL									0.0467				0.0828	0.0286
Ground	Silver	10.5000	0.8540	0.9000	1.0000	2.0000	1.7500	10	0.0331	3.5000	8.7150	25.26	0.0423	0.0146
Power / Ground	Silver	10.5000	0.8540	0.9000	1.0000	3.1000	1.7500	10	0.0513	5.4250	8.7150	25.26	0.0656	0.0226
Shield	Silver	10.5000	0.8540	1.0000	1.0000	3.1000	1.7500	10	0.0570	5.4250	8.7150	25.26	0.0729	0.0251
Vias	Silver	10.5000	0.8540	1.0000	41.0000	0.0125	0.0125	50	0.0003	0.0002	8.7150	25.26	0.0004	0.0001
Finger Metal	Silver	10.5000	0.8540	1.0000	2.0000	1.2000	0.1000	10	0.0025	0.1200	8.7150	25.26	0.0032	0.0011
SUBTOTAL									0.1442				0.1845	0.0636
Solder	Lead	11.3000	0.5660	0.3000	42.0000	0.0750	0.0370	200	0.0079	0.0028	8.7150	25.26	0.0142	0.0049
Solder	Tin	7.3000	1.2050	0.7000	42.0000	0.0750	0.0370	200	0.0119	0.0028	8.7150	25.26	0.0155	0.0054
	Aluminum	1.8400	8.9000		1.0000				0.0000	0.0000	8.7150	25.26	0.0000	0.0000
Tantalum Caps	Tantalum	5.0000	0.4000	1.0000	2.0000	0.4000	0.1000	200	0.0080	0.0400	8.7150	25.26	0.0459	0.0158
Chips	Silicon	2.3300	9.3600	1.0000	2.0000	1.0000	0.6000	350	0.0979	0.6000	8.7150	25.26	0.0515	0.0178
0402 Resistors	Alumina	3.7500	7.2000	1.0000	6.0000	0.1000	0.0500	300	0.0034	0.0050	8.7150	25.26	0.0014	0.0005
0805 Caps	Alumina	3.7500	7.2000	0.8000	4.0000	0.2000	0.1250	1000	0.0300	0.0250	8.7150	25.26	0.0127	0.0044
0805 Caps	Iron	7.0000	2.0000	0.2000	4.0000	0.1000	0.1250	1000	0.0070	0.0125	8.7150	25.26	0.0057	0.0020
Silver Epoxy	Silver	10.5000	0.8540	0.2500	2.0000	1.0000	0.8000	50	0.0210	0.8000	8.7150	25.26	0.0269	0.0093
Finger substrate	Alumina	3.7500	7.2000	1.0000	2.0000	1.2000	0.1000	375	0.0338	0.1200	8.7150	25.26	0.0143	0.0049
SUBTOTAL									0.2208				0.1882	0.0649
Dielectric 1	Glass	2.6000	10.0000	1.0000	1.0000	3.2000	1.7500	50	0.0728	5.6000	8.7150	25.26	0.0321	0.0111
Dielectric 2	Glass	2.6000	10.0000	1.0000	1.0000	2.1000	1.7500	50	0.0478	3.6750	8.7150	25.26	0.0211	0.0073
Dielectric 3	Glass	2.6000	10.0000	1.0000	1.0000	2.0000	1.7500	100	0.0910	3.5000	8.7150	25.26	0.0402	0.0139
Dielectric 4	Glass	2.6000	10.0000	0.9000	1.0000	1.9000	1.7500	50	0.0389	3.3250	8.7150	25.26	0.0172	0.0059
Dielectric 5	Glass	2.6000	10.0000	0.9000	1.0000	1.6000	1.7500	50	0.0328	2.8000	8.7150	25.26	0.0145	0.0050
Finger Dielectric	Glass	2.6000	10.0000	2.0000	2.0000	1.2000	0.1000	50	0.0062	0.1200	8.7150	25.26	0.0028	0.0010
SUBTOTAL									0.2895				0.1278	0.0441
Substrate	BeO	2.85	14.4	1	1	4.98	1.75	500	1.2419	8.715	8.715	25.26	0.3472	0.1198
Total									1.9430				0.9305	0.3210
Ladder silicon	Silicon	2.3300	9.3600	1.0000	1.0000	14.0500	1.8000	300	1.7678	25.2900		25.26		0.3209