



Material Declaration
Statement of Materials, Construction

Product: XRP9710EY-F
Package: LGA|12x12mm

Component		Material			Material Weight %	
Name	Weight (mg)	Element/Compound	CAS No.	Weight (mg)	/Total Unit	/ Component
Die 1	5.39	Silicon	7740-21-3	5.39	0.49%	100.00%
Q1	0.42	Silicon	7740-21-3	0.42	0.04%	100.00%
Q2	0.86	Silicon	7740-21-3	0.86	0.08%	100.00%
Q3	0.42	Silicon	7740-21-3	0.42	0.04%	100.00%
Q4	0.86	Silicon	7740-21-3	0.86	0.08%	100.00%
Bond Wire	1.45	Au	7440-57-5	1.45	0.13%	100.00%
Capacitor_C6	1.60	Barium oxide & Titanium dioxide	1304-28-5 & 13463-67-7	1.07	0.10%	66.56%
		Copper	7440-50-8	0.17	0.02%	10.74%
		diboron trioxide and silicon dioxide	1303-86-2 & 7631-86-9	0.02	0.00%	1.19%
		Nickel Plating	7440-02-0	0.02	0.00%	1.13%
		Nickel Alloys	7440-02-0	0.28	0.03%	17.44%
		Tin Plating	7440-31-5	0.05	0.00%	2.94%
Capacitor_C4 ,C5	38.00	Barium oxide & Titanium dioxide	1304-28-5 & 13463-67-7	26.61	2.42%	70.02%
		Copper	7440-50-8	4.27	0.39%	11.23%
		diboron trioxide and silicon dioxide	1303-86-2 & 7631-86-9	0.47	0.04%	1.25%
		Nickel Plating	7440-02-0	0.19	0.02%	0.49%
		Nickel Alloys	7440-02-0	5.95	0.54%	15.65%
		Tin Plating	7440-31-5	0.52	0.05%	1.36%
Capacitor_C7,C8,C13	18.90	Barium oxide & Titanium dioxide	1304-28-5 & 13463-67-7	13.04	1.18%	69.00%
		Copper	7440-50-8	2.98	0.27%	15.76%
		diboron trioxide and silicon dioxide	1303-86-2 & 7631-86-9	0.33	0.03%	1.75%
		Nickel Plating	7440-02-0	0.13	0.01%	0.70%
		Nickel Alloys	7440-02-0	2.06	0.19%	10.87%
		Tin Plating	7440-31-5	0.36	0.03%	1.92%
Capacitor_C3 ,C10	10.24	BaTiO3	12047-27-7	6.60	0.60%	64.45%
		Other	-	0.14	0.01%	1.37%
		Ni	7440-02-0	1.56	0.14%	15.23%
		Cu	7440-50-8	1.72	0.16%	16.80%
		Ni	7440-02-0	0.08	0.01%	0.78%
		Sn	7440-31-5	0.14	0.01%	1.37%
		BaTiO3	12047-27-7	1.95	0.18%	52.00%
Capacitor_C1,C2,C9	3.75	Other	-	0.06	0.01%	1.60%
		Ni	7440-02-0	0.36	0.03%	9.60%
		Cu	7440-50-8	1.20	0.11%	32.00%
		Ni	7440-02-0	0.09	0.01%	2.40%
		Sn	7440-31-5	0.09	0.01%	2.40%
		BaTiO3	12047-27-7	1.95	0.18%	52.00%
Inductor_L1,L2	360.00	Iron Powder	7439-89-6	57.70	5.24%	16.03%
		Iron(Fe)	7439-89-6	161.93	14.70%	44.98%
		Copper(Cu)	7440-50-8	77.97	7.08%	21.66%
		Other	-	62.40	5.66%	17.33%
		Silica	60676-86-0	485.76	44.10%	85.70%
Mold compound	566.81	Epoxy resin	-	28.34	2.57%	5.00%
		Metal hydroxide	-	17.00	1.54%	3.00%
		Phenol resin	-	17.00	1.54%	3.00%
		Carbon Black	1333-86-4	1.70	0.15%	0.30%
		Phenol Novolac	9003-35-4	17.00	1.54%	3.00%
		Other	-	62.40	5.66%	17.33%



Material Declaration
Statement of Materials, Construction

Product: XRP9710EY-F
Package: LGA|12x12mm

Component	Weight (g)	Material	Weight (g)	Weight (%)	Percentage (%)
Laminate	74.88	Copper	7740-50-8	33.70	3.06%
		Continuous Filament Fiber Glass	65997-17-3	3.74	0.34%
		Bismaleimide/Triazine	105391-33-1 & 1156-51-0	14.98	1.36%
		Epoxy Resin	26265-08-7	11.23	1.02%
		Inorganic filler	13776-74-4& 7631-86-9	3.00	0.27%
		Morpholine derivative(solder resist)	-	5.99	0.54%
		Nickel	7440-02-0	1.50	0.14%
Die Attach	1.57	Gold	13967-50-5	0.75	0.07%
		Silver	7440-22-4	1.17	0.11%
		Di-ester resin	-	0.19	0.02%
		Polymeric material	-	0.05	0.00%
		Functionalized ester	-	0.12	0.01%
Solder Paste	16.46	Epoxy resin	-	0.05	0.00%
		Tin	7440-31-5	13.74	1.25%
		Antimony	7440-36-0	0.74	0.07%
		Dipropylene glycol methyl Ether	34590-94-8	1.23	0.11%
		Nonionic Surfactant	68439-49-6	0.49	0.04%
		Amine Surfactant	61790-85-0	0.25	0.02%
Total Unit Weight:		1101.59			

Component weight is based on homogenous material used to assemble the unit.
Composition derived from the material declaration from vendors.

RoHS Certificate of Compliance

This package is fully RoHS compliant. The table above shows that this package meets the following RoHS requirements for EACH PACKAGE COMPONENT.

- RoHS 2 (Recast) 2011/65/EU | Fully Compliant | No exemptions taken
- China RoHS | Fully Compliant
- RoHS-6 | Fully Compliant
- Non Use of PFOS & PFOA
- REACH | Fully Compliant
- Halogen-free | Green

EU RoHS Restricted Substance	Allowable Limit (at homogenous material level)
Cadmium & its compounds (Cd)	100 ppm (0.01 weight %)
Hexavalent Chromium & its compounds (Cr(VI))	1000 ppm (0.10 weight %)
Mercury & its compounds (HG)	1000 ppm (0.10 weight %)
Polybrominated biphenyls (PBB)	1000 ppm (0.10 weight %)
Polybrominated diphenyl ethers (PBDE)	1000 ppm (0.10 weight %)
Lead & its compounds (Pb)	1000 ppm (0.10 weight %)

Dodd-Frank Wall Street Reform and Consumer Protection Act, July 21, 2010

We comply with this conflict metal free policy that restricts the use of those conflict metals, mining from the Democratic Republic of Congo (DRC) and it's adjoining countries.

- Exar will not accept product which uses these conflict metals from these areas. We require our suppliers to enforce this policy and be able to identify and verify from their sources of minerals are conflict free. Suppliers are required to report if they or any supplier through their supply chain use any of these conflict metals that are derived from certain conflict minerals originating in the DRC or an adjoining country. Exar Corporation is not aware of any conflict metals to be used in any of their products.
- Flammability rating of UL 94-V0
- MSL Pb-Free: L2A @ 245°C