



**Material Declaration**  
Statement of Materials, Construction

Part Number: XR21B14111L16-D2-F  
Package: 16L QFN (3x3)

	Component		Material			Material Weight %	
	Name	Weight (mg)	Element/Compound	CAS No.	Weight (mg)	/Total Unit	/Component
1	Die	1.1558	Silicon	7631-86-9	1.155844	5.35	100.00
2	Die Attach	0.0747	Silver	7440-22-4	0.054513	0.25	73.00
			exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	7534-94-3	0.014935	0.07	20.00
			1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7	0.004854	0.02	6.50
			Acrylic acid, 2-[methyl[(1,1,2,2,3,3,3,4,4,4-nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 3-mercapto-1,2-propanediol, 2-me	1017237-78-3	0.000373	0.00	0.50
3	Leadframe	5.0381	Cu	7440-50-8	4.907787	22.73	97.41
			Fe	7439-89-6	0.118397	0.55	2.35
			P	7723-14-0	0.004156	0.02	0.08
			Zn	7440-66-6	0.006298	0.03	0.13
			Ag	7440-22-4	0.001511	0.01	0.03
4	Mold Compound	13.7784	Silica fused	60676-86-0	12.469460	57.75	90.50
			Epoxy Resin	-	0.647585	3.00	4.70
			Phenol Resin	-	0.647585	3.00	4.70
			Carbon black	1333-86-4	0.013778	0.06	0.10
5	Plating	1.1461	Sn	7440-31-5	1.146104	5.31	100.00
6	Wire	0.3977	Copper	7440-50-8	0.390767	1.81	99.99
			Palladium	7440-05-3	0.006960	0.03	0.01
Total Unit Weight:		21.5909					

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

China RoHS | Fully Compliant

RoHS-6 | Fully Compliant

Non Use of PFOS & PFOA

REACH | Fully Compliant

Halogen-free | Green

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: L1 @ 260°C

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 %)

Chew Mee Foo, QA Manager