

## **Material Declaration**

Statement of Materials, Construction

Product: ST16C2550CQ48-F Package: 48L TQFP (7x7)

	Component		Material			Material \	Weight %
	Name	Weight (mg)	Element/Compound	CAS No.	Weight (mg)	/Total Unit	/ Component
1	Die	2.6400	Silicon	7440-21-3	2.64000	1.55	100.00
2	Die Attach	0.5350	Silver	7440-22-4	0.39591	0.23	74.00
			Acrylic Resin	-	0.04815	0.03	9.00
			Polybutadiene derivative	-	0.02675	0.02	5.00
			Bitadiene copolymer	-	0.00803	0.00	1.50
			Acrylate	-	0.03210	0.02	6.00
			Epoxy Resin	-	0.01338	0.01	2.50
			Peroxide	-	0.00268	0.00	0.50
			Additive	-	0.00803	0.00	1.50
3	Leadframe	67.3770	Cu	7440-50-8	65.36917	38.34	97.02
			Fe	7439-89-6	1.54967	0.91	2.30
			Р	7723-14-0	0.02021	0.01	0.03
			Zn	7440-66-6	0.10107	0.06	0.15
			Ag	7440-22-4	0.33689	0.19	0.50
4	Mold Compound	98.0000	Epoxy Resin A	-	4.90000	2.87	5.00
			Epoxy, Cresol Novolac	29690-82-2	1.47000	0.86	1.50
			Phenol Resin	-	4.90000	2.87	5.00
			Carbon Black	1333-86-4	0.29400	0.17	0.30
			Silica fused	60676-86-0	81.24200	47.66	82.90
			Silica fused	76361-86-9	4.90000	2.87	5.00
			Silica, crystalline	14808-60-7	0.29400	0.17	0.30
5	Plating	1.5686	Sn	7440-31-5	1.56857	0.92	100.00
6	Wire	0.3578	Cu	7440-50-8	0.35775	0.60	99.99
			Other	-	0.00004	0.00	0.01
	Total Unit Weight:	170.4784		<u> </u>	<u> </u>	·	

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

Non Use of PFOS & PFOA

□ REACH | Fully Compliant

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: L3 @ 260°C

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Chiew Mee Foo, QA Manager