

## **Material Declaration**

Statement of Materials, Construction

Part Number: SP6644EU-L Package: 8L MSOP

	nt	Material			Material Weight %	
Name	Weight (mg)	Element/Compound	CAS No.	Weight (mg)	/Total Unit	/ Component
Die	1.4186	Silicon	-	1.4186	5.36	100.00
2 Die Attach	0.2150	Silver	7440-22-4	0.1612	0.61	75.00
		bisphenol-F-(epichlorhydrin)	9003-36-5	0.0086	0.03	4.00
		Fatty acids, C18-unsatd., dimers,polymers with epichlorohydrin	68475-94-5	0.0086	0.03	4.00
		gammaButyrolactone	96-48-0	0.0086	0.03	4.00
		Epoxy resin	-	0.0086	0.03	4.00
		Poly[oxy(methyl-1,2-ethanediyl)], a-(2-aminomethylethoxy)	9046-10-0	0.0086	0.03	4.00
		Copper oxide	1317-38-0	0.0086	0.03	4.00
		1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8	0.0021	0.01	1.00
3 Leadframe	10.0640	Cu	7440-50-8	9.5030	35.89	94.43
		Ni	7440-02-0	0.2964	1.12	2.94
		Si	7440-21-3	0.0642	0.24	0.64
		Mg	7439-95-4	0.0148	0.06	0.15
		Ag	7440-22-4	0.1857	0.70	1.84
4 Mold Compound	13.8260	Silica fused	60676-86-0	11.9871	45.27	86.70
		Epoxy resin	-	0.8296	3.13	6.00
		Epoxy, Cresol Novolac	29690-82-2	0.2765	1.04	2.00
		Phenol resin	-	0.6913	2.61	5.00
		Carbon Black	1333-86-4	0.0415	0.16	0.30
5 Plating	0.8518	Sn	7440-31-5	0.8517	3.22	99.99
		Others	-	0.0001	0.00	0.01
6 Wire	0.1045	Gold	7440-57-5	0.1045	0.39	99.99
		Others	-	0.0000	0.00	0.01
	Leadframe  Mold Compound  Plating	Leadframe       10.0640         Mold Compound       13.8260         Plating       0.8518         Wire       0.1045	bisphenol-F-(epichlorhydrin) Fatty acids, C18-unsatd., dimers,polymers with epichlorohydrin gammaButyrolactone Epoxy resin Poly[oxy(methyl-1,2-ethanediyl)], a-(2-aminomethylethyl)-w-(2-aminomethylethoxy) Copper oxide 1,4-Bis(2,3-epoxypropoxy)butane  Leadframe  10.0640  Cu Ni Si Mg Ag Mold Compound 13.8260 Silica fused Epoxy resin Epoxy resin Epoxy, Cresol Novolac Phenol resin Carbon Black  Plating 0.8518 Sn Others Wire 0.1045 Gold Others	bisphenol-F-(epichlorhydrin)   9003-36-5     Fatty acids, C18-unsatd., dimers,polymers with epichlorohydrin   gammaButyrolactone   96-48-0     Epoxy resin	bisphenol-F-(epichlorhydrin)   9003-36-5   0.0086     Fatty acids, C18-unsatd., dimers, polymers with epichlorohydrin   68475-94-5   0.0086     GammaButyrolactone   96-48-0   0.0086     Epoxy resin   -   0.0086     Poly[oxy(methyl-1,2-ethanediyl)], a-(2-aminomethylethyl)-w-(2-aminomethylethoxy)   0.0086     Copper oxide   1317-38-0   0.0086     1,4-Bis(2,3-epoxypropoxy)butane   2425-79-8   0.0021     Leadframe   10.0640   Cu   7440-50-8   9.5030     Ni   7440-02-0   0.2964     Si   7440-21-3   0.0642     Mg   7439-95-4   0.0148     Ag   7440-22-4   0.1857     Mold Compound   13.8260   Silica fused   60676-86-0   11.9871     Epoxy resin   -   0.8296     Epoxy, Cresol Novolac   29690-82-2   0.2765     Phenol resin   -   0.6913     Carbon Black   1333-86-4   0.0415     Plating   0.8518   Sn   7440-31-5   0.8517     Others   -   0.00001     Wire   0.1045   Gold   7440-57-5   0.1045     Others   -   0.00001	bisphenol-F-(epichlorhydrin)   9003-36-5   0.0086   0.03     Fatty acids, C18-unsatd., dimers, polymers with epichlorohydrin   68475-94-5   0.0086   0.03     gammaButyrolactone   96-48-0   0.0086   0.03     Epoxy resin   -   0.0086   0.03     Poly[oxy(methyl-1,2-ethanediyl)], a-(2-   0.0086   0.03     Poly[oxy(methyl-1,2-ethanediyl)], a-(2-   0.0086   0.03     Copper oxide   1317-38-0   0.0086   0.03     Copper oxide   1317-38-0   0.0086   0.03     1,4-Bis(2,3-epoxypropoxy)butane   2425-79-8   0.0021   0.01     Leadframe   10.0640   Cu   7440-50-8   9.5030   35.89     Ni   7440-02-0   0.2964   1.12     Si   7440-21-3   0.0642   0.24     Mg   7439-95-4   0.0148   0.06     Ag   7440-22-4   0.1857   0.70     Mold Compound   13.8260   Silica fused   60676-86-0   11.9871   45.27     Epoxy resin   -   0.8296   3.13     Epoxy, Cresol Novolac   29690-82-2   0.2765   1.04     Phenol resin   -   0.6913   2.61     Carbon Black   1333-86-4   0.0415   0.16     Plating   0.8518   Sn   7440-31-5   0.8517   3.22     Others   -   0.0001   0.00     Wire   0.1045   Gold   7440-57-5   0.1045   0.39     Others   -   0.0000   0.00

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

□ RoHS-6 | Fully Compliant

□ REACH | Fully Compliant

EU RoHS Restricted Substance
Allowable Limit
(at homogenous material level)

Cadmium & its compounds (Cd)
Hexavalent Chromium & its compounds (Cr(VI))
Mercury & its compounds (HG)
Polybrominated biphenyls (PBB)
Polybrominated diphenyl ethers (PBDE)
Lead & its compounds (Pb)

Allowable Limit
(at homogenous material level)
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: L1 @ 260°C

Cuf

Chiew Mee Foo, QA Manager