

## **Material Declaration**

Statement of Materials, Construction

Part Number: S7100PH-C4 Package: 484L HSGBA (23x23mm)

	Component		Material			Material Weight %	
	Name	Weight (g)	Element/Compound	CAS No.	Weight (g)	/Total Unit	/ Componen
Γ	Die	0.1502	Silicon	7440-21-3	0.1502	3.98	100.00
ı	Underfill	0.0170	Crystalline free silica	-	0.0116	0.31	68.00
			Liquid epoxy resin compound of bisphenol F type	9003-36-5	0.0039	0.10	23.00
			Aminocompound	-	0.0015	0.04	9.00
3	Ероху	0.0500	Treated Aluminum oxide	-	0.0438	1.16	87.5
			Others	-	0.0063	0.17	12.5
1	Heat Spreader	2.3620	Cu	7440-50-8	2.3485	62.22	99.4
			NI (Metal)	7440-02-0	0.0135	0.36	0.5
5	Solder ball	0.3983	Tin(Sn)	7440-31-5	0.3844	10.18	96.5
			Silver(Ag)	7440-22-4	0.0119	0.32	3.0
			Copper(Cu)	7440-50-8	0.0020	0.05	0.5
;	Substrate	0.6215	Copper Foil(Cu)	7440-50-8	0.2486	6.59	40.0
ı			Glass cloth	65997-17-3	0.1865	4.94	30.0
			Epoxy Resin including inorganic filler	-	0.1865	4.94	30.0
,  -	PSR Ink	0.0319	Solvent Naphtha(Petroleum),Heavy Arom	64742-94-5	0.0035	0.09	11.0
			Talc containing no asbestiform fibers	14807-96-6	0.0010	0.03	3.0
			Morpholine Derivative	-	0.0010	0.03	3.0
			Barium Sulfate	7727-43-7	0.0131	0.35	41.0
			Dipropylene Glycol Monomethyl Ether	34590-94-8	0.0054	0.14	17.0
			Epoxy resin	-	0.0045	0.12	14.0
			Dipropylene glycol	34590-94-8	0.0035	0.09	11.0
3	Build up	0.1195	N,N-Dimethylformamide	68-12-02	0.0010	0.03	0.8
			Cyclohexanone	108-94-1	0.0016	0.04	1.3
			Bisphenol A epoxy resin	25068-38-6	0.0104	0.28	8.7
			Silica	7631-86-9	0.0394	1.05	33.0
			Coal tar naphtha	64742-94-5	0.0024	0.06	2.0
			Toluene	108-88-3	0.0002	0.01	0.2
1			Others	-	0.0645	1.71	54.0
)	Bump	0.0239	Tin(Sn)	7440-31-5	0.0231	0.61	96.5
			Silver(Ag)	7440-22-4	0.0007	0.02	3.0
			Copper (Cu)	7440-50-8	0.0001	0.00	0.5

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

□ 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 (Ph)	1000 nnm (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

Chiew Mee Foo, QA Manager