



Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

Adobe Reader version 7.0.5 is required to complete this declaration.

IPC-1752-2 v1.02
1752-2

IPC Web Site for Information on IPC-1752 Standard
<http://www.ipc.org/IPC-175x>

Form Type *
Distribute

Declaration Class *
Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat

Supplier Information

Company Name * Cypress Semiconductor Corp	Company Unique ID Cypress	Unique ID Authority	Response Date * 2020-07-06	Response Document ID				
Contact Name * QA Customer Support	Title - Contact QA Customer Support	Phone - Contact * 6328497500	Email - Contact * qacs_team@cypress.com	Duplicate Contact -> Authorized Representative				
Authorized Representative * Jeff Gary Balleca	Title - Representative STAFF EHS Engr	Phone - Representative * 6328497500	Email - Representative * jgtb@cypress.com	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight	UOM	Unit Type
SOIC20_SZ20_300mils	SOIC20_SZ20_300mils	SOIC20_SZ20_300mils	2020-07-06		AMKOR Phil	543.9842	mg	Each
Alternate Recommendation				Alternate Item Comments	Package QTP No. 180412			

Manufacturing Process Information

Terminal Plating / Grid Array Material Matte Tin (Sn)	Terminal Base Alloy Other	J-STD-020 MSL Rating 3	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments

TEST REPORTS: MC (001-79655); DA (001-88687); PLATING (001-79877); BW (001-79682); LF (001-80073)

Save the fields in this form to a file

Export Data

Import fields from a file into this form

Import Data

Clear all of the fields on this form

Reset Form

Lock the fields on this form to prevent changes

Lock Supplier Fields

RoHS Material Composition Declaration

Declaration Type *

Detailed

RoHS Directive 2002/95/EC

RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2002/95/EC and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a "RoHS restricted substance") in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.

RoHS Declaration * 1 - Item(s) does not contain RoHS restricted substances per the definition above

Supplier Acceptance

Accepted

Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and checkboxes will appear below. Check all applicable exemptions.

- | | |
|--|---|
| <p>1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.</p> <p>2a. Mercury in straight fluorescent lamps for general purposes not exceeding 10 mg in halophosphate lamps</p> <p>2b. Mercury in straight fluorescent lamps for general purposes not exceeding 5 mg in triphosphate lamps with a normal lifetime</p> <p>2c. Mercury in straight fluorescent lamps for general purposes not exceeding 8 mg in triphosphate lamps with long lifetime</p> <p>3. Mercury in straight fluorescent lamps for special purposes.</p> <p>4. Mercury in other lamps not specifically mentioned in this list.</p> <p>5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.</p> <p>6a. Lead as an alloying element in steel containing up to 0.35% lead by weight.</p> <p>6b. Lead as an alloying element in aluminum containing up to 0.4% lead by weight.</p> <p>6c. Lead as an alloying element in copper containing up to 4% lead by weight.</p> <p>7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).</p> <p>7b. Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications.</p> | <p>7c. Lead in electronic ceramic parts (e.g. piezoelectronic devices).</p> <p>8. Cadmium and its compounds in electrical contacts and cadmium plating except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations piezoelectronic devices).</p> <p>9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators</p> <p>10a. Deca BDE in polymeric applications</p> <p>10b. Lead in lead-bronze bearing shells</p> <p>11. Lead used in compliant pin connector systems.</p> <p>12. Lead as a coating material for a thermal conduction module c-ring.</p> <p>13a. Lead in optical and filter glass.</p> <p>13b. Cadmium in optical and filter glass.</p> <p>14. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight .</p> <p>15. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages.</p> |
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Declaration Signature

Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature

Homogeneous Material Composition Declaration for Electronic Products

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

Line Functions: +P Inserts a New Part +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

+P	-P	Item/SubItem Name	+M	-M	Homogeneous Material	Weight	Unit of Measure	+C	-C	Level	Substance Category	+S	-S	Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
																			-	+	
+P	-P	Mold Compound	+M	-M	Encapsulation	385.9884	mg	+C	-C	Supplier	Epoxy Resin A	+S	-S	Epoxy Resin A	TRADE SEC		26.3655	mg			48,467
								+C	-C	Supplier	Epoxy Resin B	+S	-S	Epoxy Resin B	29690-82-2		13.5725	mg			24,950
								+C	-C	Supplier	Phenol Resin	+S	-S	Phenol Resin	TRADE SEC		15.4645	mg			28,428
								+C	-C	Supplier	Silica Amorphous	+S	-S	Silica Amorphous	60676-86-0		328.652	mg			604,15
								+C	-C	Supplier	Carbon Black	+S	-S	Carbon Black	1333-86-4		1.9339	mg			3,555
+P	-P	Leadframe	+M	-M	Base Material	146.6901	mg	+C	-C	Supplier	Copper	+S	-S	Copper	7440-50-8		143.0064	mg			262,88
								+C	-C	Supplier	Iron	+S	-S	Iron	7439-89-6		3.4627	mg			6,365
								+C	-C	Supplier	Zinc	+S	-S	Zinc	7440-66-6		0.1768	mg			325
								+C	-C	Supplier	Phosphorous	+S	-S	Phosphorous	7723-14-0		0.0442	mg			81
+P	-P	Die Attach	+M	-M	Adhesive	0.1592	mg	+C	-C	Supplier	Silver	+S	-S	Silver	7440-22-4		0.1232	mg			226
								+C	-C	Supplier	Reaction product: bisph	+S	-S	Reaction product: bisph	9003-36-5		0.0084	mg			15
								+C	-C	Supplier	Fatty acids, C18- unsat	+S	-S	Fatty acids, C18- unsat	68475-94-5		0.0066	mg			12
								+C	-C	Supplier	gamma - Butyrolactone	+S	-S	gamma - Butyrolactone	96-48-0		0.0064	mg			12
								+C	-C	Supplier	Epoxy Resin	+S	-S	Epoxy Resin	TRADE SEC		0.0065	mg			12
								+C	-C	Supplier	Polyoxypropylenedi a	+S	-S	Polyoxypropylenedi am	9046-10-0		0.0063	mg			12
								+C	-C	Supplier	Copper Oxide	+S	-S	Copper Oxide	1317-38-0		0.0018	mg			3
								+C	-C	Supplier	4-Bis(2,3- epoxyprop	+S	-S	4-Bis(2,3- epoxypropox	2425-79-		0.0008	mg			1
+P	-P	Die	+M	-M	Circuit	5.67	mg	+C	-C	Supplier	Silicon	+S	-S	Silicon	7440-21-3		5.67	mg			10,423
+P	-P	Wire	+M	-M	Interconnect	1.0035	mg	+C	-C	Supplier	Gold	+S	-S	Gold	7440-57-5		0.9943	mg			1,828
								+C	-C	Supplier	Palladium	+S	-S	Palladium	7440-05-3		0.0091	mg			17
								+C	-C	Supplier	Others	+S	-S	Others	TRADE SEC		0.0001	mg			0
+P	-P	Lead finish	+M	-M	Plating	4.473	mg	+C	-C	Supplier	Silver	+S	-S	Silver	7440-22-4		0.783	mg			1,439
								+C	-C	Supplier	Tin	+S	-S	Tin	7440-31-5		3.69	mg			6,783

Homogeneous Material Composition Declaration for Electronic Products

Requester Instructions: The requester can optionally include additional substance categories and substances that must be declared for the item on this form. This is in addition to JIG Level A and JIG Level B substances already included for the JIG section. The requester should enter additional substance categories and then enter name of the substance and the CAS number. These entries will be accessible to the supplier via Level drop-down by selecting "Requester". Use the Load "Requester" and Test button to view the entries, just select "Requester" in the Level drop-down list in the previous section.

		Substance Category			Substance	CAS
+C	-C		+S	-S		
Update Level "Requester" and Test				Clear Level "Requester" values		