



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.

1752-2 1.1	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
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Supplier Information

Company Name * Cypress Semiconductor Corp	Company Unique ID CY	Unique ID Authority CY	Response Date * 2020-03-08	Response Document ID
Contact Name * Quality Customer Support	Title - Contact Quality 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
BGA48_BZ48_6 x 8 mm	BGA48_BZ48_6 x 8 mm	BGA48_BZ48_6 x 8 mm	2020-03-08		ASEK	78.993	mg	Each
Alternate Recommendation					Alternate Item Comments	Package QTP No. 131204		

Manufacturing Process Information

Terminal Plating / Grid Array Material Tin/Silver/Copper (Sn/Ag/Cu)	Terminal Base Alloy CU Alloy	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 Report: MC (001-79853); DA (001-79608); Plating (001-79878); BW (001-79685); SUB (002-12811)

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 choose all applicable exemptions.

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: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

		Item/SubItem Name		Homogeneous Material		Weight	Unit of Measure	Level		Substance Category	Substance		CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
+I	-I	+M	-M					+C	-C		+S	-S					-	+	
+I	-I	+M	-M	Substrate	Base Material	23.9154	mg	+C	-C	Supplier	SiO2	SiO2	60676-86-0		2.6307	mg			33,303
								+C	-C	Supplier	Acrylic	Acrylic	Trade Secre		2.3915	mg			30,275
								+C	-C	Supplier	Epoxy	Epoxy	29690-82-2,		1.9132	mg			24,220
								+C	-C	Supplier	Bisphenol	Bisphenol	13676-54-5		3.5873	mg			45,413
								+C	-C	Supplier	Triazol	Triazol	25722-66-1		4.1853	mg			52,983
								+C	-C	Supplier	Cu	Cu	7440-50-8		8.7172	mg			110,35
								+C	-C	B	Nickel (external applic	Nickel	7440-02-0		0.3587	mg			4,541
								+C	-C	Supplier	Au	Au	7440-57-5		0.1315	mg			1,665
+I	-I	+M	-M	Solder Ball	External Plating	4.9665	mg	+C	-C	Supplier	Tin	Tin	7440-31-5		4.892	mg			61,930
								+C	-C	Supplier	Ag	Ag	7440-22-4		0.0497	mg			629
								+C	-C	Supplier	Cu	Cu	7440-50-8		0.0248	mg			314
+I	-I	+M	-M	Die Attach	Adhesive	7.6901	mg	+C	-C	Supplier	Silver	Silver	7440-22-4		3.7297	mg			47,216
								+C	-C	Supplier	Epoxy Resin	Epoxy Resin	Trade Secre		2.5762	mg			32,613
								+C	-C	Supplier	Functionalized Ester	Functionalized Ester	Trade Secre		0.6921	mg			8,762
								+C	-C	Supplier	Diester	Diester	Trade Secre		0.6921	mg			8,762
+I	-I	+M	-M	Die	Circuit	1.4	mg	+C	-C	Supplier	Silicon	Silicon	7440-21-3		1.4	mg			17,723
+I	-I	+M	-M	Wire	Interconnect	1.161	mg	+C	-C	Supplier	Gold	Gold	7440-57-5		1.161	mg			14,698
+I	-I	+M	-M	Mold Compound	Encapsulation	39.86	mg	+C	-C	Supplier	Silica	Silica	60676-86-0		35.7544	mg			452,62
								+C	-C	Supplier	Epoxy Resin	Epoxy Resin	Trade Secre		2.1923	mg			27,753
								+C	-C	Supplier	Phenol Resin	Phenol Resin	Trade Secre		1.7937	mg			22,707
								+C	-C	Supplier	Carbon black	Carbon black	1333-86-4		0.1196	mg			1,514