



# 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 <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>	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 * 2019-02-05	Response Document ID
Contact Name * Quality Customer Support Gr	Title - Contact Quality Customer Support Group	Phone - Contact * 6328497500	Email - Contact * qacs_team@cypress.com	Duplicate Contact -> Authorized Representative
Authorized Representative * Jeff Gary Balleca	Title - Representative EH&S Engineer	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
FBGA (BW-196) - 15x15x1.5	FBGA (BW-196) - 15x15x1.5 m	FBGA (BW-196) - 15x15x1.5 m	2019-02-05		ASE TAIWAN	619.54	mg	Each
Alternate Recommendation				Alternate Item Comments	QTP No. 044004			

## Manufacturing Process Information

Terminal Plating / Grid Array Material Tin/Silver/Copper (Sn/Ag/Cu)	Terminal Base Alloy CU Alloy	J-STD-020 MSL Rating 5	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments  
Direct Material Analysis Test Reports: Mold Compound (001-79853); Die Attach (001-79607); Solder Ball (001-79880); Bonding Wire (001-79685); Substrate (001-80071, 001-80072)

Save the fields in this form to a file

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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	Substrate	+M	-M	Base Material	186.2599	mg	+C	-C	Supplier	SiO2	+S	-S	SiO2	60676-86-0		19.5387	mg			31,537
								+C	-C	Supplier	Acrylic	+S	-S	Acrylic	Trade Secre		17.1359	mg			27,659
								+C	-C	Supplier	Epoxy	+S	-S	Epoxy	29690-82-2,		11.4364	mg			18,459
								+C	-C	Supplier	Bisphenol	+S	-S	Bisphenol	13676-54-5		27.9017	mg			45,036
								+C	-C	Supplier	Triazol	+S	-S	Triazol	25722-66-1		33.4895	mg			54,056
								+C	-C	Supplier	Cu	+S	-S	Cu	7440-50-8		73.1629	mg			118,09
								+C	-C	B	Nickel (external applic	+S	-S	Nickel	7440-02-0		2.589	mg			4,179
								+C	-C	Supplier	Au	+S	-S	Au	7440-57-5		0.9127	mg			1,473
								+C	-C	Supplier	Br	+S	-S	Br	7726-95-6		0.0931	mg			150
+I	-I	Solder Ball	+M	-M	External Plating	68.64	mg	+C	-C	Supplier	Sn	+S	-S	Sn	7440-31-5		65.5512	mg			105,80
								+C	-C	Supplier	Ag	+S	-S	Ag	7440-22-4		2.7456	mg			4,432
								+C	-C	Supplier	Cu	+S	-S	Cu	7440-50-8		0.3432	mg			554
+I	-I	Die Attach	+M	-M	Adhesive	38.94	mg	+C	-C	Supplier	Epoxy resin	+S	-S	Epoxy resin	Trade Secre		2.7258	mg			4,400
								+C	-C	Supplier	Diester	+S	-S	Diester	Trade Secre		10.7085	mg			17,285
								+C	-C	Supplier	Functionalized Ester	+S	-S	Functionalized Ester	Trade Secre		3.894	mg			6,285
								+C	-C	Supplier	Polymeric	+S	-S	Polymeric	Trade Secre		1.1682	mg			1,886
								+C	-C	Supplier	Silica fused	+S	-S	Silica fused	60676-86-0		20.4435	mg			32,998
+I	-I	Die	+M	-M	Circuit	22.96	mg	+C	-C	Supplier	Si	+S	-S	Si	7440-21-3		22.96	mg			37,060
+I	-I	Wire	+M	-M	Interconnect	6.65	mg	+C	-C	Supplier	Au	+S	-S	Au	7440-57-5		6.6493	mg			10,733
								+C	-C	Supplier	Ion Impurities	+S	-S	Ion Impurities	Trade Secre		0.0007	mg			1
+I	-I	Mold Compound	+M	-M	Encapsulation	296.090	mg	+C	-C	Supplier	Silica (fused)	+S	-S	Silica (fused)	60676-86-0		263.5201	mg			425,34
								+C	-C	Supplier	Epoxy Resin 1	+S	-S	Epoxy Resin 1	93705-66-9		13.3241	mg			21,506
								+C	-C	Supplier	Epoxy Resin 2	+S	-S	Epoxy Resin 2	Undisclose		5.9218	mg			9,558

+C	-C	Supplier	Phenol resin	+S	-S	Phenol resin	106466-55-1		13.3241	mg			21,506
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