



AN INFINEON TECHNOLOGIES COMPANY

THIS SPEC IS OBSOLETE

Spec No: 002-23048

Spec Title: IPC1752 MATERIAL DECLARATION WLCSP49  
(FR49) (4.5X4 MM)\_SPIL\_SNAGCU(SAC105)\_  
PANASONIC CV8710TAC

Replaced by: NONE



# 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 Inform
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## Supplier Information

Company Name * Cypress Semiconductor Corp	Company Unique ID Cypress	Unique ID Authority	Response Date * 2020-01-24	Response Document ID				
Contact Name * QA Customer Support	Title - Contact QA Customer Support	Phone - Contact * +6328497500	Email - Contact * qacs_team@cypress.com	<input type="button" value="Duplicate Contact -&gt; Authorized Representative"/>				
Authorized Representative * Jeff Gary Balleca	Title - Representative Sr Staff EHS Engr	Phone - Representative * +6328497500	Email - Representative * jgtb@cypress.com	Supplier Comments or URL for Additional Information				
Requester Item Number FR49	Mfr Item Number WLCSP 49 (4.5x4mm)	Mfr Item Name WLCSP 49 (4.5x4mm)	Effective Date 2020-01-24	Version	Manufacturing Site SPIL	Weight * 72.01	UOM mg	Unit Type Each
Alternate Recommendation				Alternate Item Comments				

## Manufacturing Process Information

Terminal Plating / Grid Array Material Tin/Silver/Copper (Sn/Ag/Cu)	Terminal Base Alloy Other	J-STD-020 MSL Rating 1	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 20 seconds	Number of Reflow Cycles 3
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Comments  
Direct material analysis test report: Substrate (002-12810,002-12811,002-26385,002-26336 & 002-26336); Polyimide (002-24197 ); Sputter (002-26316&002-26317); Plated Ni (002-26

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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

Jeff Gary Balleca

Digitally signed by Jeff Gary Balleca  
Date: 2020.01.30 08:32:51 +08'00'

## 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					-	+		
		WLCSP 49			Die	2.347	mg		Supplier	Silicon Chip		Silicon	7440-21-3		2.347	mg			32,593
+M	-M	Mold Compound	17.065		mg		+C	-C	Supplier	Silica		Silica	Trade Sec	15.017	mg			208,54	
+C	-C	Supplier	Epoxy Resin				+S	-S	Epoxy Resin	Trade Sec		1.1092	mg					15,403	
+C	-C	Supplier	Phenolic Resin				+S	-S	Phenolic Resin	Trade Sec		0.8533	mg					11,850	
+C	-C	Supplier	Carbon black				+S	-S	Carbon black	1333-86-4		0.0853	mg					11,850	
+M	-M	Solder Ball	2.951		mg		+C	-C	Supplier	Sn		Sn	7440-31-5		2.8995	mg		40,265	
+C	-C	Supplier	Ag				+S	-S	Ag	7440-22-4		0.0353	mg					490	
+C	-C	Supplier	Cu				+S	-S	Cu	7440-50-8		0.0147	mg					204	
+C	-C	B	Nickel (external app				+S	-S	Nickel	7440-02-0		0.00147	mg					20	
+M	-M	Solder Bump	0.046		mg		+C	-C	Supplier	LF Bump		LF Bump	Trade sec	0.046	mg			639	
+M	-M	Substrate	49.601		mg		+C	-C	Supplier	Acrylic Resin		Acrylic Resin	Trade Sec	2.9277	mg			40,657	
+C	-C	Supplier	Phthalcyanine Blue				+S	-S	Phthalcyanine Blue	Trade sec		0.0134	mg					186	
+C	-C	Supplier	Organic Pigment				+S	-S	Organic Pigment	Trade Sec		0.0134	mg					186	
+C	-C	Supplier	Barium Sulfate				+S	-S	Barium Sulfate	7727-43-7		0.5102	mg					7,085	
+C	-C	Supplier	Silica				+S	-S	Silica	Trade Sec		0.5102	mg					7,085	
+C	-C	Supplier	Talc				+S	-S	Talc	Trade Sec		0.5102	mg					7,085	
+C	-C	Supplier	Aromatic Carbonyl C				+S	-S	Aromatic Carbonyl Con	Trade Sec		0.2607	mg					3,620	
+C	-C	Supplier	Amine Compound				+S	-S	Amine Compound	Trade Sec		0.0334	mg					464	
+C	-C	Supplier	Levelling agents				+S	-S	Levelling agents	Trade Sec		0.0401	mg					557	
+C	-C	Supplier	Acrylic Monomer				+S	-S	Acrylic Monomer	Trade Sec		0.5214	mg					7,241	
+C	-C	Supplier	Epoxy Resin				+S	-S	Epoxy Resin	Trade sec		1.3435	mg					18,657	
+C	-C	Supplier	Continuous Filament				+S	-S	Continuous Filament Fi	65997-17-3		10.5658	mg					146,72	
+C	-C	Supplier	Bismaleimide				+S	-S	Bismaleimide	105391-33-		3.2872	mg					45,649	

+C	-C	Supplier	Triazine	+S	-S	Triazine	25722-66-1		3.2872	mg		45,649
+C	-C	Supplier	Epoxy Resin	+S	-S	Epoxy Resin	9003-36-5		6.1047	mg		84,776
+C	-C	Supplier	Inorganic Filter	+S	-S	Inorganic Filter	21645-51-2		0.2348	mg		3,261
+C	-C	Supplier	Copper	+S	-S	Cu	7440-50-8		3.1729	mg		44,062
+C	-C	Supplier	Copper	+S	-S	Cu	7440-50-8		15.9799	mg		221,91
+C	-C	Supplier	Tin	+S	-S	Tin	7440-31-5		0.2743	mg		3,809
+C	-C	Supplier	Silver	+S	-S	Ag	7440-22-4		0.0085	mg		118
+C	-C	Supplier	Copper	+S	-S	Cu	7440-50-8		0.0014	mg		19