IPC ASSOCIATION CONI		Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			der both	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.								
752-21.1		IPC Web Site for Information on IPC-1752 Standard Form Typ http://www.ipc.org/IPC-175x Distribute				* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi					als and Mfg	Informati	on	
upplier Inf	1 1													
Company name*			Company us	Company unique ID			Unique ID Authority				Response Date*			
nsemi											2024-05-11			
Contact Name	:	Title - Contact			I	Phone - Contact*				Email - Contact*				
Product-Env-S	Stewards		Product Enviro Compliance			]	NA				Product-Env-Stewards@onsemi.com			
uthorized Re	epresentative*	Title - Representative			I	Phone - Representative*				Email - Representative*				
Product-Env-S	Stewards	Product Enviro Compliance			]	NA				Product-Env-Stewards@onsemi.com				
Rec	quester Item Number			Mfr Item Name			Effective Date	Version	N	Anufacturing Site	W	eight*	UOM	Unit Type
				LOG CMOS GATE	E NAND QUAI	D	2024-05-11 PH1		H1	12	2.04	mg	Each	
	ring Process Informa						I					1 1		
		,		STD-020 MSL	Rating	Peak Process Body Te		Τ'				er of Reflow Cyc	les	
Mat	tte Tin (Sn) - annealed		CU Alloy	1			260		C	30	seconds	3		
omments														
	num time at peak temperat													
or more infor	rmation regarding materia	l composition	please refer t	o page 3										

RoHS Material Composition Declaration			Declaration Type *	Detail	led						
Directive 2015/863/EU amending RoHS Directive 2011/65/EU  RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).											
Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, 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 inexcess 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 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 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 substa	ances per the definition above	Supplier Ac	cceptance *	Accepted						
Exemption: 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.											
Exemption List Version	EL-2011/534/EU										
Declaration Signature											
Instructional Complete all of the required	fields on all neggs of this form. Calcut th		a duan dawn. This will display the signature on	a Digitally sign	the declaration (if recruired by the						
Instructions: Complete all of the required Requester) and click on Submit Form to			e drop-down. This will display the signature ar	ea. Digitally sign	the declaration (if required by the						

## **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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	0.98	mg	Supplier	Silicon (Si)	7440-21-3		0.98	mg
Die Attach	4.44			Epoxy resin	proprietary data		0.111	mg
			Supplier	Silver (Ag)	7440-22-4		3.552	mg
			Supplier	Polybutadiene polymer	Proprietary Data		0.2886	mg
			Supplier	Acrylic resins	Proprietary Data		0.4884	mg
Lead Frame	69.62		Supplier	Silver (Ag)	7440-22-4		0.7658	mg
			Supplier	Zinc (Zn)	7440-66-6		0.1392	mg
			Supplier	Iron (Fe)	7439-89-6		1.8101	mg
			Supplier	Copper (Cu)	7440-50-8		66.9048	mg
Mold Compound-Black	43.43	mg		Proprietary	proprietary data		3.4744	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2172	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		39.7384	mg
Plating	3.27	mg	Supplier	Tin (Sn)	7440-31-5		3.27	mg
Wire Bond - Cu	0.3	•	Supplier	Palladium (Pd)	7440-05-3		0.0048	mg
			Supplier	Copper (Cu)	7440-50-8		0.2952	mg