ASSOCIATION CONNECTINE ELECTRONICS INDUSTRIES	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					Form Type Distribute	* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mfg Information				
upplier Inform	ation														
Company name*			Company unique ID			Ţ	Unique ID Authority					Response Date*			
nsemi											2024-05-20				
Contact Name			Title - Contact			1	Phone - Contact*				Email - Contact*				
Product-Env-Stewa	rds		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
uthorized Represe	ntative*		Title - Representative			I	Phone - Representative*				Email - Representative*				
Product-Env-Stewa	rds		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
Requeste	r Item Number			Mfr Item Name			Effective Date	e Version	n I	Manufacturing Site		Weight*	UOM	Unit Type	
				LOG CMOS COUN	NTER BINARY 20		2024-05-20		I	PH1		22.04	mg	Each	
	Proccess Informatio														
2			Terminal Base Alloy J-STD-020 MSI		_ Rating	Peak Process Body Temperatur					per of Reflow Cyc	eles			
Matte Tir	n (Sn) - annealed	C	U Alloy	1			260		C	30	secon	ds   3			
omments															
	ime at peak temperature														
or more informatio	on regarding material co	mposition p	please refer t	o page 3											

RoHS Material Composition Declaration			Declaration Type *	Detail	ed						
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 is true and corrections that such information is true and corrections that it gathered the information is true and corrections that it part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information is true and correction 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, on 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 has not or 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 substar	nces per the definition above	Supplier A	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											
		e "Accepted" on the Supplier Acceptance	drop-down. This will display the signature a	rea. Digitally sign t	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).

<b>Homogeneous Material</b>	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	mg		Epoxy resin	proprietary data		0.444	mg
			Supplier	Silver (Ag)	7440-22-4		3.552	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.444	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			Epoxy resin	proprietary data		2.1715	mg
			Supplier	Phenolic Resin	Proprietary Data		0.8686	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		1.0857	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2172	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		39.087	mg
Plating	3.27	mg	Supplier	Tin (Sn)	7440-31-5		3.27	mg
Wire Bond - Cu	0.3	mg	Supplier	Copper (Cu)	7440-50-8		0.3	mg