ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				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 Type http://www.ipc.org/IPC-175x Distribute				e *	* Declaration Class * Class 6 - RoHS Yes/No. Homogeneous Materi					ials and Mfg Information				
upplier Inform	ation				·										
Company name*			Company unique ID			ī	Unique ID Authority					Response Date*			
nsemi										2024-0	2024-05-15				
Contact Name			Title - Contact			]	Phone - Contact*				Email	Email - Contact*			
Product-Env-Stewa	rds	Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com				
uthorized Represer	ntative*	Title - Representative			1	Phone - Representative*				Email	Email - Representative*				
Product-Env-Stewar	rds	Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com				
Requester	Requester Item Number Mfr Iter		m Number Mfr Item Name				Effective Dat	te Version Manufacturing Site			Weight*	UOM	Unit Type		
		MC100EP51DTG BBG ECL FLIP FLOP		LOP RESET		2024-05-15			PH8		22.7	mg	Each		
Ianufacturing I	Proccess Information	on													
Terminal Plating / Grid Array Material T			Terminal Base Alloy J-STD-020 MS		SL Rating	Peak Process Body Temper		y Temperatu	ure Max Time at Pea	k Tempera	ature Num	ber of Reflow Cyc	eles		
Matte Tin (Sn) - annealed			CU Alloy 3				260   C   30		seco	nds 3					
omments															
TTENTION: MSL	3 Rated item requires I	Bake and D	ry Pack (afte	r electrical test)											
or more informatio	n regarding material co	mposition	please refer t	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 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 near not of 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 exclusivesource of the Supplier's Itaalian 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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	1.0	mg	Supplier	Silicon (Si)	7440-21-3		1	mg
Die Attach	0.66	mg		Resin	proprietary data		0.0528	mg
			Supplier	Silver (Ag)	7440-22-4		0.5577	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.0495	mg
Lead Frame	10.38	mg	Supplier	Silver (Ag)	7440-22-4		0.218	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0125	mg
			Supplier	Iron (Fe)	7439-89-6		0.2439	mg
			Supplier	Copper (Cu)	7440-50-8		9.9025	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0031	mg
Mold Compound-Black	9.5	mg		Epoxy resin	proprietary data		0.475	mg
			Supplier	Phenolic Resin	Proprietary Data		0.475	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.19	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0475	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		8.3125	mg
Plating	1.06	mg	Supplier	Tin (Sn)	7440-31-5		1.06	mg
Wire Bond - Au	0.1	mg	Supplier	Gold (Au)	7440-57-5		0.1	mg