IPC ASSOCIATION CO	© Copyright 2005.	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 low 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 Mater					ials and Mfg Information			
upplier Iı	nformation														
Company name*			Company unique ID			J	Unique ID Authority				Response Date*				
nsemi											2024-05-05				
ontact Nam	ne	Title - Contact			I	Phone - Contact*				Email - Contact*					
Product-Env	-Stewards		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
uthorized R	Representative*	Title - Representative			I	Phone - Representative*			Email - Representative*						
roduct-Env	-Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
R	equester Item Number			Mfr Item Name			Effective Date	Version	M	Ianufacturing Site	Weig	nt*	UOM	Unit Type	
				FM Modulator Dem	nodulator	2024-05-05 PH		PHM 150.0			mg	Each			
	uring Process Inform														
Те	Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020			STD-020 MSL	Rating	Peak Process Body Temperature   Max Time at Peak				Temperature Number of Reflow Cycles					
contains Bi		CU Alloy 3				260		C 30		seconds	3				
omments															
<b>TENTION</b>	N: MSL 3 Rated item requir	res Bake and D	ry Pack (afte	r electrical test)											
or more info	ormation regarding materia	al composition	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 have provided as part of that agreement, will be the sole and exclusivesource 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 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	3.05	mg	Supplier	Silicon (Si)	7440-21-3		3.0387	mg
			Supplier	Polyimide	Proprietary Data		0.0113	mg
Die Attach	0.62	mg	Supplier	Silver (Ag)	7440-22-4		0.4402	mg
			Supplier	Epoxy resins	129915-35-1		0.1798	mg
Lead Frame	49.21	mg	Supplier	Zinc (Zn)	7440-66-6		0.064	mg
			Supplier	Iron (Fe)	7439-89-6		1.1564	mg
			Supplier	Copper (Cu)	7440-50-8		47.9502	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0394	mg
Mold Compound-Black	95.25	mg		Epoxy Phenol Resin	proprietary data		11.43	mg
			Supplier	Carbon Black (C)	1333-86-4		0.381	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		80.5815	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		2.8575	mg
Plating	1.7	mg	В	Bismuth (Bi)	7440-69-9		0.0102	mg
			Supplier	Tin (Sn)	7440-31-5		1.6898	mg
Wire Bond - Cu	0.17	mg	Supplier	Copper (Cu)	7440-50-8		0.17	mg