IPC ASSOCIATION CONNI	© 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 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 Typhttp://www.ipc.org/IPC-175x Distribute				* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi				ials and Mfg Information				
upplier Info	ormation													
Company name*			Company un	Company unique ID			Unique ID Authority				Response Date*			
nsemi											2024-04-20			
Contact Name		Title - Contact			1	Phone - Contact*				Email - Contact*				
Product-Env-St	tewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com				
uthorized Rep	oresentative*	Title - Representative			I	Phone - Representative*			Email - Representative*					
Product-Env-St	tewards		Product Enviro Compliance				NA NA				Product-Env-Stewards@onsemi.com			
Requ	uester Item Number	Mfr Item	Number	Mfr Item Name			Effective Date	Version	N	Ianufacturing Site	Wei	ght*	UOM	Unit Type
		ES1D UFR SMA PN		UFR SMA PN 1A 2	IA PN 1A 200V		2024-04-20 TSCBE		SCBE	67.9		mg	Each	
	ing Process Informational Plating / Grid Array M		Germinal Base	Alloy	STD-020 MS	I Pating	Peak Proce	ess Rody Te	mperatur	e Max Time at Peak	Temperature	Numbe	er of Reflow Cyc	loc
<u> </u>		CU Alloy 1		3 I D-020 IVIS	L Kaung	Peak Process Body Tempera 260 C		•			3	of Kellow Cyc	105	
omments	t III (SII) - allifeateu		C Andy	1			200			130	seconds	13		
	um time at peak tempera	turo durina sol	Idering is 10-3	M seconds										
	mation regarding materia	8												

<b>RoHS Material Composition Declaration</b>			Declaration Type *	Detailed						
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).										
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 informationprovided 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 uppliers 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 exclusivesource of the Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.										
RoHS Declaration * 4 - Item(s	s) does not contain RoHS restricted substance	ces per the definition above except for selected exer	nptions Supplier Acceptance	* Accepted						
Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead). Exemption: 7c-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.										
Exemption List Version	EL-2011/534/EU									
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 R		,								

## **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	0.764	mg	Supplier	Silicon (Si)	7440-21-3		0.6876	mg
			В	Nickel (Ni)	7440-02-0		0.005	mg
			Supplier	Gold (Au)	7440-57-5		0.0011	mg
			Supplier	Lead Bisilicate	65997-18-4	7c	0.0703	mg
Die Attach Solder	2.25	mg	Supplier	Silver (Ag)	7440-22-4		0.0563	mg
			A	Lead (Pb)	7439-92-1	7a	2.0812	mg
			Supplier	Tin (Sn)	7440-31-5		0.1125	mg
Lead Frame	27.5903	mg	Supplier	Iron (Fe)	7439-89-6		0.0331	mg
			Supplier	Copper (Cu)	7440-50-8		27.5489	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0083	mg
Mold Compound-Black	36.69	mg		Metal Hydroxide	proprietary data		1.2842	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		2.9352	mg
			Supplier	Carbon Black (C)	1333-86-4		0.1834	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		29.352	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		2.9352	mg
Plating	0.6057	mg	Supplier	Tin (Sn)	7440-31-5		0.6057	mg