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 lev	This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lowe 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 Info	formation														
Company name*			Company unique ID			U	Unique ID Authority					Response Date*			
nsemi											2024-04-28				
Contact Name		Title - Contact			P	Phone - Contact*				Email - Contact*					
Product-Env-St	Stewards	Product Enviro Compliance			N	NA				Product-Env-Stewards@onsemi.com					
uthorized Rep	presentative*	Title - Representative			P	Phone - Representative*				Email - Representative*					
Product-Env-St	Stewards	Product Enviro Compliance			N	NA				Product-Env-Stewards@onsemi.com					
Requ	uester Item Number			Mfr Item Name]	Effective Date	Version	Manufacturing Site		V	Veight*	UOM	Unit Type	
				ANA BAL MODU	L MODULTR/DMODULTR		024-04-28 PH1		H1	1:	22.04	mg	Each		
	ing Process Informa		Corminal Desa	Alloy	STD-020 MSL R	latina	Dook Descri	ogs Dody To	maratur	May Time at Peals	Tamparatu	wa Numb	er of Reflow Cyc	Jac	
		Terminal Base Alloy J-STD CU Alloy 1		S1D-020 MSL R	ating	Peak Process Body T 260		emperature Max Time at Peak ' C 30		seconds 3		er of Reflow Cyc	eies		
•	te 1 in (Sn) - annealed	C	U Alloy	1			200		C	30	second	IS 3			
omments	4:41- 4 4		Ji :. 10 1	20 1-											
	um time at peak temperat														
r more inform	mation regarding materia	i composition [piease refer to	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 (DBP), Dibutyl phthalate (DBP), 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 is true and correction that such information is true and correction 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	0.98	mg	Supplier	Silicon (Si)	7440-21-3		0.98	mg
Die Attach	4.44	mg		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	mg	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	mg	Supplier	Palladium (Pd)	7440-05-3		0.0048	mg
			Supplier	Copper (Cu)	7440-50-8		0.2952	mg