IPC ASSOCIATION ELECTRONIC	© Copyright 200	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			nder both le	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					Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					s Materials	ials and Mfg Information			
Supplie	r Information														
Company	name*	Company un	Company unique ID			Unique ID Authority					Response Date*				
nsemi											2	2024-04-25			
Contact N	Vame		Title - Conta	Title - Contact			Phone - Contact*				F	Email - Contact*			
Product-l	Env-Stewards		Product Enviro Compliance			ı	NA				] ]	Product-Env-Stewards@onsemi.com			
uthorize	ed Representative*		Title - Representative			P	Phone - Representative*				E	Email - Representative*			
Product-	Env-Stewards		Product Enviro Compliance			r	NA				] ]	Product-Env-Stewards@onsemi.com			
	Requester Item Number Mfr Item		n Number Mfr Item Name				Effective Date	ve Version Manufacturing Site		Site	Weig	ht*	UOM	Unit Type	
		MBT2222ADW1T1G SS SC88		SS SC88 GP XST	SC88 GP XSTR NPN 40V		2024-04-25		C	CN1		6.2		mg	Each
Ianufa	acturing Process Inform														
	8,		,		-STD-020 MSL I	Rating		ocess Body Temperature   Max Time at Peak		at Peak Te			r of Reflow Cyc	les	
	Matte Tin (Sn) - annealed		CU Alloy	1			260		C	30		seconds	3		
omments															
	naximum time at peak temper														
or more	information regarding mater	rial composition	please refer to	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).											
cadmium, hexavalentchromium, polybromin contains a RoHS restricted substance inexce encompass all such components. Supplier cet as of the date that Supplier completes this Company acknowledges that Supplier may hindependently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated diphess of an applicable quantity limit, please indriffes that it gathered the information it provom. Supplier acknowledges that Company wave relied on informationprovided by others of the supplier agrees that, at a minimusy and the Supplier enter into a written agree yesource of the Supplier's liability and the C	enyl ethers (each a "RoHS restricted substan licate below which, if any, RoHS exemption vides in this form using appropriate methods vill rely on this certification in determining the s in completing this form, and that Supplier um, itssuppliers have provided certifications ement with respect to the identified part, the tompany's remedies for issues that arise rega	s of the European Union member states) of the ce") in excess of the applicable quantity limit is you believe may apply. If the part is an assemb to ensure its accuracy and that such informatio e compliance of its products with European Ur may not have independently verified such infor regarding their contributions to the part, and the erms and conditions of that agreement, including information the Supplier provides in this	dentified above. If a ally with lower level in is true and correct tion member state la mation. However, in ose certifications are ag any warranty righ	homogeneous material within the part components, the declaration shall to the best of its knowledge and belief, was that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the lats and/or remedies provided as part of						
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	0.19	0.19 mg		Silicon (Si)	7440-21-3		0.19	mg
Lead Frame	2.04	mg	В	Nickel (Ni)	7440-02-0		0.7813	mg
			Supplier	Iron (Fe)	7439-89-6		1.0792	mg
			Supplier	Copper (Cu)	7440-50-8		0.1795	mg
Mold Compound-Black	3.9		Supplier	Boron zinc hydroxide oxide	138265-88-0		0.117	mg
			Supplier	Zinc Monoxide (ZnO)	1314-13-2		0.0195	mg
			Supplier	2,4,6-triamino-s-triazincompd.withs-triazine-triol	37640-57-6		0.117	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		3.12	mg
			Supplier	Carbon Black (C)	1333-86-4		0.039	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		0.312	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.1755	mg
Plating	0.05	mg	Supplier	Tin (Sn)	7440-31-5		0.05	mg
Wire Bond	0.02	mg	Supplier	Palladium (Pd)	7440-05-3		0.0002	mg
			Supplier	Copper (Cu)	7440-50-8		0.0198	mg