IPC  ASSOCIATION CONI		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 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 Typ http://www.ipc.org/IPC-175x Distribute				* Declaration Class * Class 6 - RoHS Yes/No. Homogeneous Materi					ials and Mfc Information			
upplier Inf	formation				·									
Company name*			Company unique ID			U	Unique ID Authority				Response Date*			
nsemi											2024-05-01			
Contact Name	:	Title - Contact			P	Phone - Contact*				Email - Contact*				
Product-Env-S	Stewards		Product Enviro Compliance			N	NA				Product-Env-Stewards@onsemi.com			
uthorized Re	epresentative*	Title - Representative			P	Phone - Representative*			Email - Representative*					
Product-Env-S	Stewards		Product Enviro Compliance			N	NA				Product-Env-Stewards@onsemi.com			
Rec	quester Item Number	Mfr Item	Number	Mfr Item Name		I	Effective Date	Version	M	Manufacturing Site		Veight*	UOM	Unit Type
		MM74HCT74MX Dual D-Type FF		Dual D-Type FF W	//Pre/Clr	2	2024-05-01 PH1		H1	1.	55.775	mg	Each	
	ring Process Informa			A.11	CTD 020 MCL D		D. I. D.	D. I. T.		M T (D )	T.	N. I	CD G C	1
		<u> </u>		STD-020 MSL Ra	ating	Peak Process Body Tempera		•				er of Reflow Cyc	cles	
	tte Tin (Sn) - annealed		CU Alloy	1			260		C	30	second	ls  3		
omments				NA 1										
	num time at peak temperat	8												
r more infor	rmation regarding materia	I composition	please refer t	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 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 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 not with respect to the identified part, the terms and conditions of that agreement, including any 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	3.63	mg	Supplier	Silicon (Si)	7440-21-3		3.63	mg
Die Attach	0.367	mg	Supplier	Silver (Ag)	7440-22-4		0.2881	mg
			Supplier	Phenolic Resin-2	54208-63-8		0.0789	mg
Lead Frame	68.71		Supplier	Silver (Ag)	7440-22-4		0.015	mg
			Supplier	Zinc (Zn)	7440-66-6		0.086	mg
			Supplier	Iron (Fe)	7439-89-6		1.614	mg
			Supplier	Copper (Cu)	7440-50-8		66.939	mg
			Supplier	Phosphorus (P)	7723-14-0		0.056	mg
Mold Compound-Black	81.974		Supplier	Ortho Cresol Novolac Resin	29690-82-2		16.395	mg
			Supplier	Carbon Black (C)	1333-86-4		0.82	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		64.759	mg
Plating	0.944		Supplier	Palladium (Pd)	7440-05-3		0.034	mg
			В	Nickel (Ni)	7440-02-0		0.891	mg
			Supplier	Gold (Au)	7440-57-5		0.019	mg
Wire Bond - Cu	0.15	mg	Supplier	Copper (Cu)	7440-50-8		0.15	mg